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ORIGINAL LECTURES.

THE ANNUAL ADDRESS

DELIVERED BEFORE THE

OBSTETRICAL SOCIETY OF LONDON,

JANUARY 2, 1878.

By CHARLES WEST, M.D., F.R.C.P.,
President of the Society.

GENTLEMEN,—It seems a small undertaking, a very easy, simple matter, to sum up at the end of a year the results of the work of a scientific society, to do honour to the memories of those of our fellow-labourers who have passed from among us, and to encourage one another by their example. And yet when one attempts the task the difficulties in the way of its performance are found to be very great: for there are in it no elements of novelty; and what is there to say which has not been said, and better said, before? Nor only so, but how small after all is the outcome of a year of the most earnest work of any society, and especially of a society like this, whose scope is but a limited one. The history, too, the uneventful history of members of our profession, of lives passed in quiet toil, in the patient quest of knowledge, in self-denying kindness, and in the practice of those homely virtues which alone it falls to most of us to have the opportunity of exercising, is one which we can scarcely bring into the full glare of publicity. We run great risk, in doing it, of distorting the familiar features of those whose memories we fain would cherish; of reflecting them as some mirrors do, magnified indeed, but misproportioned.

Pardon me if I seem to regard my office as a humbler one than some would represent it. I know full well that it is beyond my skill to discharge it fittingly; and I trust you will not think that I seek to extenuate my own shortcomings by detracting from the interest or the importance of the subjects with which I have to deal.

The first duty that devolves on me, indeed, is one as pleasant as it is easy—to congratulate you on the increase of your numbers, and on the general prosperity of the Society. The number of our members is 738, as against 700 last year; and though numbers go to prove only that a society is popular, there yet is no surer proof of the decay of an association than when members recede from it without cause assigned, or when candidates do not come forward to fill the vacancies which time makes in its ranks. Neither of these signs of decline appears, and, I trust, will never show itself in the Obstetrical Society. Increasing numbers mean increase of income; and it is needless to do more than call your attention to the satisfactory report of your Treasurer. You have heard, too, from your Honorary Librarian that your collection of books (a good and well-chosen one it is) increases steadily; and it has been my pleasing duty to return, on behalf of the Council and of you, gentlemen, our best thanks for fresh gifts of books and casts from our Honorary President, handing over to his juniors the instruments which helped him to his extended usefulness and well-merited fame.

The nineteenth volume of your *Transactions* will, I trust, be found not inferior in value to its predecessors. For my own part, while I have learnt much from the papers and discussions, and have refreshed my on many points somewhat obsolete knowledge, I have not been without a strong feeling that, for the full efficiency of your President, it is needed that his knowledge should be as complete and as recent as that of the youngest member of your body. For the courtesy and kindness with which you have borne with my shortcomings, let me here return you my most heartfelt thanks.

Our meetings have never lacked a good attendance, nor have the discussions been wanting in interest. It has seemed, however, to the Council due both to those gentlemen who are so good as to contribute papers to the Society, as well as to the President and Secretaries, that the law should define more clearly than has hitherto been done the mode of proceeding when any doubt may arise as to whether the novelty or interest of a communication renders it desirable that it should be brought before the Society. The object of the changes proposed is to throw the burden of a decision more upon the Council at large, and to remove it as far as may be from the President and Secretaries, so that the bare suspicion of personal feeling being mixed up in the question of the acceptance or rejection of a paper shall be impossible. The laws thus modified have been approved by the Council, but it was thought wise, as one or two other rules may require amendment, not to trouble you with piecemeal legislation, but to let the matter stand over for a year.

You will be asked to vote the continuance of the two committees, the one of which has done good service in the collection of casts and drawings of various forms of distorted pelves, and in some instances of pelves themselves; and the other is engaged in the investigation of the important subject of transfusion. The labours of the Transfusion Committee have been impeded by the laws which impose difficulties in the way of experiments on animals for the benefit of man. According to some good people, the dominion which the Book of Genesis says was given to man "over every living thing that moveth upon the earth" was a very limited monarchy indeed. The work of the Temperature Committee was found almost impossible to be carried out except in a lying-in-hospital. It is therefore not proposed to reconstitute that Committee, but to leave the further elucidation of the problems with which it occupied itself to individual research.

It is not often that our medical societies become directly interested in legislative questions. The importance, however, of urging on the Government the adoption of some plan for securing that the women who practise as midwives among the poor shall be really competent to the duty which they undertake, has, as you know, engaged much of the time and thoughts of several of your past Presidents; and to the accomplishment of this object one of our number, Dr. Aveling, has devoted himself with an unwearied zeal, without which our progress towards this most desirable end would have been very small.

I need not say that the question of the expediency or inexpediency of women engaging in the practice of medicine generally is not at all involved in this action of the Society. Strongly advocated by some, it is as strongly deprecated by others, and it is not for me here to offer an opinion about it one way or the other. But we cannot abstain from taking up the subject, when we find that there is a body of several thousand women to whom the poor of this country have to look for attendance in their confinements, and that the bulk of these women have absolutely no education to fit them for their duties, and have advanced little, if at all, in intelligence during the past hundred years.

A committee was formed to draw up the details of a scheme which should provide for all midwives receiving, as they do in every continental country, a certain minimum of general and special education, and for their passing a very simple examination, which aims at little more than the exclusion of crass ignorance. The doing this should entitle them to be registered; and this registration should alone convey the right to obtain parochial or other public appointments. His Grace the Lord President of the Council expressed himself as favourable to the principles which the scheme embodies. It was afterwards laid before the Medical Council, who approved its object. In order to correct various legal and technical imperfections, it was submitted to Mr. Roscoe, the legal adviser of the College of Physicians; and the scheme, which has been drawn up by the Council with your sanction, will, it is hoped, be found such as can, notwithstanding some criticisms which have been passed upon it, be fairly carried into practice.

I may add that it does not appear to me at all desirable to substitute for the proposed plan of various examining boards, and various registration districts throughout the country, any scheme which would imply the formation of one central board for examination and registration under the control of the Local Government Board; nor do I advise its indefinite postponement till either the details of county organisation are improved, or till the much-vexed question of the general admission of women to practice in the higher departments of medicine has been settled.

The need is an urgent one. If it is to be met at all, it must be in such a way as to entail on the midwives no larger outlay than such as poor women whose rate of pay in England does not exceed five or six shillings a case can be expected to meet. A costly education, a stringent examination in the higher branches of the obstetric art, a journey to the metropolis, or to one of three or four large towns, would

entirely exceed the measure of their resources. Our object is simply to provide a class of nurses who to the ordinary knowledge of nursing superadd that of the attendance on women in natural labour. If the portals of all the medical examining bodies were thrown open to women to-morrow—nay, if in some ladies' parliament men were voted to be disqualified for the practice of medicine and surgery, and none but women were allowed to exercise it, the case of the village midwife would still remain unprovided for and the poor unprotected, just as they are now. An imperfect remedy of an admitted evil speedily applied is much to be preferred to a far-distant one, which promises, when realised, to be more complete. I trust that the Society will not allow itself to be turned aside by questions wholly foreign to the subject which we have in view, but that all its members will persevere in the endeavour which concerns us, not as doctors, but simply as citizens, striving to supply a great social want,—to secure some guarantee that the poor shall not continue to be exposed to an ignorance and unskilfulness against which the government of every other civilised country has protected them.

Copies of the proposed scheme are, I think, in the hands of most of the Fellows present. The Secretaries will supply copies to anyone who asks for them.

And here ends the strict business of the meeting. But it still remains for me to make mention of those who were with us this day last year; or, at least, were members of our Society then, and are not now. How best to do this is a problem which I do not well know how to solve. A dull catalogue of the day of birth, the day of death, the appointments held, the works written, would yield but little interest or profit—a mere colourless outline, in which it would be hard to recognise the once familiar features. To overlay the dead with praise, would answer no better end; and the gilded statue of one so noble, wise, and good as the late Prince Consort seems placed as a material warning against so grave an error. I will try to be an honest chronicler, and to say of our lost friends what they who dwell now in a land where there are no false seemings would, if they revisited us, wish said of themselves.

The first whose loss we have to deplore is one who, in professional standing and in wide reputation, stood pre-eminent. You anticipate the name of Sir W. Fergusson, who was one of the original members of this Society, and took a prominent part at the meeting when it was founded. He recognised then the close connexion which subsists between surgery and obstetrics, and endorsed his opinion when he accepted the Vice-Presidency of the Society. I do not give up the hope that our friends at the College of Surgeons may lay this to heart, and that I may live to see some obstetrician occupying their Presidential chair. It would honour them as it would honour us, and I am sure would do much good to every branch of medicine and surgery. But medical politics do not concern us here.

What Sir William Fergusson was as a surgeon it is not for me to say. I prefer to take a few sentences from the affectionate notice of him by Sir James Paget, in his address to the Medico-Chirurgical Society in March; and if it is true that *laudari à laudato* is the highest honour which a man can attain to, the surgeon whom Sir James Paget praises may be considered fortunate indeed:—

"He was the chief practical surgeon of his time, most eminent in his great practical ability as an operator. His plans for an operation were well designed, his apparatus was always complete and in its place; every appliance was as nearly as may be perfect. But it would be a shame to Fergusson, and good sense, and good surgery, to say that he owed nearly all his success to his excellence in operating. It gained him his first reputation; the second he owed to the publication of his "System of Practical Surgery"; and when these drew on him attention, he was found to be good in a wide range of professional knowledge, and very charming in his personal character. His oral teaching was less effective than his writings; they speak clearly and vigorously. In many and important cases he was quick and clear in diagnosis; he saw into them at once, and, without analysis, or weighing of evidence, formed a just opinion."

So far Sir James Paget, whose words I have taken the liberty of condensing, though without in any respect changing them. The last characteristic which he mentions—of quick, clear diagnosis—struck me much on the occasions when I met Sir William Fergusson in consultation. It appeared to me to be the result of vast experience and of a very tenacious memory—as if his head were stored with a collection of precedents, which every year and every day increased. When these failed him he appeared to less advantage; but to say this is only to say that, while he had many gifts, he had not all—that the bedside was his proper place, not the lecture-room nor the council-chamber. This, however, is but small abatement from merit which in other respects was of the very highest order. Add to his reputation as a surgeon, and the success which he attained among the public, the fact that success did not spoil him; that strife did not sour his temper; that he was gentle, kindly, genial, hospitable; that he so avoided speaking ill of others that it came to pass that no one had an ill word to say of him; that he never made an enemy, or lost a friend; and that when he died, at the age of well-nigh threescore and ten, his death was felt to be premature, his loss a public misfortune and a private sorrow; and this, the simple truth, is of itself a praise beside which all other eulogy seems tame.

I do not know whether it is necessary to add that he was born on March 20, 1808, at Prestonpans, in Scotland; that he began the study of medicine in 1825, and worked so well that at the age of twenty he was appointed by Dr. Knox, of Edinburgh, Demonstrator of Anatomy to a class of 400 students. In 1828 he became a Member, and in 1831 a Fellow of the College of Surgeons of Edinburgh; and in 1836, after holding various minor appointments, he was elected Surgeon to the Royal Infirmary of that city. In 1840 he came to London to fill the chair of Professor of Surgery at King's College, and the post of Surgeon to the Hospital; and between that time and his death, on February 10, 1877, he had filled with reputation almost every post which a member of the medical profession could hold, and had received every honour to which he could aspire.

Another of our original Fellows died on January 6, 1877—one whose face was well known in these rooms, and whose voice was often heard in our discussions, pointing out a fallacy in argument, or questioning the exact accuracy of a statement; sometimes, perhaps, in eagerness for victory, losing sight of a something of more value still.

Dr. Snow Beck, M.D., of London, a Member of the Royal College of Physicians, a Fellow of the Royal College of Surgeons, and a Fellow of the Royal Society, was born at Newcastle about the year 1814, became a pupil of Mr. Baird, Senior Surgeon to the Newcastle Infirmary; entered at University College in 1836, and, after taking the membership of the College of Surgeons in 1839, went abroad for two years. In 1841 he returned to London, and engaged in general practice. He worked also with much diligence at the Strand Union Workhouse, of which, I believe, he was at one time the medical officer. It was here that accident placed in his hands a gravid uterus, with the dissection of the nerves of which he occupied himself; attention having been already drawn to the subject by the researches of Dr. Robert Lee. It would answer no end to revive, after the lapse of more than thirty years, the details of an acrimonious dispute concerning the correctness of the observations of two gentlemen, of whom the one believed that the nerve-substance grew largely during pregnancy; the other with equal good faith contended that a fallacy lay at the root of that belief, and that the supposed nerves were, to a large extent, mere bands of cellular tissue, which Dr. Lee's imagination converted into nerves. Dr. Beck's observations were believed by the Council of the Royal Society to be the more accurate, and they adjudged to him in 1845 the gold medal of that distinguished body, into the fellowship of which he was afterwards elected.

His subsequent work was chiefly in the direction of practical subjects. I have read his essays on "Functional Diseases of the Uterus," published in the *London Medical Journal* for 1851; his paper on "Inflammation of the Vagina," as well as his essay on "Puerperal Fever," in the *British Medical Journal* for 1866; and his remarks on different occasions during the discussions in this Society. They all impress me with the conviction that his abilities were above the average; that he observed patiently, and reflected thoughtfully; that he was fitted in many respects to have done more than he ever accomplished.

And why this comparative failure? Why did the great distinction of his life become to him like that fruit fabled to grow on the Dead Sea shore—fair outside, ashes and bitterness within? The answer is not far to seek. The honours which he gained so early were dearly bought at the price paid for them; the strife in which they involved him, the self-assertion which

that strife forced upon him, spoilt him for the mental discipline which might have won for him that higher place as a scientific investigator, that warm one as a cherished friend which a man covets none the less because he may haply miss the way that would have led to them. There are things better worth striving for, believe me, than success.

I have not taken the names of our deceased Fellows quite in their order, for the second who died was one of whom I have been unable to gather any particulars—Mr. Frederick Martin Rickard, M.R.C.S. and L.S.A., 1865-66, Assistant-Surgeon 25th Madras Native Infantry, who died at Kurnool in India on January 8, 1877. He died at the post of duty, far away from home, justifying the motto of the Society to which he belonged, as do many of our Fellows—"*Opifer per Orbem.*"

Three more names complete my chronicle. The first, one which these few words of mine may perhaps save from oblivion beyond the limits of his own country town, where his memory is cherished, and where I am glad to know that his son is winning for himself in the same profession the affection with which his father was regarded.

Charles Welchman, M.R.C.S. 1845, practised at Lichfield, where he died from paralysis at the age of fifty-four, on April 14, 1877. His townsman, Dr. William Browne, has been so good as to give me a few particulars about him, which differ but little from histories with which we are so familiar, that change but the name and it would do for many another one. Educated at Birmingham, which he left with the reputation that no one knew his work better, or was more dexterous as an operator, he settled at Lichfield, married, and had to contend with all the pecuniary difficulties which a rapidly increasing family brought upon him. As time wore on, these difficulties preyed on his spirits and interfered with his success, though they did not lose him the confidence and well-deserved affection of his patients. Of this no better proof can be given than the fact that the officers of the yeomanry regiment to which he belonged subscribed to a testimonial which must have been worth much more to him than the purse of gold with which they presented him. Two years before his death he was for a time laid aside by an attack of paraplegia, from which, however, he almost completely recovered. The enforced pause in his over-busy life served as such pauses often do, a good end; and when a second attack of paralysis carried him off suddenly, it found him walking guided by that "kindly light" which he had first learned to look upon amid the gloom of two years before.

These all may be said to have died prematurely, for they had not attained the full age of man, and might have been expected to add something more to the common stock of knowledge, to do something more for the benefit of humanity.

I come now, however, to a name which we cannot mention without a more than common sorrow, that of Dr. Bathurst Woodman, who had shown great promise, and more than that—who had accomplished more in his comparatively short life than most do who live much longer. Nor is this his only claim to our remembrance, but he has left behind him the highest testimony to his personal worth—a memory cherished with affectionate regard by those who knew him best and longest, for they who had been his teachers remained through life, and continue still after his death, his attached friends.

To one of them I owe the brief story which is all I can give to keep his memory fresh and green among those who knew him. He was born in the year 1836, at Codenham, near Minstead, one of the loveliest spots in the beautiful New Forest, where his father was a Dissenting minister. He grew up there, making up by earnest reading for a too unsystematic and desultory education; and his mastery of modern languages shows that he turned his opportunities, or his want of them, to the best account. He began his studies at the London Hospital in 1858, and during his pupilage impressed everyone by his earnestness and thoroughness in all his work. He joined the College of Surgeons in 1861; after which he held the office, first of Resident Accoucheur, then of House-Surgeon to the Hospital; and after a short experiment in general practice at Torquay, he returned to London to the scene of his studentship. His history, unlike that of most of us, was not one of more or less successful competition for appointments, but of those who had them to bestow competing for his acceptance of them. First, Resident Medical Officer to the London Hospital, then Clinical Assistant for Out-patients; then in 1870, having previously been admitted a Member of the Royal College of Physicians, Assistant-Physician to the Hospital. He had previously shown, as Medical Superintendent of the Cholera Hospital at Limehouse, his power of earnest work, and in the report of it published in vol. iii. of the *London Hospital Reports*, his ability to turn that work to the best account.

From that time till he died his work was incessant: he contributed papers to various journals, and took besides an active share in the proceedings of this Society. He translated and edited Wunderlich's treatise on Medical Thermometry, he lectured on Physiology, examined at Apothecaries' Hall, took a part in the composition of a paper which was thought worthy of publication in the *Philosophical Transactions*, and the composition of which required a thorough acquaintance with the details of medical chemistry. Add to this that he was joint author with Dr. Tidy of a work on Medical Jurisprudence, with which, if one can find a fault, it would be that the amount of matter which it contains was beyond the powers of the author, as it is of the reader, to digest, and that all this time he had to perform, and performed well, the duty of Assistant-Physician to the Hospital: and what wonder if body and mind, thus overtaxed, gave way! They gave way just when reward, which had seemed so slow in coming, came at last, and the Physicianship to the Hospital and the Fellowship of the College of Physicians had just been conferred upon him. Success came, and reputation, but came too late to save him. Perhaps he had sought for them too eagerly—for the desire for them is apt to cast a strange glamour over the clearest intellect, and cause it to forget what the poet tells us, that

> "Fame is no plant that grows on mortal soil,
> But lives and spreads abroad by those pure eyes,
> And perfect witness of all-judging Jove."

Be this as it may, he was broken down beyond recovery when the reward came, and he was pressed down by sorrows too sacred for me to speak of here. At length he gave way, as the bow breaks when overbent, or as the wearied traveller falls at last beneath the burden which he has long carried, and in bearing which he has found no helper.

> "—— with fairest flowers
> I'll sweeten thy sad grave,"

or rather, we will all look beyond the grave, to where, in peace at last, he watches us vainly struggling here; and could he make his voice heard, it would, I doubt not, be to urge on all, especially on our younger Fellows, on some of whom life's troubles may possibly now be pressing, the words which for one sad moment he forgot—"When my heart is overwhelmed, lead me to the Rock that is higher than I."

From some graves, as from this, we turn with sorrow; others we contemplate with a feeling of satisfaction—the vessel brought at last "to the desired haven." And thus, happily, we may make mention of the last name upon my list—that of Mr. Robert Dunn, of Norfolk-street, with whose kindly face and friendly greeting most of us were familiar. He belonged to an old Northumberland border family of landed proprietors, and was born at East Brunton, in the parish of Gosforth, in the year 1799. His ancestors were for many generations Lairds of Macfen in the county of Northumberland; but he valued more highly his descent on the maternal side from the family which gave Bishop Nicholas Ridley to the Church of England. I may in passing just observe that a lineal descendant as some would have it he could not be, since the good Bishop was never married; and as the Roman Catholic writer Dr. Lingard tells us, "his refusal to avail himself of the permission to marry, though he condemned not the marriages of others, added to his reputation." But so is history written.

Mr. Dunn was educated at a private school at Newcastle, conducted by a Mr. Atkinson, who is said to have been a profound mathematician, and a distinguished member of the Literary and Philosophical Society of that town. He served an apprenticeship to Mr. W. Davison of Alnwick, but did not begin his medical studies in London until the age of twenty-five, when he entered as a pupil of the then united medical schools of Guy's and St. Thomas's Hospitals.

In Mr. Dunn's case at least the much-decried apprenticeship system worked well. Exceptional cases indeed prove nothing, but I cannot but connect his robustness of mind in some degree with the fact that he came to the systematic study of his profession with the intellect of a man, not with

the mere sharp-wittedness of a lad. One hears that the racing of two-year-olds damages the breed of race-horses: I am not quite sure that the youth who answers questions concerning all things knowable at eighteen, turns out the best medical practitioner at eight-and-twenty.

The friendship of Dr. Addison, with whose family he had been on terms of intimacy from boyhood, stood Mr. Dunn in good stead during his student-days and after. He became a Licentiate of the Apothecaries' Society in 1825, and a Member of the College of Surgeons in 1828; and he settled down in practice in Norfolk-street, Strand, where the rest of his life was passed—apparently drawn to that locality by its nearness to the Carey-street Dispensary, to which Dr. Roots and Dr. Addison were then Physicians,—and where he spent for many years all the time that he could spare from a steadily increasing practice, in the endeavours to perfect his knowledge.

Honest work always yields good fruit; so did Mr. Dunn's. He contributed to the first volume of the *Transactions* of this Society, in 1859, a paper on the "Statistics of Midwifery," deduced from more than 4000 cases occurring in his own practice. The paper is of value and interest: the interest dependent not merely on the facts which it contains (themselves of no mean importance), but as displaying the earnest simplicity of mind which was so marked and so beautiful a feature in his character. But he did not confine his attention to what are commonly called practical subjects. The phenomena of the mind, the disorders of its action, the connexion of those disorders with diseases of the organ through which it acts; the various problems connected with the mental development of different races, and their relation to special conditions of the brain; the psychological characteristics of different races of men; the evidences in favour of the unity of the human species,—occupied, I can scarcely say his leisure, but rather I should say engaged his less busy hours.

And what, some may ask, was the outcome of it all? what new truth did he bring to light? what old truth did he substantiate? I have not the knowledge critically to estimate the value of each of his essays, and to assign to all their exact worth. But I know that the increment of our knowledge is the total of the small additions made by each honest observer. "Symbolum aliquod, utcunque exiguum," was all that Sydenham ventured to say of his work; what shall we say of ours? Nor only so, but if, as most of us believe, we are placed here in a trial state, to cultivate our intellect, to improve our moral being with reference to a higher, nobler condition than this, just as our first parents were placed in the garden "to dress it and to keep it," when yet out of the ground there grew of its own accord, untilled, uncared for, every tree that was "pleasant to the sight, and good for food," so should our self-improvement be to us as it was to them, the motive and the spur to our own diligence.

It was thus that our friend understood life and life's duties. That in discharging these duties he was honoured and respected and beloved; that he became a member of this society and of that, a Fellow and Vice-President of the Medical and Chirurgical Society, one of our original associates; the President at one time of the Metropolitan Branch of the British Medical Association, what profits it to tell, except for this—that one is always pleased to hear of merit meeting with due recognition. One believes that in his case it met with it all the more because his every effort was directed to deserve, not to claim, reward.

For the last year or two of his life health began to fail him, old age set its mark upon him, and the symptoms of heart disease gave him warning. But he was active and good-doing to the last. He died as he had lived, passing away quietly, unexpectedly, in the night of November 4, 1877, giving no one any trouble, but just going to sleep as usual, and waking on the morrow to sunnier skies and in a brighter realm.

And now, gentlemen, my task is done, and I have tried to discharge for our deceased friends the office which some kindly occupant of this chair will do another day for you, for me. It were idle or worse to try to moralise on subjects so trite as those which these short life-notices suggest—the much to do, the little time to do it in. All that I fain would say is summed up in the motto inscribed beneath the sun-dial in Old-square, Lincoln's-inn, which, as it tells us of the fleeting hours, adds the reminder, "Pereunt, et imputantur."

CLINICAL REMARKS ON OVARIOTOMY AT THE SAMARITAN HOSPITAL,

DECEMBER 19, 1877.

By T. SPENCER WELLS, F.R.C.S.,
Consulting Surgeon to the Hospital.

GENTLEMEN,—The patient on whom I might have performed my last ovariotomy in this hospital has decided—wisely, I think—to wait a few months before running the unavoidable risk of the operation, even in a favourable case. She is a National schoolmistress, and she can earn her living without much discomfort, and this discomfort has rather lessened than become greater during the past six months; she is sure her size has not increased during that time: so, on all these grounds, she will wait; and all I have to do to-day, to conclude my work as Surgeon to this hospital, is to tap a Belgian sister of charity, who has a large ovarian tumour, which, from its pelvic attachments, its rapid growth, and the emaciation which has attended its growth, raises the fear of its being of a malignant character. You see I do not remove her from her bed. I simply turn her on one side, puncture the integuments with a lancet, and then through the syphon-trocar, which I contrived many years ago, the fluid flows quietly into a pan beneath the bed, and a portion is set aside for careful examination.

In the next bed is a patient almost well, for whom I did ovariotomy this day fortnight. The case is peculiar, as she was tapped nine years ago by Mr. Taylor, of Guildford; and for three years went about with a suppurating cyst discharging constantly. Then it healed, and for some five years she remained well. But other cysts grew, and I removed a very large tumour, so intimately adherent in some parts that I could only separate the adhesions by knife and scissors; yet recovery has been uninterrupted. The other patient, done on the same day, is in the next ward. She is now convalescent, but for some days she had a good deal of fever—a temperature of 102° and pulse of 120 day after day, though the head was kept cool by the ice-cap. She came all the way from New Zealand to have the operation done here; and there are several points of interest in her case, especially in the diagnosis, which will call for remark hereafter.

We will now go upstairs, and see the patient operated on last Wednesday. She is, as you see, remarkably well, though there has been unusually free suppuration between two of the stitches. As a rule, the incision in the abdominal wall heals by first intention, and suppuration is quite exceptional.

Last week I showed a table, which I had prepared as a record of my whole experience of ovariotomy in this hospital—an experience of exactly twenty years, from my first attempt in December, 1857, to my case last week. That case must now be added to the table; and the patient is so well that I am confident we may safely add her to the list of recoveries. Here is the corrected table:—

Years.	Cases.	Recoveries.	Deaths.
1858 . . .	3	3	0
1859 . . .	6	4	2
1860 . . .	2	1	1
1861 . . .	6	3	3
1862 . . .	13	10	3
1863 . . .	16	11	5
1864 . . .	14	11	3
1865 . . .	17	13	4
1866 . . .	15	10	5
1867 . . .	21	17	4
1868 . . .	32	25	7
1869 . . .	21	14	7
1870 . . .	24	17	7
1871 . . .	26	18	8
1872 . . .	30	23	7
1873 . . .	34	25	9
1874 . . .	29	20	9
1875 . . .	28	20	8
1876 . . .	42	38	4
1877 . . .	29	26	3
Total . .	408	309	99

Now let us see how far increasing experience has affected the

proportion between recoveries and deaths in successive years. A glance at the table will show you how this varies in the several years; but we want larger numbers for anything like accurate statistical conclusions. This, we may, perhaps, gain by grouping the cases together in series of five years. I have done this, and here is the result:—

	Cases.	Recoveries.	Deaths.
First five years . . .	30	21	9
Second five years . . .	83	62	21
Third five years . . .	133	97	36
Fourth five years . . .	162	129	33

If we take the last two years only (1876 and 1877), we find 71 cases, with 64 recoveries and only 7 deaths—a mortality just below 10 per cent.

Or putting these facts in another form, and dividing the twenty years into four successive periods of five years each, it appears that in the—

First five years . . .	about	1 in 3 died
Second and third five years .	,,	1 ,, 4 ,,
Fourth five years . . .	,,	1 ,, 5 ,,
Last two years	,,	1 ,, 10 ,,

But, to render the matter more clear, I arrange these cases in another table, which gives us at once the number of cases, the number of deaths, and the percentage of recoveries:—

Series of years.	Cases.	Deaths.	Recoveries.
First five years (1858 to 1862) .	30	9	70 per cent.
Second five years (1863 to 1867) .	83	21	74 ,,
Third five years (1868 to 1872) .	133	36	73 ,,
Fourth five years (1873 to 1877).	162	33	80 ,,
Total	408	99	
Two last years (1876 and 1877)	71	7	90 ,,

I ought, however, to remark, in order to explain the figures, that, in addition to the sixty-nine cases originally noted for the last two years, I have included two cases which both recovered, where I operated a second time on the same patient. As a patient who has recovered after the removal of an ovary, and some years afterwards finds the other enlarged and requiring removal, is evidently under different conditions from a patient who undergoes ovariotomy for the first time, I have always kept these second operations in a separate list. But in making the above calculations they have been taken into account, together with two other patients who also recovered after second operations in 1866 and 1868. I have not lost a single hospital patient after a second ovariotomy. A moment's consideration of these facts —indeed, I think the question may be considered as settled —will carry the conviction that increasing experience has been accompanied by diminishing mortality.

In speaking of ovariotomy in this hospital, and in preparing the preceding tables, I have dealt with my own work alone. For many years, with an occasional rare exception, I did all these operations. And in connexion with the evidently increased success attending them, it is interesting, just for a moment, to look back over the many hesitating steps by which we have advanced in gaining confidence in our diagnosis, facility in the purely operative proceedings, and the means of meeting many of the early difficulties of after-treatment.

The two chapters on the diagnosis and investigation of cases of ovarian tumours in my book "On Diseases of the Ovaries," published in 1872, occupy no less than 140 pages. The greater part of what is there written was very imperfectly known in 1858, and assuredly, with little more than my experience as a naval and military surgeon, I was hardly so well-informed as the ordinary practitioner of the day, much less so than many of our brethren. Indeed, I made but slight allusion to the subject in the surgical lectures which I gave from 1856 to 1860 at the Grosvenor-place School. But it is not overstepping the truth to say that now, after years of inspecting, sounding, tapping, analysing fluids, microscopically examining deposits, measuring, mapping surfaces, and comparing the charts with the revelations of the knife, the cases in which we are deceived as to the nature of a tumour, its point of origin, its adhesions, and the chances of its easy removal, are but rare exceptions; and I am inclined to believe that a review of the entries under the different headings in the several editions of my little form of note-book would afford more information than amusement even to a captious and quizzing investigator. How different, too, the operation and all its accessories and accompaniments from what we used to see when the operator was seated between the legs of a woman, spread out like a frog for vivisection, with the room heated like a furnace and filled with steam, and the red-hot irons glowing in a corner, like a scene of the surgery of the fifteenth century; the hesitation of incertitude, and the rashness of desperation, sometimes the dogmatism of assumed superiority, often the loquacity of puzzled curiosity, and always the risk of collapse from bleeding or chloroform interfering with the calmness necessary for the operation, and the chances of safety for the patient. Any of you who have seen the operations performed upon the women now in the hospital may have observed that the operation is not done in a theatre, but in one of the light, airy, quiet rooms in which the patient remains alone with her nurse for at least a week after the operation.

No visitor has been admitted since 1873 who has not signed the following declaration:—"We, the undersigned, have not been to any post-mortem examination nor any dissecting-room, nor attended any case of infectious disease, within the last seven days." Any qualified medical man, from any part of the world, is freely admitted after having signed this declaration; but even our own colleagues who cannot sign it are bound in honour to absent themselves. Before visitors are admitted, the patient is placed upon a table, lying on her back warmly clothed, her lower limbs covered with a blanket, the head and shoulders supported by pillows, the knees and hands secured by straps, a perforated indiarubber sheet so applied that only the front of the abdomen is uncovered, and she is asleep under the influence of what I believe to be the safest and best of known anæsthetics, bichloride of methylene. All the instruments that can be wanted for the most complicated case are ready and at hand. There must not be any threading of needles at the last moment. The nurses have a precise number of perfectly pure and soft sponges, and plenty of small fine linen cloths for use before the sponges are wanted. Supposing daylight direct or reflected fails, I have tried various kinds of reflecting lamps when searching for vessels deep in the pelvis; but the most useful of all is the small medical lamp recently introduced by Colin, of Paris. You saw me a fortnight ago finish a second operation almost after dark by the aid of this lamp. All this is ready before visitors come into the room, and they are then requested to observe the most absolute silence. It is quite a common thing here for an operation to be completed without a single word having been spoken by myself, the assistants, or the nurses; and if a remark is made by an unwary visitor it is at once hushed.

The incision in the abdominal wall, the stopping of bleeding from superficial vessels by torsion forceps, the division of the peritoneum, the exposure and tapping of the cyst, the separation of adhesions, the management of adhering omentum or intestine, the breaking down of inner septa and the withdrawal of the tumour from the abdominal cavity, the treatment of the pedicle, the examination of the opposite ovary and uterus, the thorough cleansing of the pelvic and peritoneal cavities, the use of drainage-tubes if required, the closure of the wound, the dressing and bandage,—all are matters of detail of great importance. You have seen them done, and if you wish for further explanation I can now only refer you to my book. You have seen the patient carried from the operation table and placed in a warm, dry bed. The room is at once cleared and darkened, and when she awakes she finds herself alone with her nurse. Recent changes in the management of the patient after operation have been chiefly in the direction of regulating temperature. Enough opium is given to relieve pain, but not more. The patient is kept warm enough to encourage free action of the skin, without being made uncomfortably hot. Food and drink are regulated by the instinctive desire for them. All our nurses are instructed in the use of the thermometer, and they are directed whenever the temperature rises above 100° Fahr. to keep the head cool by means of the ice-water cap. If the skin is dry, very small doses of aconite are given frequently (half a drop of the tincture every half-hour). It is only in the rare exceptional cases of septicæmia, septic peritonitis, or pyæmic fever that large doses of quinine or of salicylate of soda are thought of. In some few cases bleeding from the arm has been necessary, but as a rule the patients are let alone after the operation and they get well.

And now, appearing here for the last time as the Surgeon of the hospital, I am glad to say that neither my colleagues nor the governing body of the institution wish that my new position as Consulting Surgeon should be purely honorary. We have arranged that I shall attend on one afternoon in every week with the express object of joining in public consultations, not only on patients who may be in the hospital, or who may be attending as out-patients, but also upon women whom any of our professional brethren may bring here for our opinion or may recommend for admission. I hope we may be able to express freely the opinions we may form after examining a patient, even if those opinions differ widely, without any risk of misunderstanding or offence. And as, of course, we should give the grounds upon which our opinion is founded, such consultations are likely to be very instructive to anyone who may be present. It is not often that operations will be performed in which such great doubt or difficulty may be expected to arise that my actual assistance will be called for, but I have assured my colleagues that if they should require my aid it will give me the greatest possible pleasure to render them any service in my power. If in some such manner as this I had not been able to keep up my interest in the work of this hospital, I might have been induced to perform the duty of Surgeon for some years longer, but a long while ago I was deeply impressed by some remarks made by Sir Benjamin Brodie on his retirement from St. George's Hospital, after eighteen years' service as Surgeon. I forget the exact words, but he has reprinted something very like them in the conclusion to his Autobiography. He says—"It was not without a painful effort that I made up my mind to resign an office to which I had been sincerely attached. In doing so I was influenced by various considerations. One of them was that I began to feel the necessity of diminishing the amount of my labours. Then I had long since formed the resolution that I would not have it said of myself, as I had heard it said of others, that I retained a situation of such importance and responsibility when, either from age or from indifference, I had ceased to be fully equal to the duties belonging to it; and lastly, when I saw intelligent and diligent and otherwise deserving young men around me, waiting their turn to succeed to the hospital appointments, it seemed to me that there was something selfish in standing longer in their way, when, as far as my own mere worldly interests were concerned, I had obtained all that I could desire."

When I first heard these sentiments of Sir Benjamin Brodie I determined that if I should ever be placed in any like position I would do my best to follow the example set by so wise and good a man; and in carrying out that determination now, I trust that while I am thus enabled to devote more time and attention to my private practice, I shall still be of some use to the suffering women in the hospital, without standing in the way of ambitious and deserving juniors, who have worked long and hard for the position they have now attained, and which I sincerely hope they may enjoy for many years to come.

PERFORATION OF THE AORTA BY A FOREIGN BODY.—Dr. Aschenborn, of the Bethanien Hospital, Berlin, relates the interesting case of a lad sixteen years of age who swallowed a needle with a hard piece of bread on June 29. The needle was detained in and penetrated the œsophagus, but did not cause much pain during the first two days. By the efforts of swallowing food which was afterwards taken the needle was thrust in still further, and on the third day penetrated the descending thoracic aorta. The connective tissue between the aorta and the œsophagus was separated by the effused blood; but the coagulum which was there formed acted as a plug, arresting the further hæmorrhage for two days, but induced severe pain by the pressure it exerted on the mediastinum. The heart was also thrust forward by the extravasation. Under the influence of particles of food which penetrated by the side of the needle into the mediastinum, the coagulum soon putrefied, and, ceasing to act as a plug, the bleeding from the wound in the aorta recurred in increased quantity, and on July 9 terminated the patient's sufferings. At the autopsy a needle 5·0 centimetres in length, with a long thread attached, was found penetrating the œsophagus and aorta.—*Berlin. Klin. Woch.*, December 10.

ORIGINAL COMMUNICATIONS.

A SECOND CASE OF

REMOVAL OF LARGE FIBROID WITH OUTGROWTHS AND BOTH OVARIES—DEATH.(a)

By J. KNOWSLEY THORNTON, M.B. and C.M. Edin.,
Surgeon to the Samaritan Free Hospital for Women and Children.

On February 19 in this year I had the honour of reading before this Society the report of a case similar to the above, and I am happy to say that the patient whose case I then recorded has lately left this country for New York, perfectly strong and well. I had an opportunity of examining her a few days before she left, and found her condition in all respects most satisfactory.

The case I am about to bring before you has unfortunately a different termination, but I feel convinced that it is only by a *thoroughly* faithful record of both successful and fatal cases that an operation of this formidable nature can hope to receive the sanction of the profession to which I believe it to be justly entitled. It is my intention, with the permission of the Society, to follow the good example set by Mr. Spencer Wells, at a sister society, in the early days of ovariotomy, and bring before you all the cases of uterine tumour which I remove by abdominal section, and I shall do so with no misgiving as to the verdict when the last case comes to be recorded.

I do not believe that hysterotomy will ever be so common as ovariotomy, because uterine tumours only occasionally shorten life, whereas ovarian tumours almost invariably do so if left alone or treated merely by tapping. I think in certain selected cases, however, that the removal of uterine tumours by abdominal section is not only justifiable, but will take its place in the surgery of the future beside ovariotomy, that grand triumph of British surgery.

There are, I think, three conditions which, together or separately, may justify the surgeon in offering to remove a uterine tumour, or rather the whole uterus—for there is a vast difference between the mere removal of an outgrowth, and the total extirpation of the supra-vaginal portion of the uterus.

I give the three conditions in what appears to me to be the order of their relative importance:—1. Pain; 2. Hæmorrhage; 3. Size.

Either of the first two may be alone so severe as to justify the ablation of the uterus. I doubt whether size alone should be held to justify the operation, especially as the danger is much increased when we have to deal with a very large solid tumour. The social condition of the patient must also be taken into consideration, for we may be justified in offering the chance of cure by operation to a poor woman who has to earn her living, when we are not if the social position of the patient places at her command all those alleviations which it is in the power of the physician to afford when aided by constant nursing and perfect rest.

In both my cases the social condition of the patient powerfully influenced my decision. In the first, pain was the chief, and almost the only justification; in the case I am about to relate, hæmorrhage was also severe.

E. M., a widow, aged thirty-eight, a cook, first consulted me as an out-patient at the Samaritan Hospital in June, 1876. She was married when thirty-one, and for two months after marriage her menstruation was suppressed, and she never felt really well afterwards. Her husband only lived nine months, and she was never pregnant. With the exception of the two periods, menstruation had always been regular till two months before she sought my advice. There was a clear interval of four weeks between each menstruation, and she was a week unwell, the discharge always being very free and without pain. From the date of the two months' suppression named above she began to suffer more pain just before and during the period, and for three years she had noticed increase of size on the left side of the abdomen. The last period, which was going on when I first saw her, had followed the previous one with an interval of only three weeks, and was excessive. There was also a great increase of pain, and some difficulty in passing water. I found on examination a firm globular tumour in the left

(a) Read before the Medical Society of London, October 22, 1877.

iliac region, very movable, and not tender on pressure, except just over the bladder, which appeared to be somewhat abnormally drawn up in front of the tumour. The pelvis was occupied by another but more irregular mass, which was evidently closely connected with the abdominal one. The pelvic portion was in the pouch of Douglas, and its lower margin involved to some extent the posterior lip of the cervix, which was thinned, and expanded over it in such a way that had the abdominal part been absent, I should have thought it a good case for the application of the actual cautery, as recommended by Dr. Greenhalgh. The sound passed four inches to the left and in front of the abdominal tumour, and could be so distinctly felt through the parietes, that I think it must have passed into the tube. My diagnosis was, fibroid outgrowths from uterus, probably both sub-peritoneal and intra-mural. From this first visit she was under my care almost up to the time of operation, and I tried all sorts of palliative treatment; Mr. Spencer Wells kindly seeing her with me in consultation on two or three occasions. During the whole time the tumour steadily increased, the pelvic portion growing most rapidly. The only thing which ever gave her relief in the way of medicine was ergot, but it did not check the growth. Pushing up the pelvic portion into the abdomen just before the period also gave some relief; but at last this could no longer be done, and before each of the three last periods her urine required to be drawn by the catheter. Hæmorrhage also became more severe, so that she was much blanched and very weak. At last the pain and hæmorrhage combined forced her to leave her situation, and I then offered her the chance of operation, fully warning her of the risk she ran. After a few weeks quiet in the country she came into the Samaritan. The sound now passed four inches and a half, with a spiral twist still to the left side, but its point could no longer be felt through the parietes. The right ovary could be distinctly felt above the pubes enlarged and tender. The pelvic portion was still to some extent movable, but prolonged and firm pressure in various positions failed to dislodge it.

On July 17, I removed the uterine mass and both ovaries, cutting through the cervix just above the vagina. The abdominal was connected to the pelvic position by a round pedicle, which I transfixed and temporarily ligatured with strong whipcord, cutting away the upper part of the tumour, so as to leave a good stump, and leaving the ends of the cord for traction on the pelvic mass. The latter was so firmly wedged in the pelvis that it was dislodged with much difficulty, and only after transfixing the base of the right ovary with a double silk ligature and removing it. I then removed the left ovary in the same way, applying a temporary clamp along each side of the body of the uterus down almost to the vagina, being warned by my former case that serious hæmorrhage might suddenly occur from partial slipping of a loop of the ovarian ligatures. I now passed my right finger into the vagina, and my left hand into the pelvis, and by the bi-manual method noted accurately the relations of the remains of the tumour to the vaginal portion of the cervix, the bladder, and rectum. Having thus selected the best place for transfixion, I withdrew my right hand, and, keeping my left behind the cervix, transfixed it with a curved needle carrying a strong double silk ligature. The transfixion was very difficult, from the hard nature and increased thickness of the cervix; and when I tied my loops I found it impossible to tighten them sufficiently on their respective halves, and therefore passed a wire loop round the whole, and tightened it with the admirable serre-nœud of M. Cintrat. Hoping to avoid any loss of blood, I cut the tumour away with the thermo-cautery, but only lost time by so doing, as it was impossible to apply it close enough to the wire and ligatures, and I was obliged to pare with the knife the stump left by its use. I now laced the whole cut surface of the broad ligament with strong silk from left to right, after the manner I employ when dealing with the broad ovarian pedicle. The wire was then removed, as were all the ligatures previously applied; the uterine stump oozed, and a double ligature of strong silk was therefore firmly tied round it, all the ends being cut short. I thus had the cut edge of the broad ligament held in its natural position across the pelvis by a silk chain, an admirable method so far as complete control of hæmorrhage was concerned, but unsatisfactory as leaving too many ligatures in the abdomen, several of them passing through uterine tissue, and some possibly through the cervical canal. Very little blood was lost, and only a little, with some of the serum which oozed away during the use of the cautery, escaped into the pelvis. The question of drainage now presented itself, and, finding everything perfectly dry, and acting on the experience of my previous case, and the usual rule in ovariotomy under similar circumstances, I did not put in a tube. I spread the omentum out between the intestines and stump before closing the wound. The operation occupied nearly two hours, being much prolonged by the use of the thermo-cautery. The patient when placed in bed had a good pulse, and the temperature in the axilla was 98·8°. Bichloride of methylene, and afterwards chloroform, were administered by Mr. Meredith, my colleagues Dr. Bantock and Dr. Champneys kindly assisting me with the operation; Mr. Spencer Wells and many other gentlemen being present. The whole mass removed weighed three pounds thirteen ounces and a half. I should have mentioned that the right ovary had in connexion with it a small group of cysts, probably par-ovarian. I will not detain you with the details of the after-treatment, as they are the same as in the case previously recorded, except that the amount of opium used was much less, as the patient suffered but little pain.

The following is a brief account of the patient's condition during the thirty-five hours that she lived after the operation:—

July 17.—9 p.m: Temperature 99·6°; pulse 110; respirations 20. Bright and cheerful; free perspiration.

18th.—Sick at six and again at seven. 7 a.m.: Temperature 101·2°; ice-water cap put on. 10 a.m.: Temperature 102·4°; pulse 132; respirations 28. Urine free and clear; feeling of pressure on bladder; much thirst; tongue dry and red. 11 a.m., 12, and 1 p.m.: Temperature 102·6°. At the latter hour I saw her again, and feared septicæmia from her manner and expression. Internal hæmorrhage also suggested itself from her extreme pallor, but I could find no other indications of it; ordered beef-tea and port wine enemata every two hours. 2.30 and 3.30 p.m.: Temperature 103°. Sickness troublesome. 4.30 p.m.: Temperature 102·6°; pulse 140, feeble; respirations 32. To continue enemata, and stimulate freely with brandy. 5.30 p.m.: Temperature 102·6°. 6.30 and 7.30 p.m.: Temperature 102°. 9 p.m.: Temperature 102·6°; pulse 160; respirations 36. Some serous oozing from lower angle of wound; bottom stitch taken out; fetid gas and sero-purulent fluid escaped. With kind assistance of Dr. Bantock, I inserted one of Keith's glass drainage-tubes, passing a couple of wires through it into the vagina, and well washed out the pelvis with warm carbolic lotion; quite conscious, but much exhausted after this operation. 11.30 p.m.: Pulse 140.

19th.—1 a.m.: Temperature 103·6°. 1.30 a.m.: Died. 1.50 a.m.: Temperature 104°. I examined the body sixteen hours after death: there was no general peritonitis; no gaseous distension of intestines; one small loop of intestine, which had slipped down beside pedicle, was intensely inflamed; there was about an ounce of fetid pus in the pelvis; no oozing had taken place from any part of the stump; the ligatures were not covered by lymph, but the uterine stump was almost entirely glazed over. I think there can be no doubt that the cause of death was rapid septicæmia; and it is worthy of note that thirty-five to forty hours is a common duration of life in septicæmia following ovariotomy. What were the causes which led to this unfortunate termination? and why was the result in the previous case, which was in some respects more unpromising, so different? The question must remain partially unanswered, I fear, until we are fully agreed as to the causes of blood-poisoning. I am one of those who accept the germ theory as explaining the primary source of infection, but I cannot resist the belief that we must look to something in the individual to explain why one patient dies and another escapes. I think the debilitated condition of this patient, from repeated hæmorrhages, and possibly her previous occupation (cook in an eating-house), rendered her a fit subject.

These are conditions beyond our control, if we exclude antiseptic surgery, and the case presented special difficulties for the application of Professor Lister's method, which it is not my purpose to enter on at present.

I fear faults in the details of the operation must bear a large share of blame, and I shall fearlessly expose them to your criticism, because I think with our present lack of experience the most brilliant surgeons of our time might

feel at a loss almost as much as the humblest while performing this operation.

Mr. Spencer Wells, the greatest authority on abdominal surgery, in his recent address in Manchester, spoke as follows on this subject:—"We only require a better knowledge of the details of the operative procedure, and a greater experience in meeting the various difficulties which may arise, to place the removal of uterine tumours by gastrotomy amongst the most hopeful of the many lines of thought and action open to the operating surgeon of the future."

The following seem to me to be the details of the procedure in this particular case which are open to question, and may be advantageously discussed in the hope of obtaining better results in the future:—

The attempt to deal with so thick a pedicle by a single transfixion.

The use of a temporary loop of metal wire.

The use of the thermo-cautery.

The lacing of the whole pedicle with silk at the finish, instead of being content with the ligatures already applied to the ovarian pedicles, and simply dealing afresh with the uterine one. This proceeding caused the passage of several thick silk threads through uterine tissue, and I cannot help fearing that one or two of them may have passed through the mucus in the cervical canal, and thus become direct channels for the admission of putrefaction.

I was induced to use the silk ligature by its greater convenience of application, its success in my first case, and in certain cases of Mr. Spencer Wells, which I alluded to in my previous paper, and most of all by the success which has attended its use in my ovariotomies. I have used it in thirty-two cases entirely, and in one other case for one pedicle, clamping the other. The latter recovered; and of the thirty-two cases I only lost five, though many of them had two ligatures on each ovarian pedicle, and some of them as many as four or five ligatures interlaced in the one pedicle. In any future case of complete ablation of the uterus I shall be inclined to use a single or double strong silver wire applied by the serre-nœud of M. Cintrat, the sharp end being turned on itself into the tissue of the pedicle. I wish I had applied such a loop instead of the temporary metal wire in this case.

However satisfactory the thermo-cautery may be in some cases, it was certainly a mistake as used in this one.

I think it not impossible that, in spite of the errors which I freely acknowledge, the termination might have been different had I inserted a glass drainage-tube at the time of operation. In future I shall always put one in, if only for a few hours, as I think uterine tissue is apt to pour out a considerable quantity of serum during the first few hours after operation. There is one other suggestion which seems to me worthy our consideration: would it not be well to soften and dilate the cervix by the introduction of a sponge or tangle-tent for twenty-four hours before the operation? It seems to me this might give a double advantage, making it easier to thoroughly cleanse the canal with some antiseptic immediately before the operation, and easier either to transfix or apply a loop round the softened tissue.

In my former paper I claimed for the silk ligature a farther trial, but said that probably different cases would, as in ovariotomy, require different methods. One successful case would not establish its use, and now one fatal case must not discredit silk altogether; but I think, while retaining the ligature, we may seek anxiously for a material which shall be as trustworthy, but without its risks. Possibly silver wire will answer best, or some form of catgut.

A CASE OF

HEMICHOREA WITH ANÆSTHESIA AND IMPAIRMENT OF SPECIAL SENSE,

BUT WITH MUCH INCONSISTENCY BETWEEN THE SENSITIVE DISORDERS.

By JAMES RUSSELL, M.D., F.R.C.P. Lond., etc.,
Physician to the Birmingham General Hospital.

THE following case is reported on account of its presenting an interesting variety, amounting even to a contrast, to the class of sensitive disorders which attended the condition of hemichorea in a patient whose case I reported in the *Medical Times and Gazette*, September 15. The departure from the type presented in that case has interest in connexion with a late discussion at the Clinical Society; it consists in the indeterminateness, and to a certain extent the inconsistency, observed in the sensitive disorders of the present case, as opposed to the precision and general consistency which characterised the anæsthesia of the preceding patient. The implication of both sides of the body in the anæsthesia, the incongruity attending the auditory phenomena under the influence of different circumstances, the very rapid recovery of sight, and the absence of any contraction of the visual field, are all points which stand in striking contrast with the phenomena presented by the subject of the other case. In my present patient the symptoms answer to the vulgar idea of hysteria far more than in the preceding one, and certainly appeared to lie to a far greater degree under the influence of mental operations.

M. A. S., aged eighteen, servant, admitted September 11, 1877. The only cases of nervous disease ascertained to have been present in her family were a liability to severe convulsions on the part of her maternal grandmother during the child-bearing period, together with the occurrence of three "strokes" in the latter period of her life; and a temporary nervous attack in her mother, attended for a few hours with loss of speech. The patient had menstruated profusely for nine months, but had passed one period shortly before admission. She presented no nervous antecedents excepting the occurrence of headache during the preceding six months. Her temper was described as being irritable; she had never suffered from hysterical developments, nor were any observed during her stay in hospital; and it may be added, she was at that time free from ovarian tenderness. She had been overworked at her place of service. She had an attack of acute rheumatism, not lasting above a week, three weeks before admission: and, about the fifteenth day after the commencement of the rheumatic attack, choreic movements were observed in the third and fourth fingers of the right hand, then in the remaining fingers, and two or three days afterwards in the right leg. She stated that there had been movements in the face, but none were observed by ourselves. The left side was entirely free throughout. Speech was "stopped" a little sometimes; deglutition was unaffected.

At admission, the right hemichoreic phenomena were decided and characteristic. The patient's manner was remarkably apathetic. She spoke in a very low tone, but articulated distinctly. This peculiarity of manner was very decided, but altered considerably under the influence of admonition. There appeared to be complete anæsthesia and analgesia on the right (the choreic) side, and incompletely, but in a decided degree, on the *left* side, the face included; but whilst she allowed a pin to be freely stuck into any part of her body, and professed her inability to appreciate the heat of a spoon dipped into tolerably hot water, she flinched very decidedly when the spoon had been heated in a lamp. The mucous membranes of the nose and mouth were equally affected with the cutaneous surface; but the conjunctiva was intolerant of contact, and she started so much when atropine was dropped between the lids as to scatter the fluid. When tested by a tuning-fork, she asserted that hearing was somewhat obscured on the left side, but that she was quite deaf on the right, both perosseally and by the meatus. There was every reason to believe her perfectly honest in the assertion, and no remark had been made to prejudice her; yet when the left ear had been stopped, she still answered readily to questions put to her in a low voice. She repeatedly affirmed that she could not distinguish the number of fingers held before the right eye, though able to discriminate light from darkness, and just to discern the glare of the ophthalmoscopic mirror. With the left eye she was unable to read below 16 Jäger whilst the right remained open, but when the right eye was closed she read No. 1 Brilliant with ease. The disc was normal. She discriminated peppermint and assafœtida with the left, but not with the right nostril; taste to salt was imperfect, but not annihilated, on the right side of the tongue. Electro-sensibility was very low in the trunk; less so in the limbs. Unfortunately, our electric brush had been mislaid. Electro-contractility was normal. There is no note relating to the presence of ischæmia.

After having been in hospital seven days, and *two days* only after she could do nothing more with the right eye than distinguish the reflection from the ophthalmoscope, vision had returned in the same eye to such a degree that she could tell the time on a fine watch, and two days later could read No. 2 Jäger. The field of vision was found in no degree contracted. She also heard better with the right ear. I was compelled to send her away from stress of room, and had not the opportunity of seeing the termination of her case; but when she

left, common sensation had been very much regained. The treatment consisted of the administration of steel, with appropriate discipline.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

UNIVERSITY COLLEGE HOSPITAL.

CASES OF STRANGULATED HERNIA.

(Under the care of Mr. BECK.)

[Notes abstracted from the reports of Mr. D Evans, Surgical Ward Clerk.]

Case 1.—Right Oblique Strangulated Inguinal Hernia with Undescended Testis in a Patient suffering from Stricture of Urethra.—Herniotomy on fourth day—Sac opened—Wound treated by Antiseptic Method; Stricture treated by Continuous Dilatation—Discharged cured in fourteen days.

C. R. P., aged thirty-six, a clerk, admitted under care of Mr. Beck, September 11, 1877. He has suffered from stricture of urethra for fourteen years, subsequent, he says, to a fall on the fork. Three years ago patient believes he ruptured himself by slipping down; and three days afterwards, whilst straining to pass water, he felt the intestine come down suddenly in the right groin. He was taken to a hospital, where the rupture was reduced, and he was ordered to wear a truss, which he has done ever since.

September 7.—After a long walk, and straining to pass water, the rupture came down behind the truss.

8th.—After another walk, he tried to reduce the rupture, but failed. He suffered a great deal of pain.

10th.—A doctor tried to reduce the hernia, but unsuccessfully.

11th.—Vomited at twelve o'clock noon, for the first time. Bowels had not been opened since September 7. Dragging pain at the navel.

Condition when Admitted.—Has a right strangulated inguinal hernia, which has just reached the upper part of the scrotum. It is very tender on pressure, resonant on percussion, and with a doubtful impulse on coughing. The right testicle has not properly descended; it can be felt at the upper part of the inguinal canal; the left testicle is in the scrotum, small and soft. There is absolute constipation; the vomiting is not stercoraceous; no collapse. Patient has a stricture of urethra which only admits a No. 1 catheter; it is situated four inches from the meatus. Urine 1010; alkaline, with a small deposit of phosphates, one-tenth albumen.

Taxis being ineffectual, at 3.30 p.m. Mr. Beck operated under chloroform. The neck of the sac was found too tight to admit of contents being returned without incision. About an ounce of straw-coloured fluid escaped. After the neck was incised the gut was returned. The right testicle appeared during the operation, and was left in position. The operation was performed antiseptically. No. 1 elastic catheter was passed into the bladder and tied in. At 7 p.m. patient vomited three pints of brownish fluid.

September 12.—Dozed during the night; but passed a little flatus. Temperature this morning 98·4°; pulse 80, full and regular. At 11 a.m., the catheter having become blocked, and the patient being unable to bear the introduction of another, he was chloroformed, and a No. 5 was passed easily and tied in.

13th.—No tenderness over wound; no suppuration. Has passed wind, but no fæces yet. A No. 8 tied into the urethra.

14th.—Wound quiet; drainage-tube shortened. No. 12 passed into urethra with ease.

15th.—Drainage-tube removed; wound healing; bowels not opened. Complains of pains after micturition.

16th.—Bowels moved after enema.

17th.—Has pain referred to neck of bladder after micturition.

19th.—Edges of wound have healed except at lower part.

23rd.—Wound dressed with boracic lint.

25th.—Wound closed completely; bowels opened naturally; passes a good stream, with slight pain after micturition. The testicle has retreated into abdomen. His only medicinal treatment has been large doses of opium—two, four, six drachms—which he has borne well. Discharged wearing a truss.

Temperature.

	Morning.	Evening.		Morning.	Evening.
Sept. 11	—	98·8°	Sept. 18	99·6°	—
12	98·4°	98·4	19	100·0	102°
13	98·8	99·4	20	100·0	—
14	99·2	98·4	21	99·6	—
15	98·0	99·2	22	99·8	—
16	98·4	99·2	24	98·4	—
17	99·4	100·0			

Case 2.—Strangulated Left Congenital Scrotal Hernia—Herniotomy—Sac Opened—Antiseptic Treatment—Wound Healed on the Twelfth Day.

Matthew G., aged thirty-two, cabinet maker, was admitted, under the care of Mr. Beck, on September 26, 1877.

State on Admission.—Patient has a congenital hernia as large as the closed fist on the left side in the scrotum. There is high-pitched resonance on percussion; no impulse on coughing. Patient complains of dragging at the navel. Vomited material brown in colour, but not stercoraceous. No passage of fæces or flatus.

Taxis was tried ineffectually by the House-Surgeon, first without, then with chloroform at 11.30 a.m. At 2 p.m., Mr. Beck also having failed to reduce the rupture, proceeded to operate. After some tight bands formed by the external abdominal ring, and the transversalis fascia had been cut, Mr. Beck was still unable to reduce the hernia. The sac was then opened, and some reddish serum escaped. The gut was intensely congested; the greater portion was easily returned, and the last part was also got back after the finger had been introduced into the fundus of the sac, and the contained coil of bowel drawn out. The neck of the sac was not very tight. On everting the sac the testicle was found protruding into the wound, showing the hernia to have been congenital. The operation was performed antiseptically, four carbolised sutures being used, and a drainage-tube introduced.

September 27.—Patient has passed flatus to a considerable amount since the operation; is very thirsty; no pain and no sickness. Morning temperature 101·6°; pulse 100. Evening temperature 102·4°. There is a pale yellowish-brown discoloration over the left iliac fossa.

28th.—Slight tenderness over the left flank. Tongue moist and slightly furred; no vomiting. Temperature morning and evening 100·6°; pulse 88.

29th.—Bowels not moved yet, but passes wind freely. Some tenderness over the seat of the wound and in the left flank. Temperature in morning 100°, evening 100·4°; pulse 80.

30th.—Temperature 99·8° morning, 100·2° evening.

October 1.—No pain in the wound or in the abdomen. The wound is quiet; there is no tension on the sutures; the discharge is quite sweet. Discoloration over left iliac fossa is less. Patient still passes wind, but no motion. Temperature 99·2° morning, 98·6° evening; pulse 80.

2nd.—Patient passed a motion to-day after enema. No pain anywhere. Tongue moist but furred. Temperature 99°; pulse 72. Drainage-tube removed.

4th.—Sutures removed.

8th.—Wound healed. Bowels moved naturally. No pain in abdomen or about seat of wound.

10th.—Discharged cured, wearing truss.

Case 3.—Strangulated Left Femoral Hernia—Herniotomy on third day (Sac not opened)—Antiseptic Treatment—Carbolised Gauze for nine days; subsequently Boracic Lint—Moderate Suppuration—Discharged Cured on twenty-fifth day.

Elizabeth C., aged sixty-five, servant, was admitted under Mr. Beck on September 10, 1877. One month before, patient was in the hospital under Mr. Barker for a femoral hernia, which was reduced under chloroform. Hernia came down again on September 8, at 8 a.m. Vomited shortly afterwards, and has done so repeatedly since. Has had violent dragging pains in the lower part of the belly. Bowels not opened since September 6. She has had no treatment.

Condition.—Patient has a left femoral hernia the size of a large walnut, with high-pitched resonance on percussion; no impulse on coughing; quite irreducible by taxis; no tenderness on pressure. She complains of dragging pain

in the lower part of the belly. There is no general distension of the belly. She has absolute constipation, and stercoraceous vomiting; otherwise her general condition is good.

Taxis was applied first without, then with chloroform, but ineffectually. On recovering from the anæsthesia there was copious stercoraceous vomiting. An hour afterwards chloroformed again, and Mr. Beck, failing to reduce the hernia, proceeded to operate. After incising Gimbernat's ligament, the hernia was readily returned without opening the sac, the contents of which appeared to be bowel only. Operation performed antiseptically; drainage-tube introduced. Temperature at 7 p.m. 99°.

September 11.—Patient quite comfortable; passed flatus last night; no vomiting since operation. Temperature, morning 99°, evening 99°.

12th.—Temperature, morning 98·8°, evening 99·6°.

13th.—Slight œdema and a blush for two inches around the wound; there is a little bagging at the upper part of the wound, and the pus that escapes has a fæcal odour. Stitches removed. Tongue dry, great thirst, but otherwise general condition good. Temperature, morning 98·8°, evening 98·4°; pulse 88°.

14th.—Bowels opened after enema. Still great thirst; tongue dry and brown. Temperature, morning 99°, evening 98·6°. Drainage-tube removed.

18th.—Bowels opened naturally. Temperature has continued normal.

19th.—Tongue clean; temperature normal; no abdominal pain; gauze dressing discontinued. Wound granulating; dressed now with boracic lint.

22nd.—Patient up and dressed to-day; eats and sleeps well; no pain. Temperature, morning 98°, evening 99·2°.

25th.—Wound healing.

October 5.—Discharged cured, wearing truss.

Case 4.—Strangulated Right Femoral Hernia with Adherent Omentum—Sac Opened—Removal of Portions of Omentum—Antiseptic Treatment for eighteen days afterwards with Astringent Lotions—Free Suppuration—Sent to Convalescent Hospital—Cured with exception of Small Sinus.

Elizabeth D., aged fifty-six, dressmaker, was admitted, under the care of Mr. Beck, on September 4, 1877.

On August 31 patient tried to catch hold of a clothes-line which was out of her reach. Two hours afterwards she felt pain in the right side, and noticed a swelling in the right groin. Bowels acted once; vomited in the evening.

September 1.—Went to see a doctor, but did not tell him about the swelling.

Nothing was done to reduce the swelling until the patient came to the hospital to-day. Has vomited five times a day since the 31st; bowels not moved since the 31st; no flatus passed.

Condition when Admitted.—Has an anxious look; pulse good; vomiting not stercoraceous; no dragging at navel, and no spontaneous pain; absolute constipation. There is a tense, roundish, elastic swelling occupying the position of the right crural canal; it is the size of a walnut, and is slightly tender on manipulation; the skin over it is natural; it is dull on percussion; there is a very slight impulse on coughing.

Taxis was applied under chloroform. The swelling was slightly reduced without gurgling, but as it could not be got back entirely, Mr. Beck proceeded to operate. An incision one inch long was made over the neck, and the sac reached. Gimbernat's ligament was incised, which enabled a portion of the contents to be reduced, but as a part still remained irreducible, the sac was scratched through, and the remaining contents were found to be omental, and adherent to the interior of the sac. This material was removed in four small pieces, catgut ligatures having been previously applied. Carbolised silk sutures were used to bring the edges of the wound together, and a drainage-tube was introduced. The operation was performed antiseptically.

℞. Tinct. opii ℥xv. 4tis horis.

September 5.—Patient comfortable; abdomen lax; flatus has passed; no vomiting; tongue coated with yellowish fur. Temperature (7.30 p.m.) 101·8°.

6th.—Flatus has passed; tongue still coated. Pulse 120; temperature 100·2° in the morning, 100·4° in evening.

7th.—Face flushed; tongue still coated; abdomen slightly tender on palpation. Pulse 108; temperature 100° morning, 101° evening. Drainage-tube removed; wound healthy.

8th.—Had a good night. No tenderness about abdomen; tongue still thickly furred; bowels acted after enema. Temperature 100·4° morning, 99·5° evening.

9th.—Had a natural motion at 8 p.m. Temperature 99·2° morning, 100·6° evening.

11th.—A natural motion again last night. Tongue cleaner; the wound is suppurating, but continues aseptic. Temperature 100·4° morning, 100·6° evening.

13th.—Wound still suppurating freely. Temperature 101° morning, 100·8° evening.

22nd.—Wound healthy, suppurating; antiseptics left off; dressed with copper solution. Temperature has ranged from 99° to 101°.

25th.—Eats and sleeps well; no pain; bowels act regularly. Temperature 99·6° morning and evening.

29th.—The wound heals rather slowly; a little pain on right side on coughing. Temperature 99·2°; pulse 100.

October 3.—Pain right side has gone; there is a sinus at the upper part of the wound.

8th.—There has been a little pus pent up in the wound; drainage-tube introduced. Tongue furred; patient suffering from general *malaise*. Temperature 100·6° morning, 102·3° evening; pulse 90 morning, 104 evening.

16th.—Still pus from the sinus, but patient better generally. Temperature normal.

22nd.—Discharge less; drainage-tube shortened; dressed with red wash. Temperature 99·2° morning, 101·2° evening.

26th.—Wound not quite healed, but discharge very much less. Sent to Eastbourne.

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Medical Times and Gazette.

SATURDAY, JANUARY 5, 1878.

THE BASES OF THE ANTISEPTIC SYSTEM.

The attention of the profession has been forcibly called of late to the doctrine and practice of Antiseptic Surgery. The Address of Dr. Roberts before the British Medical Association, in August, presented the subject from the point of view of the practitioner of medicine, whilst the Oration of Dr. Allen Thomson before the British Association, delivered shortly afterwards, dealt with the doctrine as it commends itself to the man of science. Still more recently, Professor Lister has added to the experimental data which support the theory; and

the presence of this apostle of the antiseptic doctrine in the midst of the surgeons of the metropolis will, no doubt, give zest to the interest which the subject so generally inspires. It appears to us that the present is no inopportune moment for a retrospective glance at the bases, theoretical and practical, on which the system is founded, for it is more than probable that errors exist, not only as to its scientific correlations, but also as to the steps by which it was established and perfected.

There is no doubt that the great theoretical basis of the Antiseptic System was laid by Pasteur in 1860. Disregarding all anterior observations, which savoured more or less of hypothesis, we may look upon the experimental investigations of the French chemist as establishing, with the nearest approach to scientific precision, the germ theory of fermentation. By such is meant the doctrine that fermentive decompositions are brought about, not by any occult property of changeable organic matter, but by the direct agency of living organisms. It is needless to say that this doctrine has been very strongly contested and severely criticised ever since. M. Pouchet at first, with a very strong following, opposed to it the theory of Heterogeny, the teaching of which was that the organisms which attended fermentations were spontaneously developed in putrescible fluids, and were not disposing agents. Subsequent observers have announced their adherence to this latter doctrine with various modifications, but it is scarcely too much to say that their followers are a vanishing number; for rigid scientific investigation has tended more and more to establish the points—first, that fermentive and putrefactive decompositions are closely correlated with the presence of minute living organisms; and secondly, that the absence of such living particles from the most highly decomposable fluids is strictly in relation with the efficiency of the means employed to exclude them. It is needless, however, to dwell on these points, for the germ-theory of fermentation and putrefaction is a necessary postulate to the antiseptic system. If that be not conceded, the system can have no scientific existence.

We read in Professor Allen Thomson's Address that Professor Lister "had the merit of being the first to apply the germ-theory of putrefaction to explain the formation of putrid matters in the living body; and he has founded on this theory the now well-known antiseptic treatment of wounds, the importance of which it would be difficult to over-estimate." With every disposition, however, to accord to Professor Lister the distinction of having elaborated and perfected the method, we cannot conclude from a review of the history of the subject that he initiated it.

Let us turn to what we may term the practical basis of the antiseptic system in surgery. We may define this as the method whereby putrefactive decomposition on the surface of wounds of the tissues is prevented, and thus a great following of evils and dangers abrogated. The disinfection of wounds is no novel proceeding. In 1859, M. Démeaux employed a powder consisting of a mixture of tar and plaster-of-Paris (a compound which had been patented the year previous) for disinfecting wounded surfaces. In the same year MM. Lemaire and Lebœuf used an emulsion of tar, prepared by means of saponine, for the like purposes. This saponine was extracted from the bark of *Quillaya saponaria*, and was found to have the property of suspending in a very perfect manner the insoluble tar in the form of a saponaceous emulsion. Velpeau reported against it, but, nevertheless, its use gained ground, and in 1862 the Administration of Civil Hospitals in Paris authorised its employment in all the establishments. It may be urged, however, that it was employed just as hosts of other lotions and applications had been used previously—to keep wounds "sweet,' and with no special reference to the doctrines of putrefaction, or the question of the advent of septic germs; but this could not be said in 1860, for in the same year that Pasteur communicated his thesis to the Academy of Sciences, Lemaire published a pamphlet ("Du Coaltar Saponiné"), in which he narrated eighty observations made on the human subject and on animals, and in which he distinctly defined the objects of the application of the coal-tar emulsion to be (1) the prevention of putrefaction by direct action upon the septic germs, and (2) the arrest of the production of pus. Lemaire showed that the active agent in the tar was carbolic acid, and in 1863 he published his work entitled, "De l'Acide Phénique: de son Action sur les Végétaux, les Animaux, les Ferments, les Vénins, les Virus, les Miasmes; et de ses Applications à l'Industrie, à l'Hygiène, aux Sciences Anatomiques, et à la Thérapeutique." A second edition was published in 1865. In this work it is not too much to say that the antiseptic method in surgery was distinctly inculcated. The antiseptic treatment of wounds, comminuted fractures, burns, and necroses, is fully described. After having cited a case of compound comminuted fracture of the bones of four fingers, successfully treated, Lemaire adds—"This observation appears to me to offer an important teaching as regards surgery. In fractures with crushing, amputation is recommended. Here we have seen that, in spite of cold-water dressing, counselled in like cases, for twenty-four hours the suffering kept increasing. It is almost certain that, if I had contented myself with this treatment, suppuration would have been established, and amputation have become inevitable. Coal-tar emulsion being employed, the pain is at once relieved, and after twenty-four hours rendered null, cicatrisation of bones and soft parts is effected, and everything preserved. This good result obtained in the case of four bones not only evidences the remarkable properties of coal-tar, but appears to me to indicate the employment of this method in cases of fractures of the limbs with crushing, before having recourse to operation." Lemaire is also explicit as to the efficacy of antiseptics in controlling suppuration. He asserts that he can arrest and reproduce at will the formation of pus, just as he can arrest and reproduce fermentation and germination; and he adds, "If my theory be true, we ought to be able to prevent the formation of pus by the use of emulsion of tar before the tissues are involved in inflammation."

Here, then, we have both *ratio* and *modus* of the antiseptic system. We have yet to consider, however, the precise relation supposed to subsist between suppuration on the one hand, and putrefaction, fermentation, or the access of germs on the other. On this point Lemaire expressed very decided views, though most of us will probably think that he passed far beyond the just limits of scientific inference. He considered that the formation of pus was directly due to the advent of germ-laden air, that the globules of pus were comparable with those of yeast, and that they had an analogous function and an identical origin.

Whatever view we may adopt as to the origin of pus, we must agree that it is no material which is, by origin and development, foreign to the organism: it is the degraded protoplasm of the organism itself. The pus-cell, however, though possessed of active vitality, does not minister to the nutritive needs of the organism in which it is developed, but, by multiplying and augmenting, acts as a foreign body, and, pressing on the surrounding tissues like a mechanical agent, causes progressive necrosis. Pus-cells indicate, according to Professor Lister, "the extreme of excess of quantity and impairment of quality in the product of abnormally excited nutrition." We have abundant evidence that the excitation due to putrefactive decomposition is a most potent and fatal cause of pus-formation, but we cannot hold that it is the *sole* exciting cause. We know that pus will form as a consequence of direct violence, and in situations where the advent of germ-laden air is in the highest degree improbable. We know, moreover, that the very agents which in dilution prevent pus-formation, when too

strong can induce it. It seems, therefore, only reasonable to conclude that putrefaction, though probably the chief, is not the only exciting cause of suppuration.

History, then, teaches us that the authors of the Antiseptic System were Pasteur and Lemaire, who formulated its principles in 1860. It was not till 1867 that Professor Lister made public his method founded on these principles, but it will be agreed on all hands that he has done a most valuable work in elaborating with all the earnestness of a truly scientific observer both the theory and practice of antiseptic surgery.

THE METROPOLITAN SEWAGE AND THE THAMES.

Since we noticed, a fortnight ago, the report of Captain Calver, upon "The Discharge of the Metropolitan Sewage into the River Thames at Barking Creek and Crossness," a brisk correspondence has been carried on in the columns of our contemporary the *Times* upon the subject. It cannot, however, be said, we think, that any real addition has been made by it to our knowledge of the subject, while the correspondence is certainly a striking example of the fact that it is not only in the arena of medical science that a conflict of testimony may be met with. It will be remembered that the question of the effect of the main outfall sewers of the metropolis on the reaches of the Thames below London has long been under the consideration of various engineers, before the construction of the works and ever since their completion. Some highly qualified and competent engineers have declared that large masses of deposit had been directly caused by the outfalls, and that the deposits were increasing in magnitude; while others, as well qualified, apparently, to form an opinion, asserted with equal confidence that the sewage outfalls tended to improve the bed of the river by increasing the scour. The main outfalls were opened in 1863-64, and in 1869 the Home Secretary appointed Mr. Rawlinson to hold an inquiry on the reported silting-up of the river, about which much alarm was then felt; but the evidence taken was so contradictory that the points in dispute remained unsettled. The Metropolitan Board of Works, however, is bound, under the Thames Navigation Act, 1870, to keep the Thames free from all obstruction to the navigation that may be caused by the flow of sewage from their outfalls, and to carry on at their own expense—that is, at the expense of the ratepayers—any dredging works required for that purpose; and in the course of the summer, last year, the Thames Conservancy instructed Captain Calver to examine thoroughly into the condition of the river, and the effects of the main outfalls, and to report to them thereon, that they might, if necessary, call upon the Metropolitan Board to clear the river-bed. Hence the report of which we have before spoken, and to many of the conclusions of which Sir Joseph Bazalgette has since given a direct contradiction. Now, many apparently competent witnesses were examined by Captain Calver; his inquiry seems to have been very complete, and very carefully conducted: the one object of it was to determine whether the sewage outfalls have or have not caused a silting-up of the river-bed in their neighbourhood, or in any way interfered with the navigation; and these outfalls are not far from London—the northern one, at Barking Creek, being about two miles below Woolwich, and the southern, at Crossness, four miles and a half below Woolwich;—so that it appears strange and almost incredible that no clear and generally accepted conclusion in the matter has yet been arrived at. But if we look at the analyses of Thames mud from various parts of the river, given by Captain Calver, it seems almost certain that the more part, at least, of the mud left uncovered at low water throughout the tidal part of the river owes its deleterious character, chiefly at least, to the presence of sewage matters. The late Dr. Letheby made a series of analyses in 1867, and another in 1868; and Drs. Odling and W. A. Miller made similar analyses in 1869. Dr. Letheby's analyses showed that the mud was composed of about 15 per cent. of organic, and 85 per cent. of mineral matter; and he remarked that these proportions did not differ materially from the proportions of organic and other matters that he found suspended in the water at London-bridge, and in the mud at London-bridge, Chelsea, and Westminster, when the sewage was discharged at low water. Another table in the report gives nearly exactly similar results from the analysis, by the same authority, of the mud at the outfalls in 1867, and of the suspended matter in the Thames water at Greenwich, Woolwich, and London-bridge in 1862. Dr. Miller found, in 1869, that the percentage of organic matter in the mud taken from Barking Creek was 16·2, and from the Thames between Chiswick and Westminster 15·8; and Dr. Odling's evidence closely agrees with that of Dr. Letheby and of Dr. Miller. Then Captain Calver proceeds to prove that "there is enough of this material in the sewage discharged from the outfalls to account for the large accumulations of it which have found a resting-place in the Thames channel": and here the estimates given vary enormously, from 35 to considerably over 100 grains per gallon; and Captain Calver's calculations and the conclusions drawn from them are, as we have said, denied. Professor Williamson, however, found 108·01 grains and 151·45 grains per gallon of suspended solids in samples taken at different times in September last from the northern outfall in fine weather; and it is said that 120,000,000 of gallons per day is a low estimate of the discharge at the outfalls, so that it is difficult to doubt that the outfalls are able to supply materials enough for the formation of deposits. But if we grant that some of Captain Calver's estimates and inferences are questionable, still there are things in his report that must make the London public uneasy. Thus, in 1871, "Mr. Leach (the engineer of the Thames Conservancy Board) reported that a deposition of 7 feet 9 inches of mud had formed between the upper end of the southern embankment and the White Hart Draw Dock, Lambeth; that another bank, 100 feet wide and 6 feet thick, occupied the river-frontage of St. Thomas's Hospital, etc." It would be difficult to exaggerate the evils that might result from sewage deposits of such magnitude as these; the safety of St. Thomas's Hospital would be endangered by them, and the whole river might become as great a nuisance as it was five-and-twenty years ago. Nor is it much satisfaction to learn that "a material portion" of the deposits above reported had been cleared away by July, 1876, by excessive rainfalls. It will be but a very lame and unsatisfactory result of our magnificent sewer system to have to depend on floods to keep the river wholesome and clear. For we suppose that it cannot be questioned that the liability to the formation of such deposit-masses as those reported by Mr. Leach is a fact? nor that such deposits are sewage-tainted? In connexion with the consideration of Captain Calver's report, we would direct attention to Dr. Woodforde's report of the sewage-purification plan adopted at Abingdon. He states that the whole of the sewage of that town is purified by filtration through natural soil, being frequently absorbed by one acre of land; and the result is so good that the effluent water contains a far less amount of organic and inorganic impurity than is contained in well-water used in the town for drinking purposes. Captain Calver recommends the Conservancy Board to call upon the Metropolitan Board of Works to dredge away the obstructions that, according to his report, they have caused; and, as we remarked when commenting on his report before, this must be done, or the sewage must be purified before it is turned into the river, or it must be discharged into the river very much

nearer the sea—each of which processes would be very expensive. It will occur also to our readers to ask, what effect will this report have on the carrying out of the West Kent main drainage works? The scheme, of which we have kept our readers informed, consists of a main sewer, fifteen miles long, which is to collect the sewage of Lewisham, Mottingham, Eltham, Bexley, Crayford, and Dartford, and finally to discharge itself into the Thames at Long Reach. Is it wise or desirable to carry it out in the face of Captain Calver's report? His statements and reasoning may well give the Board of Works pause.

THE WEEK.

TOPICS OF THE DAY.

It will be very satisfactory to many of our countrymen to learn that an International Hospital has been established at Naples. The correspondent of the *Times*, writing from that city under date the 21st ult., states that under the auspices of several of the foreign consuls and others, this Hospital has been opened. A German "surgeon and physician," and a German lady who acts as matron, both speaking English, reside in the Hospital. The patients are to be divided into three classes, in the first of which separate rooms are provided, every expense included, at 7s. 6d. a day; those of the second class are received in common rooms at 4s. 6d. a day; and those in the general ward at 1s. 10d. a day each. Arrangements have been made for the seafaring portion of the community, under which every vessel paying a subscription of 7s. 6d. or 3s. 9d. has the right of sending any of its sick crew to the Hospital at the rate of a fraction under 1s. 6d. a day each. The Hospital is to be entirely supported by voluntary contributions, and the invalid is to have the privilege of calling in to consultation any medical man in the neighbourhood he may desire. The advantages which such an institution will afford will be more fully appreciated by those who have had to suffer the inconveniences and expense of illness in hotels and lodging-houses abroad; under such adverse circumstances everyone knows the endless difficulties which arise, and the impossibility of obtaining careful attention and nursing. In these days of universal travel it is be hoped that the Naples Hospital will be the first of a series of international institutions in the different cities abroad most affected by the citizens of the world, and we shall be glad to hear of its ultimate success.

The series of model by-laws recently issued by the Local Government Board for the use of sanitary authorities have been framed with a view of giving a certain pliability to the statute law, enabling it to be more readily adapted to particular local requirements. Throughout, these models show that the great technical skill at the command of the Board—legal, architectural, engineering, and medical—has been fully concerned in their preparation, and on several subjects the counsel of others than the Board's own special advisers has been sought. Thus, with respect to the regulation of new streets and buildings, the Royal Institute of British Architects was consulted; with respect to common lodging-houses, the Commissioners of Metropolitan Police; and with respect to provincial markets, the officials of the City of London. The model by-laws aim at a standard of local sanitary administration which, if not the highest that a local authority could compass, very greatly exceeds the present common rule of the kingdom. First, with respect to the storage of domestic refuse and filth in the vicinity of dwellings, the by-laws would allow no greater accumulation than that which occurs within a period of one week, with some few exceptions specified. Next, they deal with the disposal of all filth; and in legislating on this question the principles and practices of the large northern towns, which have been found to be the best, have been adopted. In that portion which deals with new buildings, great care has been devoted to the ventilation of house-drains; and the fact that provisions for their proper construction have been included in these by-laws will remove all reasonable excuse for the reproduction and perpetration of those errors of house-drainage, which have so long existed in our midst. This series of model by-laws may indeed be said to contain a detailed exposition of sanitary practice in the several subjects to which they refer.

A military contemporary has circulated a rumour that the post of Director-General of the Naval Medical Department is to be abolished, and that Sir Alexander Armstrong is to be succeeded by a captain as Superintendent, with a Fleet-Surgeon as adviser on all matters medical. We certainly have heard that the new First Lord is intent upon remodelling the administration of his Department, but there are many reasons for doubting whether such a change as this would be for the benefit of the Service. In the first place, it would do away with one of the very few prizes that the Naval Surgeon has to look forward to as the reward for long years of service; and, further, we are of opinion that it would be more to the taste of Naval Surgeons to be under the control of one of their own officers. The Naval Medical Department is not in such a flourishing condition that the authorities can afford to introduce changes which would render it more unpopular than it is at the present time; and although our contemporary may simply have spoken on rumour, we trust that Mr. Smith has no intention of making any such change as that alluded to.

A recent case of death from excessive drinking at Birmingham has unfortunately shown how powerless the present law is to deal with offences of this description. Two men, and a woman the keeper of a public-house, were brought up for causing the death of a man through drinking ten quarterns of whisky, for which the male prisoners paid, and which were served by the female proprietor. Dr. Darwin, who attended the deceased, and who was afterwards present at the post-mortem examination, stated that death had resulted from congestion of the brain, lungs, and stomach, caused in the first instance by intoxication, and in the second by some pieces of onion being forced into the bronchial passages by vomiting. Dr. Carter, who made the post-mortem examination, coincided entirely in this opinion. The magistrate observed that if he thought there was any probability of the prisoners being convicted at the assizes he should certainly commit them; but as he felt assured that the judge would rule that they had been guilty of no unlawful offence, he regretted that he could not punish, but must discharge them.

Dundee would seem to have a peculiar method of celebrating its holidays, if we are to believe the evidence of its Police Superintendent. At the beginning of last week that functionary, at a meeting of the Police Commissioners, made application for five double-springed wheelbarrows, one for each police-station, to convey drunk and incapable persons to the office during the approaching holidays. The Commissioners unanimously granted the application, and ordered the barrows to be made immediately. This novel ambulance service will come into use on New Year's-day, and will cost the ratepayers £28 15s., being at the rate of £5 15s. for each barrow.

The Canal-Boats Act has now come into operation. It will be remembered that the Act affects the whole of the river and canal traffic in the country, extending over some 4800 miles of rivers and canals, and aims at improving the

condition of about 100,000 men, women, and children engaged on board these boats.

Much alarm is stated to have been caused at Moscow by the appearance of the Siberian plague in that city. Recently a laundress at the University, who was suspected of having died from it, was subjected to a post-mortem examination, with the result that the suspicions of the authorities were confirmed. Since this death several other persons have succumbed to the same malady, which is more disastrous in its effects than either small-pox or cholera, and the police authorities are now taking energetic measures to prevent the disease from spreading. It is believed that the seeds of the plague were brought from Tiflis either by Turkish prisoners or Russian invalids.

We hear it reported that the Local Government Board has ordered an inquiry into some cases of irregularity stated to have occurred at the Holborn Workhouse. From statements which have been publicly made without contradiction it appears that an unqualified assistant has for some time been entrusted with the care of the sick and dying, and allowed to prescribe the diet he judged necessary for the patients. It is further reported that a book of blank certificates of death, duly signed by the medical officer, was left out during that gentleman's absence from town, so that the unqualified assistant might at any time fill them up with the name and age of any pauper who happened to die. It is satisfactory to learn that an inquiry is to be held, which will either refute the exaggerated statements which have been circulated, or at once put an end to a state of affairs which should never have been allowed to exist.

It would almost seem that, in drafting Acts of Parliament, the greater the amount of legal acumen employed, the less the result in common sense. This was exemplified last week at the Hammersmith Police-court. Mr. Jones, Clerk to the Fulham Board of Works, appeared with Dr. Collier, the Medical Officer of Health, to support a summons against a Mrs. Shanks, of Mansion House-street, Hammersmith, for unlawfully letting a certain portion of a house without having the said house disinfected. The defendant did not appear, the magistrate being informed that she had left the house. Mr. Jones applied for a warrant for her apprehension. He said the defendant had small-pox in her house, and while her son was recovering from an attack she let a room to lodgers without acquainting them of it. The lodgers, mother and son, were attacked with the disease and removed from the house. He (Mr. Jones) could not prove that the defendant's son had small-pox in the room. He thought the Act applied to the whole house. Mr. Bridge said the Legislature intended that, but unfortunately the Act did not carry it out, as the words were "any house, room, or part of a house." The magistrate then decided not to issue a warrant until the Board had obtained counsel's opinion.

An outbreak of ophthalmia is reported to have taken place at the Mitcham Pauper Schools. These establishments have recently been visited by Mr. Baber, the oculist on the staff of Guy's Hospital, and he has reported to the Guardians that all the 500 children in the Schools are more or less afflicted with the disease, and that immediate treatment should be adopted.

The abuse of powders for killing vermin, in country districts, is a serious subject, and one admittedly difficult to deal with. These powders are constantly resorted to by persons with a suicidal tendency, or they are employed with criminal motives. On Monday last, at Birmingham, a labourer was committed for trial for attempting to poison a number of persons; he had gone with them to a beer-shop, and in the course of a disagreement which ensued he was seen to put a packet of vermin-killer over the jug of liquor out of which the party were drinking. The fact that these preparations are announced to be poisonous makes them, in one sense, all the more dangerous.

THE REDRUTH SANITARY ASSOCIATION.

The severe epidemic of scarlatina and diphtheria, which proved so fatal in Redruth and the surrounding parishes during the years 1875 and 1876, has induced a number of gentlemen interested in the welfare of the community to organise themselves for the purpose of diffusing a knowledge of the laws of health among the inhabitants of Redruth and its neighbourhood. The Association has been formed with a view of co-operating with the existing Sanitary Authorities, by preparing the public mind for an intelligent response to their orders; and in this respect they may do good service, for in some districts, under the average of intelligence, sanitary enforcements are apt to be looked upon in the light of persecution. Taking the death-rate of children under five years of age as a test of the sanitary condition of a neighbourhood, Redruth compares unfavourably with every union in the five south-western counties, excepting the densely populated towns of Exeter, Plymouth, and East Stonehouse. The Association proposes, when any disease of an epidemic character breaks out, to visit the neighbourhood and direct the attention of the Sanitary Authority to any defect which may appear to have an influence in spreading the disease. In this way they may, by judicious management, do much good; and the efforts of the gentlemen composing the Association at Redruth, if properly carried out, will be worthy of imitation in many of our outlying districts where the Sanitary Authority is regarded with anything but friendly eyes.

LIQUEFACTION OF OXYGEN.

In the last week of 1877 news came from Geneva of the very interesting fact that M. Raoul Pictet had succeeded in obtaining the liquefaction of oxygen gas. The *Journal de Genève* states that M. Pictet proved the possibility of this on December 22, in the laboratory of the Society for the Manufacture of Physical Instruments, at Geneva, and thus describes the process:—"By a double circulation of sulphurous acid and carbonic acid, the latter gas is liquefied at a temperature of 65° of cold, under a pressure of from four to six atmospheres. The liquefied carbonic acid is conducted into a tube four metres long; two combined pumps produce a barometric vacuum over the acid, which is solidified in consequence of the difference of pressure. Into the interior of this first tube, containing solidified carbonic acid, is passed a tube of a slightly less diameter, in which circulates a current of oxygen produced in a generator containing chlorate of potash, and the form of which is that of a large shell, thick enough to prevent all danger of explosion. The pressure may thus be carried to 800 atmospheres." Under a pressure of rather more than 300 atmospheres, and under intense cold, a liquid jet of oxygen issued from the extremity of the interior tube. There remain now only two unconquered elemental gases, viz., hydrogen and nitrogen.

POST-MORTEM EXAMINATIONS IN WORKHOUSES.

The Poor-Law Medical Officers' Association have received from the Secretary to the Local Government Board the following reply to their memorial on the subject of allowing the medical officers of workhouses to make post-mortem examinations of the bodies of paupers who die in workhouses:—"I am directed to state that the Board have communicated with their Medical Officer, and have carefully reconsidered the subject, and that they see no reason to alter the views which have already on former occasions been

expressed by them upon it. The Board are of opinion that a post-mortem examination should not be made of the body of a workhouse inmate except by the direction of a coroner when holding an inquest, or the direction of the Board of Guardians for any especial, urgent, and particular reason which they may deem of sufficient importance to render such an examination necessary, or at the request of the relatives of the deceased. The Board also direct me to state that they think that a board of guardians would hardly be justified in directing in any particular case that a post-mortem examination should take place, if the nearest relative of the deceased objected clearly and decidedly to that course. The Board, under these circumstances, are not prepared to take the proceedings suggested by the Poor-Law Medical Officers' Association, or to issue any minute or regulation on the subject."

THE MEDICAL SOCIETY OF LONDON.

We are informed that arrangements have been made for an unusually interesting meeting of the Society of London on the 14th inst. Dr. Foulis, of Glasgow, has promised to attend, and to bring up with him the man upon whom he lately performed the operation of excision of the larynx. Dr. Foulis will read a paper on the subject, and then the artificial larynx manufactured to replace the natural one will be exhibited, and it will be shown that the patient can read out loud, and converse by means of it. Professor Tyndall has been asked to lend to the Society for the evening a König's revolving mirror, so that the waves of sound may be demonstrated, the voice being produced by various reeds, each representing a musical note.

THE SICK AND WOUNDED IN THE RUSSO-TURKISH WAR.

The following interesting reports to the Stafford House Committee have been forwarded to us for publication :—

From Mr. W. L. Stoney, Assistant-Commissioner to the Stafford House Committee, dated Pera, December 7, 1877.

Mr. Pratt, who arrived from Naples on Monday last, left for Sofia on Wednesday, 5th inst., and will make a tour of inspection through Roumelia. He took with him large supplies of medical stores, blankets, and clothing, so as to supply all the more distant stations, whilst the roads are comparatively in good order and free from Russians.

Copy of Dr. Ryan's Report, dated Erzeroum, November 22.

We arrived here last night at eight o'clock, having taken five days from Trebizonde; 190 miles over bad road, snow and frost latter half. Woods suffered considerably, but showed immense pluck. I had hoped to have arrived in three days, but, owing to the very bad post-horses which we rode, and to the fact that Dr. Woods is not a very good horseman, we were unable to. I called at once on Mr. Zohrab, H.M. Consul here, who received me with the greatest kindness. I had a long talk with him, and eventually agreed with him that the best we could do would be to take over from the Turks a hospital, and work it in the same manner as that worked by Dr. Fetherstonhaugh. I called this morning on Mukhtar Pacha, who received me most courteously, and told me he was exceedingly glad that we had come, as there was any amount of work to be done; he also told me that anything he could do for me he would. Later I called on Yussuf Bey with Mr. Zohrab, and have agreed to take a hospital, containing 250 beds, which has hitherto been worked by the Turkish doctors. I am to have sole charge of the hospital, retaining the services of four of the Turkish zairah bashis (otherwise dressers), and paying them half what they receive from the Turkish Government. I am also taking an apothecary on the same terms, and will pay the attendants, as they will work much more satisfactorily. I have not yet had time to see the hospital, but Mr. Zohrab tells me it is one of the best buildings. Williams (the dragoman) has, I believe, started three days ago, and I hope will arrive in six or seven days. In the meantime Mr. Zohrab is going to give lint, charpie, bandages, etc., enough to go on with. I shall have some expenses in commencing work at this new hospital, and probably shall have to buy beds, mattresses, etc. I have telegraphed to-day to ask you to send me up through the Imperial Ottoman Bank £200, as now may be the only time you will be able to manage it, as, since Kars has fallen, it is more than probable that in a few days we shall have very hard fighting; and it seems, from the opinions of men best entitled to judge, that Erzeroum will fall, and in such a case it will be our duty to remain with the wounded until they are well, so that I think you had better send me some money—very probably I may not require it, but still it is better to err on the safe side. There are at present 3500 wounded here, but I expect in about four or five days the place will be flowing in blood, as the Turks will make a very determined resistance. There are, I believe, some beds in the hospital which we are taking, but I do not know how many, and we will have to buy more, in addition to several other necessities. There are at Trebizonde about 150 packages waiting for transport to come up here; sixty-six are sent by Lord Blantyre, and the remainder by Mrs. Layard. We are going to live with the other Englishmen here, who have been very kind. I shall hope by the next post to give you a more detailed account of the hospital and its working. The Consul here showed me two letters to-day which he received from General Hermann and the Russian Consul, stating that Drs. Casson and Buckley had left for Tiflis. I cannot state how kind the English Consul here has been in assisting me in every way; he personally introduced me to Mukhtar Pasha and to Yussuf Bey, chief of the hospitals here. Mr. Zohrab takes the greatest interest in the working of the hospitals here; our hospital will be distinguished by the name of the "Stafford House Hospital," in distinction from the other, which is called the "English Hospital." I shall write again by the next post, and will telegraph arrival of our stores. (Williams arrived with all stores on Dec. 2.)

Copy of Report from Dr. Stiven, Rustchuk, November 24.

This is now the third occasion that the Stafford House Hospital, Rustchuk, has been of value to the Turkish wounded, in affording accommodation and treatment to the victims of the fight of the 19th inst. at Pyrgos and Johanchiflick. Being informed that a great battle was taking place at Pyrgos and in the vicinity of Kadikeni, Dr. Lake and myself started for the scene of action to assist in helping the wounded, leaving Dr. Beresford in charge to receive any wounded that might arrive on that day. Finding that the Turkish doctors were short of hands, I left Dr. Lake with them, who stayed all night at Kadikeni, and assisted the dressing of the wounded. Fearing that wounded might arrive at our hospital, I returned in the evening to Rustchuk, and found Dr. Beresford with the assistants, Mehemet Effendi, a Turkish surgeon (who, I may add, has done exceedingly good work in connexion with the hospital since its opening), busily engaged in attending to a large number of wounded that had just arrived. Taking up my share of the work, we got them all (sixty-five in number) safely into bed about 6 p.m. On the following day Dr. Lake returned to his duties at the hospital, as no further fighting was expected on that day, the weather being unfavourable for any field operations. Our hospital was very nearly full then, only some eighteen beds being vacant for the service of any fresh wounded that might arrive on the following day. On the 21st inst. the thirty-two wounded and two officers were sent down to our hospital from Kadikeni, from which number we took in twenty-two of the graver cases, and the two officers, who were both severely wounded in the arm. The ten that remained were slight finger cases, and were sent to the military hospital, where they were admitted. The hospital has now for the first time been filled up to its full complement of beds, excluding the ten beds of the officers' ward, of which two are occupied; and though we have anxiously looked forward to the arrival of another surgeon to assist us in the hard work that is in our hands, it may be satisfactory to you to know that Drs. Lake, Beresford, and myself, with the assistant Turkish surgeon, Mehemet Effendi, have done our utmost to alleviate and soothe the sufferings of the wounded entrusted to our care, our work every day since

our arrival occupying us from early morning to dusk. At the close of last week the hospital contained 117 patients; on the 19th it admitted 65 patients; on the 21st, 22; and on the 23rd, one; it also admitted on the 21st two officers into the lately-made ward for the latter patients. During the week five patients have died, three of which were severe cases from the fresh arrivals. Those discharged to duty number three. Thus the hospital at the close of this week contains 197 wounded soldiers and two wounded officers.

Copy of Dr. Busby's Letter to Mr. Kennett, dated Sophia, November 28.

You will have had a telegram saying we arrived here last Friday afternoon. We delivered your letter to the *médecin-en-chef* the next morning, and told him we were prepared either to do work as an ambulance at the front or establish a hospital here. He said that should Mehemet Ali approve of the latter course, he would give us a hospital, but that we must wait for Mehemet Ali's decision as to which of the two we should do. Unfortunately he was away at the front, but his return expected daily. We set about hiring arabas so as to take us up to Orkhanie, where we heard fighting was going on, thinking that we might be able to do some useful work there, and also save time by finding the commander-in-chief, and so get decided which line of work we should take up. But arabas here are very scarce, and we found we could not organise this in so short a time; moreover we heard that all that ground was well occupied by the Red Crescent men. Being convinced that we were more likely to do good by remaining here, I went to the *médecin-en-chef* again and told him we were anxious to get to work at once, and proposed taking a hospital without waiting for Mehemet Ali's return, whereupon he said he would take me to his representative in the town the following morning. This he accordingly did, but the reception there was not particularly cordial; they wished to put off giving us a hospital until every requisite for carrying it on should have arrived from Constantinople. I explained that this would take some ten days, and proposed that they should procure for us three arabas and zaptiehs to take us up to the front, to Etrepol, where I heard there had been fighting, and that there were no Red Crescent surgeons. They promised to see about this and let me know later, but nothing came of it: this was yesterday. In the meantime Cullen got hold of an Armenian doctor here, who is on the Medical Council, and after some talk with him, got him to go with us in the evening to the chief at his private house. We told him we were not willing to remain inactive so long, and proposed that if he could hand over to us a hospital with its patients, and all the necessary requisites for carrying on the work, we would replace these requisites with our own as soon as we could get them up from Constantinople. On these conditions we are to receive a hospital for 150 beds, and begin work to-morrow. You will have received a telegram to this effect, and saying what we are most in need of. The stores that started with us have come in all right, so that we shall require no further medicines at present. Lady Strangford is here; has just started a hospital of 150 beds. She has her staff of nurses, Dr. Stevenson as surgeon, and an Englishman named Crook in the Turkish Medical Service has been attached by the authorities as assistant-surgeon. All the public buildings and many of the larger private houses have been turned into hospitals. Dr. Sarell is up at Tash Kiasen (between this and Orkhanie), where he has a hospital. The Russians have occupied Orkhanie, so that all the Red Crescent surgeons have come down to Tash-Kiasen. The news we get this morning is that Osman Pasha has got out of Plevna with the loss of 18,000 men and has gone to Widdin. We hear no end of news more or less true. We had snow the day before yesterday, which still lies. George Stamos is going back with this to Philippopolis. We should probably require a second dragoman for hospital work, though any French or German-speaking dresser would do. All the dressers and *infirmiers* will be taken over from the Turkish authorities, and they will receive from us the same rate of pay as they get from Government. We shall also want a *pharmacien*. (An English-speaking dragoman and a *pharmacien* were sent, December 5.)

Copy of Dr. McIvor's Report for week ending Saturday, December 1, 1877.—Adrianople.

Patients in hospital, November 24, 234; admitted during week, December 1, 32;—total 266; patients discharged during week, cured, 2; died during week, 4—total, 6; patients in hospital, December 1, 260. During the past week, six partial resections were performed in hospital—two of both both bones of forearm, one of tibia, two of bones of feet, one of part of sacrum. The resection case we received from you has enabled us to perform these operations efficiently; and as those patients on whom we have operated are progressing most satisfactorily, we hope to substitute resection for amputation in certain cases—a matter which is evidently a great boon to the patients, who would otherwise be crippled for life.

Captain Burnaby, a member of the Stafford House Committee, visited our hospital in the capacity of inspector, on November 26; and as we had not received any information of his intended visit, he had a good opportunity of seeing the hospital in its ordinary condition. I have to state that 226 sick and wounded arrived at the Turkish department of hospital from Philippopolis to day. Their linen was in a most filthy condition; and as the Turks had not sufficient clean linen for them, I gave them 220 shirts and 100 pairs of drawers to supply the deficiency.

Report on Baron Mundy's Model Barrack-Hospital, by Dr. Neylan, Chief Surgeon to the Hospital, Gul Hané, Stamboul.

To-day (December 4) the new Model Barrack-Hospital in the Military Medical School, Stamboul, was visited by the Princess Reuss, to introduce there the four sisters of charity sent by the Queen of Saxony as nurses. The Princess, with the Prince and a large suite, were received at the entrance of the Hospital by Marco Pacha, Director of the Medical School (Gul Hané); they were then conducted over the barrack by Dr. Mundy, and the Princess expressed her satisfaction with all the arrangements. The design is an original one of Baron Mundy, M.D., who has also superintended all the steps of the construction, as well as its total internal fittings. It is a rectangular wooden building divided in two, longitudinally, by a partition. These divisions communicate at one end. There are four entrances. Each half contains fourteen beds, which are again separated in the centre between each seven beds by a movable curtain. It is heated by four large porcelain stoves. It is lighted and ventilated by sky-lights and alternate side windows, which are arranged so as to give complete ventilation without causing an injurious draught. In each compartment are clocks, barometers, thermometers, and calendars, both in European and Turkish styles. At each end of the two divisions four small rooms are curtained off. Of these, one is fitted up as an operating-room, and contains an operating-table (Baron Mundy's design), of ingenious mechanical construction; a second, as a depository for drugs and appliances: a third, as an office, etc.; and the remaining one is for the use of lady nurses. There is a raised platform around the hospital covered by an awning, which can be used as a promenade by convalescents even in inclement weather. It must be mentioned that both sides of the hospital can be lifted up, thus in summer converting that part of the building into a tent. The closets are erected at about twenty yards' distance (to which a covered way leads), and are constructed according to modern sanitary rules. Each iron bedstead is provided with a straw palliasse, horse-hair mattress, two pillows, ditto linen sheets and blankets. by its side is a handsome walnut stand or table for the patient's medicine, drinks, cigarettes, etc. The dressing-tables, fitted with every necessary, are on rollers, and can be easily propelled from bed to bed. Commodes also on the same principle. The ward tables, glass cases for instruments, etc., are of superior manufacture; in fact, the furniture is good enough for a respectable residence. Most modern surgical appliances are employed—amongst many the following may be enumerated:—English, French, and German splints; Esmarch's bloodless ligatures; irrigators and triangular bandages; carbolic acid and ether spray producers; cradles for suspending fractures and keeping off the pressure of the bedclothes; water-beds, air-cushions, and pillows; amputation and resection instruments; urinometers; clinical thermometers; hypodermic syringes; enema apparatus; stomach-pump; Nélaton's and other bullet-probes and forceps; drainage tubing; basins and trough for foul wounds—in fact, nothing which could contribute to the patient's comfort or recovery has been forgotten or neglected. From its admirable hygiene, and the facility it affords for the isolation of the gravest from the less severe cases (and it is to be devoted solely to

heavily wounded), it is pre-eminently a model bracket hospital. That this will be of benefit, not alone to the wounded, but to the country at large, will be at once seen if its situation is considered. It is placed in the centre of the quadrangle of the great military medical school of the empire, where nearly 500 students may become daily familiarised, if they wish, with modern surgical appliances and treatment. The benefit so derived will be, no doubt, disseminated throughout the length and breadth of Turkey. It is essentially an international creation, as the cost of the building (£500) has been borne by the "Croissant Rouge." Baron Mundy fitted up the interior with the funds collected by him (through the press) in Germany and Austria. "Stafford House" supplied the chief surgeon, the beds, surgical instruments, medicines, and stimulants. Mrs. Layard has kindly provided this model barrack-hospital with excellent sheets, flannels, shirts, jackets, etc. Finally, the Queen of Saxony gives the four nurses under the patronage of the Princess Reuss; whilst the Ottoman Government, to which the school belongs, will provide food for patients, and other requisites. Dr. Mautner (Austrian), Chief Surgeon of the Ottoman Railway Company (the terminus of which adjoins the Barrack Hospital), will assist me there, and his knowledge of Turkish, German, and French will also, no doubt, be of great service. We hope soon to get a sufficient number of grave cases to begin working in four or five days' time.

BLANTYRE COLLIERY EXPLOSION.

(*From a Correspondent.*)

There is but little said now of the Blantyre Colliery Explosion, but, before the catastrophe has passed away utterly from the minds of most men, a few words on the subject generally may not come amiss:—

In a productive coal mine in Scotland, 207 able-bodied men have lost their lives by an explosion of fire-damp. The carnage, amounting to the population of an ordinary village, is unfortunately not the only ground of appeal to general sympathy, and, we think, to science. Around the death-pit there is a wide circle of desolation, including ninety-six widows and 230 children, stricken with sorrow and poverty by the catastrophe. The suddenness and sharpness of the accident, the rude luxury and notorious improvidence of the class of which they are members, have reduced these survivors to utter destitution and dependence. Similar catastrophes have occurred before, and even since this frightful accident. It is not our province to comment upon the perfect or imperfect construction of such vast subterranean workshops, nor to express an opinion as to the provisions and precautions adopted in order to dilute or dissipate by ventilation the irrespirable and inflammable gases in which their inhabitants move and breathe; and it is far from our intention to express a single sensational word as to the responsibilities of proprietors and the helplessness of those in their employment, especially as a public investigation, sanctioned by Government, has taken place in order to discover these relations, and, it may be, to suggest salutary changes in the system at present in operation. But, dismissing all gossip and possible exaggeration, it would appear to have been proved that the ignorance and foolhardiness of the lower grades of colliers is even greater than what was expected; that they despise or disregard almost all the means of safety within their reach; that they run risks (of the nature of which they must have some knowledge) by using open lights, by smoking their pipes in spots where large accumulations of gas were known or might be supposed to exist; by resorting to the most rude mechanical expedients to dislodge the gas in which they work; by resorting to explosion, instead of excavation, in the midst or vicinity of fire-damp; by seeing, unwarned and unmoved, boys labouring under the narcosis of choke-damp; and by an indifference, if not a rejection, of legal enactments and local regulations established for their preservation. The painful conviction has thus been forced upon us, that these men, as a class, are totally incapable of taking care of themselves, and must be cared for by others; that they set a lower value upon life than do other labourers; that they have not realised the fact that they hold it in trust for the interests of their family and of society, and that its deprivation inflicts an injury upon the community, as well as upon themselves. That such views are beginning to dawn upon the understanding of the more intelligent members of this class may be inferred from the following resolution, unanimously agreed to in a meeting held at Glasgow shortly after the accident, and reported in the *Scotsman* newspaper:—"That this meeting calls upon the Government that a thorough inspection be made regularly as to the condition of the mines of Scotland, and at the same time make such amendments on the Mines Regulation Act as will insure a complete compliance with its provisions."

That the prayer of this and similar appeals may, to a certain extent, be the result of discontent and demagogism, is not our concern; but that this great calamity, of which it may be accepted as an outcome, will lead to legislation with the view to preserve life and property, is highly probable; and we think this a convenient time to direct attention to certain arrangements which might be calculated to secure the ends in view. The required machinery is simple, accessible, tending in no degree to innovation, nor to interference with the functions of Government commissioners, managers, overseers, etc., who, we doubt not, discharge faithfully the duties connected with their offices. We are now authorised to examine and regulate the size, the breathing-space, and various other sanitary matters in hospitals, prisons, schools, even in certain private dwellings; and by a slight extension of the laws upon this subject, the medical officers appointed and paid to attend to the health of the inhabitants of mines when above ground should be empowered and required to inspect and report upon the conditions under which their patients live while below ground; and assuredly the education in physics now attainable in all medical schools would enable and entitle such inspectors to determine the surroundings, the doings, and misdoings, of those committed to their professional charge, so far as these are connected with the preservation of life and health, or the aggravation of disease. The reports upon these subjects should be submitted daily or weekly, as may be enacted, to some Government officer or board. Again, we are authorised to take cognisance of nuisances, irregularities, etc., affecting the public weal, even of trivial neglect or infractions of the law, and it would be only necessary to extend the powers and oversight of the police force over the mining population while at work, in order to secure a constant and rigid observance of whatever wholesome regulations and precautions, general or local, now exist, or may afterwards be provided.

At present medical men attached to mines are remunerated weekly by a capitation tax on the wages of the operatives, and, as the supplemental duties suggested, as well as the supervision of the police, are proposed principally for their benefit, it seems but just that whatever additional outlay may be necessary should be drawn, in whole or in part, from the same source; and when the enormous sums expended in the internecine struggle between capital and labour during strikes are recollected, the proposal cannot be stigmatised as either unfair or excessive.

The Haller Centenary.—On December 19 the one hundredth anniversary of the death of Albrecht von Haller was celebrated with great pomp at Bern, the University and municipal authorities having combined for this purpose. Deputations from the Federal Council, the Federal Chambers, and Swiss and foreign universities, took part in the ceremonial, and a medal was struck on the occasion. The committee charged with the preparations have published a biography with an admirable portrait of Haller. Born at Bern in 1708, he studied medicine first at Tübingen, and then at Leyden, where he took his doctor's degree. Two years afterwards, in company with Gessner, he commenced his numerous excursions in the Swiss mountains, collecting the materials for his great work on Botany. In 1733 he settled at Bern as a physician, and also giving lectures there, and founding an anatomical theatre; and in 1736 he was called to the new Hanoverian University at Göttingen, where he founded several important institutions, especially the Göttingen Royal Society in 1751, of which he became President for life. His numerous scientific acquisitions and great devotion to the cause of science secured for him the highest distinctions; which, however, he abandoned in 1753, in order to return to Bern, where he had been elected a member of the Grand Council. It was in this city he died, universally beloved, in 1777.—*Union Méd.*, December 25.

RESEARCHES UPON THE SUPRA-RENAL BODIES AND THE OVARY.

An important paper upon "Points of Resemblance between the Supra-renal Bodies of the Horse and Dog and certain Occasional Structures in the Ovary," by Dr. Creighton, of Cambridge, was read before the Royal Society on December 6. The conclusions at which Dr. Creighton has arrived will excite rather than satisfy scientific inquiry, and will certainly stimulate further research on the structure and significance of the ovary and supra-renal bodies. The object of the paper is to prove that there exists an essential *resemblance* between the constituent parts of the supra-renal bodies of mammals and certain structures in the mammalian ovary that are of occasional but normal occurrence—namely, the remains of Graafian follicles and persistent *corpora lutea*. The appearances on which the comparison is based are best seen in the supra-renals of the dog and horse and in the ovaries of the bitch.

First, with respect to the supra-renal bodies and Graafian vesicles. The supra-renals of the horse and dog have a zone of follicles immediately under the fibrous tunic. These may be taken to be essentially elongated closed cylinders, straight or curved, or tortuous or doubled-up. The cylinders are completely filled with long and narrow epithelial-like cells, arranged in close order across their lumen. Each cell stretches across, generally speaking, the whole width of the cylindrical space; the nucleus of a cell is generally towards one end, and the other end is often pointed. Cells appear alternately to arise from opposite sides of the space, their pointed or relatively free extremities interlocking among the nuclear or basal ends of the cells opposite.

The structures in the ovary, to which the cortical follicles of the supra-renals are compared, are described by Dr. Creighton for the first time. They are the remains of Graafian follicles, within which the ovum, after reaching a degree of ripeness, has shrivelled up and disappeared. The appearances in question are numerous in the ovaries of the bitch, especially towards old age. Their structure is perfectly definite, and their occurrence is tolerably uniform. They are spoken of as obsolete Graafian follicles, and are to be carefully distinguished from those Graafian follicles from which a ripe ovum has been successfully discharged. They are produced in the following way:—Within a Graafian follicle, in a more or less advanced stage of ripeness, the ovum decays, and the remains of it are expelled or absorbed. The *membrana granulosa* persists in the form of a longer or shorter cylindrical body, straight or slightly curved, or sinuous or doubled-up. These cylinders have the most remarkable superficial resemblance to the cortical cylinders of the supra-renal body. But the resemblance in minute structure is still more remarkable. The cylinders from both organs are completely filled with cells packed in close order across their long axis; the cells have precisely the same length and breadth, and the same relation of attached ends and free ends, the former uniformly broad and containing the nucleus, and the latter pointed and interlocking, with the attached end opposite. As regards cell-substance, and size and shape of nucleus, no differences are discernible.

The structures from two different organs that are thus brought into comparison not only resemble one another closely, but they are each of them unlike anything else in the body. The origin of the structures in the ovary can be traced in the clearest manner; they are the remains of Graafian follicles within which the ovum has aborted or decayed. The conclusion is that the cortical structures of the supra-renal are the obsolete condition of follicles that, in their active period, resembled the existing Graafian follicles; and this conclusion is so far in accordance with the hypothesis, based upon independent evidence, that the supra-renal body as a whole (and in its several parts) is an obsolete organ.

In opposition, therefore, to the usual subdivision of parts of the supra-renal body, Dr. Creighton proposes to limit the term "cortex" to the extreme outer zone of follicles, and to apply the term "medulla" to the general mass or parenchyma of the organ, which the outer zone covers, including in the medulla the extreme central and generally pigmented part. The outer zone of follicles in the horse and dog are quite unique among the structures comprising the supra-renal, and are broadly contrasted with the rest of the organ lying internal to them. The outer zone has, therefore, no continuity of structure with the zones next to it, whereas the extreme central part differs from the neighbouring parenchyma in unessential particulars, and chiefly in the character of the bloodvessels or blood-spaces within it.

In the second section of the paper Dr. Creighton describes the resemblance of the general intra-cortical mass of the supra-renal and another class of ovarian structures—namely, the *corpora lutea*. First, he finds that both structures are cellular throughout, and that the individual cells are the same. The cells are epithelial-like and polyhedric, with a central nucleus and a wide zone of cell-substance. The cell-substance in both cases is so coarsely granular as often to resemble the vitellus of the mammalian ovum, and in both cases the granular protoplasm is sometimes replaced by, or occupied by, a vacuole. The one point of difference is that the cells of the corpus luteum are half as large again as those of the supra-renal parenchyma. Secondly, the cells in both cases are set in a fine meshwork of fibres connected with the walls of the capillaries. Thirdly, there is in both the same radial arrangement of bloodvessels (capillaries) from centre to circumference. Fourthly, the central vein, or system of venous lacunæ of the supra-renal, has its counterpart in the corpus luteum. Lastly, there are points of resemblance relative to the pigmentation of the respective structures.

Dr. Creighton believes that the prevalent theory of the circumstances of the formation and decay of the corpora lutea is not comprehensive enough.

In many preparations the similarity described extends to the arrangement of the obsolete Graafian follicles round the circumference of the corpora lutea and that of the cortical supra-renal follicles round the parenchyma.

It is carefully to be noted that Dr. Creighton's paper does not extend beyond a statement of points of *resemblance*. Both the corpus luteum and the supra-renal are unsolved problems. But, as Dr. Creighton says, if this resemblance be a resemblance in essentials, a sound theory of the supra-renal as a whole will probably be found to depend upon a sound theory of the corpus luteum.

FROM ABROAD.

Prof. Lasègue on an Asylum for Epileptics.

In the *Archives Générales* for December, Prof. Lasègue furnishes an interesting account of a prolonged visit which he paid to a special asylum for epileptics, at Tain, in the department of the Drôme—the only one which exists in France, and one little known beyond its immediate precincts. He prefaces his account by some remarks on the deplorable position of the victims of epilepsy—shunned by society, excluded from hospitals, and, until of late years rendered responsible for infractions of law which were really due to the influence of this disease Society seems coldly hostile to them; and in vain do we look for the same assistance which is so heartily bestowed on the blind, and the deaf and dumb. The charitable administration has paid little attention to these cases in France, no public opinion inducing and supporting its efforts. Admission is often given to them into the lunatic asylums under the pretext of a temporary insanity; and in these their lot would be the better if they were really insane. Even in the case of families of easy position, the fate of an epileptic is a sad one. Concealing as long as they can the existence of a disease that is regarded as a shame and humiliation, it eventually becomes known, and when every medical opinion has been exhausted, and the disease remains incurable, the lunatic asylum, after all other means of guardianship have been tried, becomes the unsuitable resort. The indigent epileptic, after leading a life of vagabondage, finds that he has no other resort than the asylum or the prison. According to this account by Prof. Lasègue, there would seem to be no means of succouring indigent epileptics analogous to that offered by our workhouse infirmaries, for their confinement to lunatic asylums can be looked upon only as a cruel aggravation of their sufferings.

However, as the object of this paper is to show, there does really exist in France one model establishment, which, as far

as we know, has none resembling it in this or other countries —an asylum solely attributed to the reception of epileptics. This, Prof. Lasègue carefully examined in all its details, and finds himself able to speak of it in terms of warm approval. Its origin is a somewhat strange one. A family of consideration in the department of the Drôme had been in possession for some 200 years of an infallible remedy, or reported less fallible than others, against epilepsy—a belief, unfortunately, guaranteed rather by tradition than experience. The medicinal substance, kept secret at first, and afterwards divulged, submitted to trial, and rejected, was the *gallium album*, which was gratuitously administered with certain ceremonious observances. The Count de Larnage, whether for the better administration of his specific, or more probably from commiseration of the numerous wretched epileptics who sought its aid, founded in 1857, at Teppe, near Tain, a special asylum for the subjects of epilepsy, which soon attained a considerable size. This, two years later, was assigned to the Sœurs de St. Vincent de Paul, who are now its proprietors and sole directors. It pays its expenses by means of the sums charged to many of its inmates, and is continually on the increase. Situated at a short distance from the Rhone, which it overlooks, and in the vicinity of two commercial and manufacturing towns, it presents nothing of the barrack or the cloister in its appearance. It is freely approached, and on entering a vast planted courtyard, which gives access to a beautiful garden and well-wooded park, all seems smiling and agreeable. Not a railing or wall exists, patients and their visitors, servants and the sisterhood, going to and fro just as they please, and not only all constraint being absent, but neither coldness nor discipline seeming apparent. On entering the building the non-paying inmates are found either at work or amusing themselves; and the refectories and sleeping-rooms are not only of the classical cleanliness usual with religious establishments, but are also adorned with some of the modest elegancies of private abodes. These exert a most beneficial effect upon the inhabitants—for the most part peasants and work-people—whose demeanour on finding themselves so well treated is one of respect. The patients are taught to rely upon each other rather than upon administrative supervision; and on the occurrence of a fit in any one of them, each of his neighbours, having had his part assigned to him in advance, instantly furnishes the requisite succour without hesitation and without precipitation. The terrifying unexpectedness of epilepsy seems to be disarmed in face of the preparations always ready. The boarders of the establishment have additional comforts according to the price paid; and in the first class of these the accommodation is almost luxurious. The present total number of patients is 200—viz., 120 women and 80 men; twenty-six sisters presiding over the various services, aided by thirty servants and work-people, some of whom are epileptics. The establishment only covers its expenses by itself supplying almost all its wants, by gardening, laundry work, cultivation of land, rearing some cattle, reparation of buildings, etc.—nothing being done by strangers. It combines the château with the well-kept farm; and all the accounts and office work are carried on in the most simple manner. The boarders are divided into five classes, and except the first class, which contains sixteen patients, the others pay from nothing to 1500 fr. per annum. In the fifth class (thirty-five men and sixty women) the charge is 500 fr. per annum. The food is good and very abundant. Liberty to go out with friends is readily accorded; and when (as is the case in all establishments of this kind) the visits of these are rare, the patients go out two together, each keeping a watch over the other, and are to be met walking along the roads, or at the river-side, and even in the town, exciting neither antipathy nor apprehension.

Statistics of Diseases of the Eye.

Prof. Hermann Cohn, of Breslau, at the meeting of German *savants* at Munich (*Allg. Wien. Med. Zeit.*, No. 45), stated that for three years he had endeavoured, by means of circulars addressed to the various clinics, to ascertain how the diseases of the eye were distributed over its various parts. In 1872 he received exact statements concerning 111,691 cases treated in twenty-four clinics; in 1874 concerning 90,510 treated in twenty-seven clinics, and in 1875 concerning 95,125 cases in thirty-five clinics—therefore in all nearly 300,000 cases. These furnished the following proportions per thousand:—

	1872.	1874.	1875.
Conjunctiva	290	294	304
Cornea	201	214	210
Sclera		4	4
Iris	59	36	40
Chorioidea		30	26
Glaucoma	9	14	10
Retina and Opticus	47	28	27
Amblyopia		12	13
Amaurosis		10	7
Lens	56	57	59
Corpus Vitreum	5	8	9
Bulbus	29	15	16
Refractio	110	85	92
Accomodatio		42	37
Musculi	34	29	29
Nervus Quintus		2	2
Org. Lacrym.	25	27	25
Orbita	—	2	2
Palpebræ	101	85	81
Diversa	—	6	7
	1000	1000	1000

Prof. Cohn observes that the remarkable agreement observed in the percentages of the three years indicates that there must be some law governing the distribution.

Dr. Dieulafoy on Thoracentesis.

Dr. Dieulafoy, in a series of papers published in the *Gazette Hebdomadaire* (October 5 and 12, November 9 and 16), under the title "Thoracentesis by Aspiration in Acute Pleurisy," and founded on sixty-five cases of acute pleurisy and 149 of thoracentesis by aspiration, after going into a critical examination of the various opinions that have been published of late years, arrives at the following conclusions:—

"Thoracentesis by aspiration in acute pleurisy is an insignificant operation and absolutely inoffensive. It should be practised with the needle No. 2, and the quantity of liquid removed at a *séance* ought never exceed 1000 grammes. The accidents of which it has been accused are of different kinds, and may be divided into three categories. Those of the third category (the so-called transformation of a serous liquid into a purulent one) cannot be imputed to the thoracentesis; for I believe I have demonstrated that this is due to a natural evolution of legitimate purulent pleurisies, and in nowise to an induced transformation of their liquid. The accidents of the second category (syncope, asphyxia, hemiplegia), due to autochthonous or migratory coagula of the heart and pulmonary vessels, or supervening under the influence of other causes (as pleuro-pulmonary gangrene, and the general condition of the individual), should not be placed to the account of the thoracentesis, since they are met with in the course of pleurisies before as well as after thoracentesis, supervening on the fact of the pleurisy itself, and not on the fact of the operation. The incidents of the first category (acute œdema of the lungs, and pulmonary congestion with or without albuminous expectoration) are the only accidents which are directly and truly imputable to thoracentesis; but they are also precisely those which may be easily avoided and prevented. On the investigation of all the examples of this class of accidents, I find that they have always been associated with either the immediate evacuation of a large quantity of liquid, or with pleurisies complicated with affections of the heart, bronchitis, tuberculosis, etc.; and the precept is to limit the quantity of liquid extracted at a time, and to proportion this to the complications which may exist. The operative procedure being fixed and invariable, there is nothing variable but the indications of thoracentesis, and these are summed up in two words—the thoracentesis is either urgent, or it is discussionable. The urgency of the operation is entirely dependent on the quantity of liquid effused, viz., when this amounts to about 1800 or 2000 grammes in a well-formed adult. In discussionable cases, where such amount does not exist, we should await the termination of the febrile stage, and aspiration should only be resorted to when the absorption of the liquid is slow and difficult."

REVIEWS.

Practical Gynæcology. A Handbook of the Diseases of Women. By Heywood Smith, M.A., M.D. Oxon., Physician to the Hospital for Women, etc. Pp. 174. London: J. and A. Churchill. 1877.

We are sorry to be obliged to say that we are much disappointed in the book before us. Had it been the work of a young man, writing while waiting for practice, we should, out of pity, have passed it over in silence; but coming as it does from a man of mature years, who is an M.D. of Oxford, and who has had great opportunities, it is our duty to express our opinion of it.

The book is of tolerably uniform quality throughout. We shall therefore best give our readers an idea of it, and at the same time justify our comments, by quoting two of the sections in their entirety. Here they are:—

"Hypertrophy of the Mamma.—*Definition.*—Undue largeness of the breast, from (1) fat, or (2) true hypertrophy of the gland. *Causes.*—(1) excessive coitus, masturbation; (2) subinvolution of the gland after suckling. *Symptoms.*—Increased weight and firmness. *Signs.*—(1) Large, soft, fairly firm; (2) large, with nodular hypertrophic enlargement of the gland. *Diagnosis.*—By signs as above. *Prognosis.*—Intractable. *Treatment.*—(1) Avoidance of cause, large doses of bromide of potassium (gr. v. to xxx.); (2) mercury, emplastrum plumbi iodidi, strapping the breast, tonics.

"Atrophy of the Mamma.—*Definition.*—Male type of breast. *Causes.*—Non-development of the ovaries, old age. *Symptoms.*—Amenorrhœa. *Signs.*—The breast remains flat, or slightly fat, and the nipple small. *Diagnosis.*—As above. *Prognosis.*—Unfavourable. *Treatment.*—Galvanic intra-uterine stem; leeches to the uterus."—(Page 126.)

These extracts will serve to show the abrupt, syllabus-like style of the author, and his want of clearness and pathological accuracy; and will give an idea of the amount of information and the kind of guidance the practitioner will get from it. Some subjects are more fully treated than others; but in the quality of the matter there is, as we have said, a tolerable uniformity. *A propos* of these quotations, we should like to ask—Does the author mean that in all cases of women who have larger mammæ than usual, and yet have not suckled, inquiry is to be made into the causal conditions first mentioned? We fear that an ignorant person, reading this book, would think so. And have any results been published of the treatment recommended for atrophy of the breast? We call attention to these points, because throughout the book local treatment is very freely recommended, and a great variety of disorders are set down as due to undue or irregular exercise of the sexual function.

The first principle of sound treatment is, where we cannot do good, to abstain from doing harm; and therefore we do not think it right to advise or carry out procedures not free from risk and uncertain in result, for a condition not at all, or very slightly, injurious to health. For this reason we cannot approve the author's treatment of atrophy of the breast, neither can we concur in his recommendation of galvanic stem pessaries for atrophy of the ovary (page 28); nor do we, like him, think it proper to use intra-uterine injections for catarrh of the uterus (page 48): a measure which (at page 50) he says is "hazardous" for a malady of which he says (page 48) that the prognosis is "favourable."

The chief mark, to our mind, of a scientific treatise is, that it admits no statements which are not supported by evidence. We venture to think that the effect of masturbation, in producing disease of the pelvic organs, has never been scientifically demonstrated. The moral hindrances which stand in the way of the investigation of this question are such as to make it very difficult to prove or disprove statements about it. The direction of professional attention to such an unverifiable cause as this, without explanation, we think does harm, by diverting attention from more tangible and more important conditions. We also think that the ill effects of presenting such things to the patient's mind should make this class of causes to be inferred last of all, and then only when all other causal conditions can be excluded, and there is circumstantial evidence to support the suspicion of the medical attendant.

So far as we can see, no additional light is thrown by the author upon obscure diseases of the pelvic organs. The book will therefore teach nothing to specialists, and we cannot give it the praise of being a safe guide to students and practitioners. Viewing it as a *résumé* of the existing knowledge of the subject (as set forth in Thomas's work, to which the author acknowledges his indebtedness), it appears to us that Dr. Smith, in his desire to make his book small, has cut his matter down even to extreme meagreness, and in aiming at conciseness often misses the clearness so desirable in an elementary work. We have already said enough to indicate our opinion of its scientific accuracy, and the kind of guidance it will give the busy practitioner.

A New System of Medicine, entitled Recognisant Medicine, or the State of the Sick. By Bholanoth Bose, M.D. Lond. London: J. and A. Churchill. Calcutta: Thacker, Spink, and Co. 1877. Pp. 212.

Principles of Rational Therapeutics. Idem. 1877. Pp. 88.

Two qualifications are required to the making of a true prophet or teacher—zeal and sound judgment. That the ambitious author of the two above-named essays has the former is apparent on the face thereof, but that he has in anything like the same degree the latter endowment is not so readily discoverable, even by searching throughout the pages of his somewhat pretentious essays. In order that we may do no injustice by the author of this "New System of Medicine," we will endeavour to cull, in his own words, the salient points, or fundamental notions which seem to us to constitute the claims of Dr. Bose to originality, and rest content to leave the verdict to our readers.

In the first place we look for the meaning of the term "recognisant." "The senses are born with the parts in which they reside, and in highly organised animals are connected together, or made mutually subservient, by means of nerves, to fulfil specific ends, as the individuals in a republic. These connecting nerves are what are called the sensiferous filaments, which convey impressions from the periphery to the nervous centres, for the information and welfare of the whole body. Their peripheral extremities, on which impressions are made, may be said to take, as it were, the cognisance of events, of which their central terminations (the brain, spinal marrow, and ganglia) take the recognisance, occasioning a sensation, cerebral, spinal, or ganglionic. The sensiferous branches may therefore generally be called *impression-bearing* or *cognisant* nerves, and the brain, spinal marrow, and ganglia *recognisant* or *sensation-producing* centres. The motor and other nerves, in that case, are simply conductors of motor power, and sense or sensation generated in the recognisant masses, like the wires of a galvanic battery."—(Page 14.)

"Functions, which are the chief objects of the senses, must consequently be of necessity *cognisant* or *recognisant*, in virtue of their connexion with the nervous system." "It is then possible for a spasm to result from direct impression on the muscular tissue, that is, to be a *cognisant* spasm, which would be *recognisant* if excited by motor nerves. A *cognisant* action, or *cognisance*, is the result of an independent exercise of the inherent power or sense with which each organ or part is naturally provided. On the other hand, a *recognisant* action, or *recognisance*, is always a dependent phenomenon, an act of the nervous system in which other parts or organs, or sometimes the whole body, is concerned; the one being, as it were, the voluntary action of an individual, the other the fulfilment of the economical dictates of a society."—(Page 15.)

We have not inclination, even had we space, to follow our author in his application of the preceding terms to the functions of man and animals. We observe that a curious employment of other secondary words, such as "accordance," "concordance," and "discordance," becomes necessary to the author; thus we are told:—

"Every durable phenomenon supposes *concordant impressions*, and *concordance* is one of the most frequent and useful functions in our general economy. . . . . We cannot leap from a miry or slippery place, we want a hard soil to press our feet upon, that is, to cause a *discordant impression* (of solidity); as soon as we are aware of the impression of a firm hard soil we send down a voluntary muscular impression (*accordance*) to oppose it on the ground

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at the same time so as to establish a *concordance*."—(Page 112.)

"The act of writing is truly a *concordance* which has its elements in the resistance of the quill (*discordance*), and that of the muscles of the hand at the same time (*motor accordance*)."—(Page 114.)

A new pathological term, viz., Kyâltis (from the Sanscrit Kyá, body), is added to express "determination" and "congestion" of the whole frame, which our author recognises as being the essential condition of fever and some other morbid states. The medical language now in use, we are told by Dr. Bose, being a perfect tautology throughout, and medicine, as far as its nomenclature is concerned, a science of mere nominalism, in order to replace "the stupidity and uncertainty" of the professional language now in vogue "on a scientific basis" he proposes words above quoted, and many other new, or newly employed or combined, terms of most barbarous character and sound.

The author's "spiritual alimentation" or psychology (page 63 *et seq.*) is so dim and wonderful to us that we cannot pretend to comprehend it.

The first of the two works we have named does not immediately concern itself with the treatment of diseases, being confined to an exposition of their nature. The second treatise, however, professes to expound "rational therapeutics," or the medicines suitable for the *tubulo-cell* life, *bitubulo-cell* life, *tritubulo-cell* life, and *pertubulo-cell* life. These terms are thus explained:—The first of these includes animals that have cells and tubes only, as the lowest radiata; the second those of a higher type in which a second set of tubes is added, viz., nerves; *tritubulo* implying the presence of three distinct supplies of tubes, viz., of vessels and ganglionic, and cerebro-spinal or cerebral nerves, the *pertubular* the *intellectual life*. What particular medicinal agents are adapted to these several divisions must be learned in the pages of the "Principles of Rational Therapeutics." That these works contain anything deserving the high-sounding title of a "System of Medicine" is more than we have been able to discover. Making use of old materials, the author has by the arbitrary employment of epithets produced a contention of words—"a strife about sounds and phrases"—a Logomachy.

Great allowance may be made when a man writes in a foreign language; but to deserve such consideration he should write with some degree of modesty, and say something worth hearing, and we cannot credit Dr. Bholanoth Bose with either claim to our forbearance.

Nurse and Patient, and Camp Cure. By S. Weir Mitchell, M.D. Philadelphia: J. B. Lippincott and Co. 1877. Pp. 73.

The first portion of this little treatise is devoted to the subject of "Nursing," from a point of view which, as the author says, is often too much lost sight of, viz., that of "amateur nursing." Dr. Mitchell does not herein depreciate the functions of sisterhoods or other associations of trained nurses, but dwells with much force upon the evils that not seldom accrue, both to patient and nurse, from the misplaced devotion of an affectionate relative. "The best nursing," observes the author, "is paid nursing, and the worst very often that which comes from the family. If the sentiment of a too tender self-devotion, when undertaking this task, be had for the patient, it is still worse for the loving nurse; . . . . so I may have failed to say forcibly enough how vast is the strain of such a task." Dr. Mitchell draws attention to the ill effects of protracted watching and nursing by relatives, effects which all practitioners must have witnessed. We quote the following with reference to sufferers from mental affections:—"For moral treatment it is usually needful, more or less, to isolate such sick persons, while it is plainly undesirable and imprudent to expose other individuals of the same blood, and possibly of like tendencies, to the emotions and states of mind which close confinement with those they love, but who are thus disordered, are sure to bring about. . . . . I have been often called upon to witness the wreck of mind and body which the effort to fulfil such a task has brought about. Indeed, I can think of nothing more likely to insure loss of health than the effort on the part of a young person, especially if a relative, to nurse the insane."—(Page 33).

We strongly commend the author's reflections upon nursing in its bearing upon relatives; and pass to a few words upon the second portion of the book, viz., "Camp Cure."

The remarks of Dr. Mitchell, under this head, apply strictly to American life, but in principle may be adopted wherever a wide range of country scenery and a fitting climate can be attained. The mode of cure described by the author may be said, in the vulgar tongue, to be "decidedly jolly," and we are tempted to envy our American cousins the possibility of fully adopting it; none the less is it an important phase of therapeutics; and it cannot be said to be a wholly neglected branch thereof, even on this side of the Atlantic, where both space and climate are too often adverse to it. To this, those can testify who frequent the valley of the Thames during the summer or autumn months.

We hope that this little pocket volume may find an extensive circle of readers, such as both its object and its performance merit.

Auscultation and Percussion. By Samuel Gee, M.D. Lond., F.R.C.P., Assistant-Physician to St. Bartholomew's Hospital, Physician to the Hospital for Sick Children. London: Smith, Elder, and Co. Second Edition.

This second edition of this book has, the author informs us in his preface, been thoroughly revised. If by this he means that he has devoted great care and attention to all details, we can endorse the statement, at the same time adding that it is considerably enlarged. We have seldom met with so exhaustive a description as we here have of the methods of physical examination of the thorax, together with the results obtained by these modes of investigation. In its perusal we are reminded of a patient dissector seeking the connexions of some complicated nervous plexus. Not only is each individual fibre traced from its origin to its periphery, but, so to speak, the anatomist conclusively demonstrates both source and termination. So with the author of the book now before us. The table of contents is elaborate and well arranged. The text is divided into two parts. In the first part we have explanations of the different methods of physical examination, viz., inspection, palpation, percussion, and auscultation. Under each heading is a description of the results which each method yields; and further, the value of each of these results from a diagnostic point of view is fully given. In the second part the subject is treated from the opposite point of view. In the place of giving the symptoms and showing in what diseases they may be met with, the author here gives the diseases, and, as it were, sorts out the symptoms belonging to each. To carry on our former figure, having traced the fibre to its termination, he turns round and retraces it in the opposite direction.

Finally we have an index, which it would be difficult to find wanting when appealed to. If there be a fault in this book, it is that it is too terse; not only is there not a word too much, but in some places there are hardly words enough.

The book is undoubtedly valuable, and will be so found, not only by the student, but by men who have been long in practice. It is indeed a question whether it is not better suited for the latter than for the former class of readers.

A Guide to Therapeutics. By Robert Farquharson, M.D. Ed., F.R.C.P. Lond., Lecturer on Materia Medica at St. Mary's Hospital Medical School. London: Smith, Elder, and Co. 1877. Pp. 302.

The introductory observations, in which the author brings us face to face with our "Guide," albeit they form but a small fractional portion of the work, are by no means the least important part thereof, inasmuch as they are truly practical, and calculated in some degree to supply the pervading defect of the book—its want of fulness. In this introduction the student will find the principles that should direct his selection and use of the medicinal agents that are subsequently brought under his notice. The work, to our own thinking, would have better attained its object had it been more extensive in its range. It is by far too concise and condensed to be of the use it might have been to the student. A few extracts will bear out our criticism on this point:—

"Ammonii bromidum seems to have an occasional and uncertain influence over whooping-cough, and is thought by some to be a good substitute for bromide of potassium in epilepsy and other nervous disorders. Dose, 10 to 20 grs."—(Page 66.) Herein is no guide to the student as to when the substitute may be required; nor is the limitation of the dose

accounted for, the dose of the potassium bromide being stated as from ten to sixty grains. We are not acquainted with any sufficient reason for the difference. Again, under the head of "Silver" (page 72), we find notice only of the nitrate of that metal, the author altogether ignoring the oxide and yet it is not an inert, nor an unimportant medicine.

Further, we notice also the total omission of a recent and useful addition to materia medica, the aqua chloroformi. Of creasote, it is stated that it "is now but little used," except for sickness, for fetid expectoration, and for the toothache (page 135). We have, however, known it of much wider use than in these few conditions.

We surmise that a student might find some difficulty in comprehending the following passage:—"Aconite is essentially a cardiac sedative, slowing (*sic*) the action of the heart at first from *inhibitory stimulation* (the italics are our own), but then causing an increase in the rapidity of the pulsations, with feebleness and irregularity, ending in death by arrest of all movement in diastole" (page 141). "Stimulation" and "inhibition" are, in their ordinary acceptation, words conveying the idea of contrary and opposite action. The meaning of this, as well as of many other passages in this work, will bear fuller exposition. The condensation, over which the author has evidently expended much labour, bids fair to foil his efforts. The book is good, so far as it goes, but it by no means goes far enough. We may hope to see future editions "considerably enlarged and improved." Before concluding our remarks we would notice a caution, which in grave earnestness we strongly recommend. With reference to the subcutaneous injection of morphia the author observes—"So great, indeed, is the popularity of this mode of treatment, that a new school of opium-eating, so to speak, has been formed, and morphia injections have unfortunately been practised to a great extent as a mere development of self-indulgence" (page 158). So frequently have we witnessed the tendency to this abuse, that it is not without much hesitation that we bring ourselves to practise the operation.

The Student's Manual of Venereal Diseases. By Berkeley Hill and Arthur Cooper. London: Smith, Elder, and Co. 1877. Pp. 97.

This is an admirable summary of the pathology and therapeutics of venereal diseases, the result, obviously, of personal observation and practical experience on the part of the authors, both of whom are officially attached to the London Lock Hospital. It might, without having been open to the charge of undue pretension, have been entitled the "Practitioner's," as well as the "Student's Manual." Among the former class there are few who possess the advantages of such a field of observation as the authors, while there are very many who may be glad to avail themselves of the valuable advice and information thus concisely placed within their reach.

News for English Doctors.—In an article in the *Allgem. Wiener Med. Zeitung* (December 3), describing a movement which has been set on foot at Vienna for securing to doctors the payment of their charges at the time of their visits, the writer observes that there would not be much difficulty in getting the public to agree to this, were there not a danger that some of the medical body themselves would be wanting in the *esprit de corps* necessary for carrying it out. For in France and England, he observes, where it was once otherwise, pressing necessity has driven the doctors (he is speaking not of consultants, but of general practitioners) to take this step, and at the present time the public have become so accustomed to it, that no one would think of allowing the doctor to be sent for before his fee was ready for him. It never enters into the head of a doctor to pay a professional visit under any other conditions. It is well known that in England and France not a single visit is made, even to the poor, for which either the parish or the State does not pay. Never is a practitioner allowed in those countries to make a gratuitous visit. It is, therefore, only necessary for doctors to be united to get patients to make these immediate payments. It may not be brought about all at once, but with time the custom may be established. If our Vienna *confrère* has no better ground for this expectation than the example of what has been done in England and France in the matter, we fear the realisation of his hopes will have to be long deferred.

GENERAL CORRESPONDENCE.

SALT IN BEER: SELTZER-WATER AND THIRST.

[To the Editor of the Medical Times and Gazette.]

Sir,—It is gratifying to see in your columns evidence of the zeal with which the able body of public analysts endeavour to protect us from sophistication of articles of food and drink, and there is no doubt that the act of tampering with the purity of any given article is one that ought to be exposed and punished.

But adulteration for the sake of profit is one thing, and adulteration which may injure the health is another. That which injures the pocket does not always, of necessity, injure the stomach: and analysts should be cautious not to overdo the "death in the pot" business; for if they excite alarm needlessly they tend to damage their own authority.

Now, there appeared lately, in your paper, a report on the addition of salt to beer, showing that considerable quantities of salt are detected in the beer sold in the parish of Camberwell. One specimen contained eighty-two grains per gallon, and it seems to be assumed by the reporter that this adulteration is practised with an immoral intention, and an immoral result—viz., "to induce thirst and encourage drunkenness."

It does not seem to have occurred to the analyst that the salt was added for the innocent business-like purpose of pleasing the palate; neither does he seem to estimate the value of the evidence on which he assumes that eighty-two grains of salt in a gallon of beer will produce any deleterious effects.

I need hardly recall the fact that common salt is an ingredient in all our food and drink. It produces an agreeable cleansing sensation on the tongue when used with food, and certainly it has been the result of my observation that the people who eat a good deal of salt with their dinner are distinguished by *not* being thirsty habitually. If you see any persons complaining of thirst, or unable to eat their dinner without sipping some liquid at the same time, you may be sure that they are not great eaters of salt. One of the most thirst-quenching liquids in existence is a decidedly salt water. It is imported with great trouble from Nassau, and the very name "seltzer-water" brings visions of coolness and refreshment to the thirsty and feverish. Bulk for bulk, seltzer-water is the most thirst-quenching liquid that I know, and if the analysis in Mr. Squire's "Companion to the Pharmacopœia" is to be depended on, it contains 160 grains of salt to the gallon, or just double the quantity that was found in the most highly salted specimen of the Camberwell beer. Every tumbler of it would contain ten grains of common salt, whilst the beer only contains five. I ask whether seltzer-water, which is generally taken at the wind-up of a feast, is a thing to create thirst and set people drinking afresh?

It is well known that many people who brew at home, and are proud of their beer, add to it a certain quantity of the nitrate of potass, in order to confer upon it a peculiar brisk, clean, cooling taste. I need hardly quote further the almost universal plan of administering saline draughts to fevered patients, in the dose of at least ten grains of nitrate of potass every four hours.

The fact seems to be that the presence of some saline matter in water gives it certain mouth-cleansing and thirst-abating qualities. Salt is added in small quantity to coffee and many other drinks, and its effect when taken in beer deserves to be carefully studied, not peremptorily condemned. Three or four centuries ago the public analysts would have condemned the brewers, who, instead of wholesome ground-ivy, dared to use the deleterious weed called hops.

I am, &c., Emeritus.

THE LATE DR. FRANCIS HAWKINS.

[To the Editor of the Medical Times and Gazette.]

Sir,—I ask permission to add a few words to your account of my late highly-valued preceptor, Dr. Francis Hawkins. Forty-five years ago he was the Professor of Medicine at King's College, London, being, in fact, the first occupant of that chair. He was also Physician to the Middlesex Hospital. He was an admirable teacher, both in the lecture-

room and at the bedside; nothing could exceed his pellucid statements of theory, or his dexterity in diagnosis. As regards progress of science, there was one point which he stated concerning to the formation of pus, in which he differed from other teachers of his day, and agreed with later authorities—namely, that pus is not a mere secretion, but is some of the exuberant and wasted material which otherwise would be employed in the act of repair.

Dr. Francis Hawkins never made much figure in consulting practice, for, alas! he lacked all those imposing elements to which some of our brethren owe their success—the ponderosity of figure, the deep-toned voice, the affected gravity of manner, etc. But he was a thorough gentleman, a skilful practitioner, and a clear-headed man of business. His elocution was admirable, and it was a treat to hear him read papers at the evening meetings which used to be held at the College of Physicians; and his memory is cherished by many an OLD STUDENT OF K.C.L.

London, January 1.

MR. HANCOCKE WATHEN'S CASE OF EXTRA-UTERINE FŒTATION.

LETTER FROM MR. W. B. WALL.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have read Mr. J. H. Wathen's letter in your paper of to-day with considerable surprise and disappointment.

I am surprised that he should think I impugn *his* veracity, when I simply corrected the *history* by stating the case as I found it.

I am disappointed that he has not dispelled the doubt I expressed of the accuracy of his diagnosis.

From my knowledge of the patient I decline to notice the "verified statement." I am, &c.,

WM. BARROW WALL.

Neyland, Pembrokeshire, December 29, 1877.

THE INDIAN FAMINE RELIEF FUND.—On the first day of the new year the Mansion House Indian Famine Fund reached the grand total of £500,000 sterling, or, in Indian currency, of over five and a half million rupees. And this sum does not include £85,000 sent direct from Lancashire and Yorkshire; £45,000 from Scotland; and £76,000 from Australia. The total of the donations sent from all parts to Madras is said to be £800,000.

TREATMENT OF EPILEPSY.—In a lecture on this subject, Prof. Hardy observed that whatever remedy may be resorted to for this purpose, there is a precept which must never be lost sight of—viz., that when once commenced the treatment must be, so to say, chronic—that is, continued for months or years. It may, indeed, be interrupted from time to time without inconvenience; but after a suspension of a fortnight, a month, or longer, it must be resumed under the penalty of losing any advantages that have been already gained. Speaking of the belladonna treatment, conducted in the mode recommended by Trousseau, he says that he has met with two cases among those in which he employed it in which he believes its success was quite complete. He thinks atropia should only very rarely be substituted for it, owing to the danger of poisonous accidents resulting from irregular apportioning of the dose. Bromide of potassium, however, he observes, is almost the only medicinal substance employed at the present time; and from its use we may hope to obtain a cure when the disease is not very old, and if the paroxysms are not very frequent. He has himself met with several cases in which such cure can quite legitimately be said to have occurred. Like all the other remedies, it must be given in increasing doses (from two to three, four, six, and even eight grammes per diem), and must be continued for a long time—two or three years. This substance has, however, the inconvenience of inducing a certain amount of intellectual paresis, and especially a slight loss of memory. It also frequently gives rise to irritation of the skin; and Prof. Hardy has often been called to cases of obstinate eczema, which only disappeared on the suspension of the bromide. These eruptions are so persistent that by this character alone he has sometimes, in spite of the denial of their relatives, been able to state that children were taking the bromide for epilepsy.—*Gaz. des Hôp.*, November 22.

REPORTS OF SOCIETIES.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Dr. STEVENSON, President, in the chair.

THE minutes of the previous meeting having been read and confirmed, Dr. Tripe moved a notice of motion for reference to the Council to decide as to the desirability of devoting certain evenings during the session for the consideration of subjects selected by the Council for discussion without the reading of a formal paper.

The report of the Council was read on the proposed future place of meeting. It was agreed to accept the terms of the Association for the Promotion of Social Science for the use of their library, gas, etc., at ten guineas for the session.

The reply from the Secretary of the Local Government Board to the suggestion of the Society that the Bill to be introduced in the next session of Parliament should contain certain clauses dealing with infectious disease was read. Allusion was made in the letter to the limited scope of the Bill as already prepared, and the unwillingness of the Local Government Board to extend its operations to the subjects suggested by the Society. The Council decided to postpone consideration of the action taken by the Metropolitan Board of Works in declaring the occupation of a cow-keeper to be an "offensive business." It was decided to take some steps to frame a Bill, to be submitted to Parliament, giving power to deal with cow-sheds and diaries, and to frame by-laws for their proper management and control.

The proposal of the Birmingham and Midland Association of Health Officers respecting the attendance in public elementary schools of children living in houses in which infectious disease exists was considered, and resolutions respecting the closing of schools during the prevalence of scarlet fever were forwarded to the Society.

Dr. DUDFIELD said that he had lately put himself in communication with the School Board managers, expressing his opinion that some arrangement might be made to put the School Board visitor in communication with the health officer, for the mutual exchange of confidential information calculated to check the spread of infectious diseases. An official letter was thereupon sent to the superintendents of districts in the metropolis, instructing them to exchange such confidential information respecting the prevalence of any infectious disease which might be known to exist in any house or street.

Dr. TRIPE alluded to the very indefinite and faulty character of the information hitherto sent to him by the School Board officers.

Dr. DUDFIELD concluded by moving a resolution to the effect that a communication having been addressed to the superintendents of the 100 metropolitan districts with a view to supply information of the existence of disease to the medical officer of health, that the Society do resolve to put themselves in communication with the School Board, with a view to secure systematic and certified information.

Mr. Armstrong was unanimously elected an extra-metropolitan member, and Dr. G. A. Heron an associate.

Mr. Owen Coleman, of Surbiton, was proposed as an extra-metropolitan member.

Dr. JAMES EDMUNDS read a paper entitled "Observations on 1000 consecutive Deaths within seven years after Insurance, from the experience of the Temperance and General Provident Institution, with a Comparison of the Deaths in the Temperance and General Section."

In the debate following the reading of the paper,

The PRESIDENT commented upon the larger proportion of casualties and zymotic disease among those insured in the temperance section than in the general, which was made up for the most part of moderate drinkers of alcoholics.

Dr. PRICE JONES commented upon the recorded deaths from "dyspepsia" and "dropsy," to show that the deductions which Dr. Edmunds had made in favour of the lives of total abstainers could not be relied upon. The medical officers making such vague returns could not be depended upon for information of such importance in deciding as to the relative advantages of total or partial abstention from the use of alcoholic beverages.

Dr. TRIPE said that it was only a natural inference to conclude that those consenting to sign a paper not to drink would be, on the whole, people of more reliable character and more likely to abstain from other excesses which would lead to early deaths. It was remarkable that there should be noted so many deaths from phthisis within seven years of insurance, notwithstanding the caution usually shown by medical officers by careful inquiry into the family history of candidates for insurance. Of deaths from diseases of the chest, 282 of the temperance section against 261 in the general section. This would seem to show that alcohol must in some way be a nutrient and a preservative from consumption, especially when these calculations were made in the relative absence of congestive diseases of the lungs so frequent among drinkers. The fewer deaths from casualties among the drinking classes was unexplicable, because we know that such are not always able to take care of themselves. It is noteworthy, too, that in large figures such as the Registrar-General's Returns, the percentage of casualties varies very little from year to year.

One of the officers of the Society rose to explain that the casualties are greater in the abstaining section because the agents at Liverpool, for instance, are themselves total abstainers, and they naturally seek out temperate lives for insurance by preference. The insurance office to which he belongs declines to take publicans and any engaged in the liquor traffic. It is regrettable that the medical officer should not always give the cause of death very accurately or concisely.

In reply to the President, he explained that the average age for insurance was thirty-seven for the general, and thirty-five for the temperance section.

Dr. BRISTOWE said that the figures quoted were too small for useful deductions, and the returns of death very inaccurate. If temperate lives were better than those of moderate drinkers, the average age of those at the present time received should be reversed. We might infer from the tables given by Dr. Edmunds that abstainers were liable to die, and did die largely from infectious diseases, and that non-abstainers were not so liable to the disease; but facts are opposed to such a conclusion. Deaths from delirium tremens are not arguable upon such a basis of comparison. Commenting upon a deduction of Dr. Edmunds', that aneurism must be a chronic disease and detectable months before death, Dr. Bristowe said that many people die of aneurism within a few months of insurance without the patient or doctor being able to detect it in the early stages of its development. Similarly, phthisis and other pulmonary diseases, also cancer—*e.g.*, of œsophagus and other internal organs.

Dr. DUDFIELD hoped that the average of deaths would be taken into account before the figures were published, and commented upon the large number of deaths from delirium tremens compared with the actual deaths from this disease in the metropolis.

Dr. EDMUNDS also showed an apparatus for diffusing carbolised and other disinfecting solutions.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 12, 1877.

Surgeon-General JOHN MURRAY, M.D., President, in the Chair.

DR. COLLIE read a paper entitled "Variolæ Anomalæ" (Sydenham) with suggestions and reflections. He began by stating the object of his paper to be "to notice some points in which the recent epidemics resemble the great epidemics of the past, to call attention to the inefficiency of the existing vaccination law, and the grave dangers which may be incurred if this inefficiency be permitted to continue." After giving details of two cases of hæmorrhagic small-pox, one following an attack of scarlet fever, the other an attack of enteric fever, in both of which death took place suddenly and without any warning, he went on to show how closely such cases resembled the accounts of the "black death" of the middle ages, as given by Vinario and others. To his mind there was no doubt but that black small-pox and black death were identical; and he further thought that black small-pox formed the chief part of the plague of Athens, so graphically described by Thucydides. In recent, as well as in the present epidemic, there had been a large and increasing proportion of black cases, and should vaccination be neglected, Dr. Collie thought that small-pox might possibly assume its middle-age virulence. He stated that black small-pox occurs invariably in unvaccinated persons, or in persons who have not been revaccinated after fifteen. He then gave the history of a case of what appeared to be, from the eruption, mild small-pox. The patient, aged twenty-one, had two good vaccination marks. Death occurred an hour after admission. The post-mortem examination showed that the anterior part of the corpus striatum and the whole of the right hemisphere were ploughed up with blood. So far as he knew this was the first case of the kind on record. Then followed a case of confluent small-pox, with extensive hæmorrhage into the vesicles, in a female aged sixty, with no evidence of vaccination, in which, contrary to expectation, recovery took place. With regard to compulsory vaccination laws, he thought that compulsory laws which are practically not compulsory were ridiculous, and that, as regards vaccination, such laws served to retard rather than to advance its progress. Dr. Collie concluded by saying that no vaccination can be held efficient which did not include revaccination about puberty, and that vaccination should be the business of the State, and be performed by specially trained State officers, private practitioners, except in exceptional circumstances, being interdicted from vaccinating.

In the discussion which followed the reading of the paper, the President, Dr. J. C. Saunders, Dr. Mackenna, Dr. Argles, and Mr. Netten Radcliffe took part.

OBITUARY.

RICHARD PAYNE COTTON, M.D., F.R.C.P. LOND.

THE profession will receive with unmixed regret the intelligence of the death of Dr. Payne Cotton, which took place on the 26th of last month, at his residence in Cavendish-square. Dr. Cotton was born in Kensington in 1820, and received his medical education at St. George's Hospital and at Paris. Early in his professional life he became associated with the Hospital for Consumption and Diseases of the Chest at Brompton, and, together with Dr. Quain, worked assiduously for many years among the out-patients, securing the remarkable success which that department of the Hospital has ever since maintained. The individual interest and sympathy which Dr. Cotton gave to every case, undisturbed (as it is in so many hospitals) by the presence of a large *clientèle* of students, was a main reason of his great popularity.

The same kindly sympathy characterised his dealings with the in-patients, and for twenty-seven years he worked on at Brompton, earning the goodwill of all associated with him in the management of the Hospital; and on retiring, in March, 1875, he was unanimously elected Consulting Physician.

In 1855 he was elected Fellow, and in 1868 one of the Council, of the Royal College of Physicians. He was a Fellow and Vice-President of the Royal Medical and Chirurgical Society, and of the Medical Society of London.

He obtained in 1852 the Fothergillian Gold Medal for his prize essay on Consumption, a work which gave a comprehensive survey of what was then known of pulmonary phthisis. This, like his smaller work, "Phthisis and the Stethoscope," ran through several editions. Dr. Cotton was among the first of those men who, occupying the front rank of the profession, realised the growing desire of the day for short manuals on medical and other scientific subjects, which have since been more largely supplied. He thus placed in the hands of students and busy practitioners a little book which reached and helped many who would never have had time to study larger and more exhaustive works.

Amongst his other contributions to medical literature may be mentioned a paper on "The Form and Movements of the Chest in Phthisis" (*London Medical Journal*, vol. iii.); "Clinical Lectures on the Physical Signs of Phthis" (*Medical Gazette*, 1849); papers on "The Therapeutics of Consumption" (*Medical Times and Gazette*, 1863); and various other articles in the medical journals. He lived for twenty years in Clarges-street, and in 1872 moved to Cavendish-square. For some years he had a large and valuable practice. His patients were all attached to him by ties of warm affection.

His was a simple, truthful, gentle character; and this, combined with the careful, minute way in which he entered into every case, insured that reciprocal sympathy which has made many deplore his loss as that of a wise and trusted friend.

Although attached to his profession, and gaining his greatest pleasure in the practice of his art, Dr. Cotton was not without a "hobby," and his hobby was geology. When nineteen years of age he had made a valuable, and in some respects unique, collection of mammalian remains from the tertiary deposits at Ilford, Essex, fully described in the catalogue of Pleistocene vertebrata, by Sir Antonio Brady, F.G.S., 1874. Some of the most important are the bones of the mammoth, rhinoceros, ox, auroch, hippopotamus, deer, lion, bear, horse, wolf, bird, and low-faced bear (perfect). Many were exhibited by Professor Owen on various occasions at the Royal Institution. Dr. Cotton has left them to the Geological Society of London, to be placed in their museum.

When quite a young man he had learned to "look from Nature up to Nature's God"; and amidst all the severe suffering of his last days he rejoiced in the assurance that very soon he should fully know all the mysteries connected with the records of creation on which we wrangle and dispute, and that great mystery of life after the solution of which we so vainly search.

Dr. Cotton, who for years had felt somewhat unequal to the fatigues of an engrossing practice, became seriously ill at the beginning of 1877, when the first signs of weak heart, shown in asthma, orthopnœa, and intermittent pulse, warned him to desist for a time from active work. After three weeks' rest, however, he returned to his practice, which, he was accustomed to maintain, was as large as was possible short of drudgery, and as lucrative as he desired.

Having thus attained the height of his professional ambition, it seems sad that he should not have lived longer in the unalloyed enjoyment of it.

In the hope of regaining health and vigour, he went with his family in the autumn to the Highlands, but two months there failed to produce the hoped-for result; and immediately on his return the heart-symptoms underwent speedy exacerbation; dropsy and albuminuria ushered in the fatal issue, and he passed into the rest for which he longed on the night of Christmas-day.

He was twice married. The Church and the Law have found representatives in his sons, but not his own profession.

G. F. COLLIER, M.D. Leyden, M.R.C.S. Eng., &c.

Dr. Collier, who lately died at the age of seventy-eight, was comparatively unknown to the present generation of medical practitioners. He was Physician-in-Ordinary to William IV., and at one time enjoyed considerable reputation in his profession, but had long ceased to practise or to take any active part in it. Having studied at Guy's Hospital, he became a teacher there, being one of three lecturers, of whom the other two were his intimate friends—Sir Astley Cooper and the late Sir Benjamin Brodie. He had a large number of private pupils, in accordance with the then prevailing custom, and altogether about 3000 students were at one period or other under him. For many years he had a large practice at 32, Spring-gardens, and had besides a suburban residence, Bohemia House, Turnham-green, where he passed the last twenty years of his life in perfect retirement. He took his L.S.A. in 1819, became an M.D. of Leyden in 1828, and took the L.R.C.P. in 1831. He was also a Member of the Royal College of Surgeons of England. Various medical works were from his pen, among them being Collier's "Celsus" and the "Code of Safety." He was examined before the House of Commons on the Public Health Bills.

Dr. Collier was also a man of considerable originality and eccentricity of character, as is well shown in the following letter, written rather more then thirty years ago, to a well-known clergyman still living:—"Dear Sir,—Please to say whether you have the character of Jane H., some time since in the service of Mr. Emery, of Hastings. The said Jane is very plain, and, if a cook at all, most certainly therefore *a plain cook*; and she has but one eye. Could you yourself recommend her for service to a nine-years widower with a large family; for, seeing she has but one eye left, it would be awkward if that should be directed only to her own interests; while, on the other hand, if she were disposed to serve me honestly, I would prefer her for her infirmities.—Your respectful humble servant, Geo. Fred. Collier."

HERBERT NORMAN EVANS, M.D., F.R.C.S. Eng.

We cannot allow the name of Dr. Herbert Norman Evans to pass away from the list of living medical men without an expression of regret at his death; he was not only an honourable and honoured, and successful medical practitioner, but also a man of rare literary tastes and knowledge. Dr. Evans was educated at the College School, Gloucester, by his great-uncle, who had sent up the future Bishop Phillpotts to win his Corpus Scholarship. There young Mr. Evans imbibed a deep taste for classical studies, which he kept up even when actively engaged in practice. He obtained his medical education at St. Bartholomew's Hospital, and in Edinburgh; took the M.D. degree of the University of Glasgow in 1824, and the Membership of the Royal College of Surgeons of England in 1825; and then became partner in a well-known and extensive practice in Hampstead. In 1845 he became a Fellow of the English College of Surgeons; and about seventeen years ago retired from general practice, and a short time afterwards went to live at Tunbridge, where he practised as a physician.

A correspondent of our contemporary the *Guardian* says of him:—"His literary tastes were manifested in his collection of a large and valuable library, his attention being largely devoted to the works of the Fathers, and to the English divines of the seventeenth century. This taste eventually resulted in the issue of the *Anglo-Catholic Library*, of which he was, in fact, the originator. It grew out of a conversation with a clerical friend in the country, who was equally impressed with himself with the great value of the 'Caroline' divines. He was ably supported by his friend Mr. Charles Crawley, who then was his neighbour at Highgate. Very few knew at the time, and still fewer at the present moment are aware, to whom it may be said we are solely indebted for this important addition to our theological literature, and for bringing many scarce and valuable tracts—such as those, *e.g.*, of Cosin and Thorndike—within the reach of theological students. It was something also to have thus called into existence such a class of editors as the late Arthur Haddan and William Scott. Mr. Evans kept his own name entirely in the background, though he was quite capable, both as a theologian and a scholar, of rendering very valuable aid, had his professional associations admitted of his so doing." At Tunbridge Dr. Evans promoted very earnestly a plan for forming a new parochial district and building a church, but after the project had made considerable progress, some unexpected opposition caused its failure; and Dr. Evans afterwards retired to St. Leonards, where he died on December 10, 1877.

Volunteer Ambulances.—Signora Mario, writing in *Fraser* for December, says:—"Of these I would say from experience that, although they did good service in France, where medical service was as much disorganised as the other departments, as a rule no *matériel* or *personnel* that is not under the direct control of the sanitary authorities can really avail for the relief of the sick and wounded. As a volunteer myself, I may be supposed to speak dispassionately, and I can affirm that every succeeding campaign taught me the utter inefficiency of all efforts undirected by qualified and regular surgeons; and I could narrate case upon case of lives and limbs sacrificed because voluntary nurses and amateur directors of ambulances had possessed themselves of the wounded on or near the battle-field, and carried them to be tended in private houses by kind but ignorant persons, or to their own hospitals, where only civil surgeons were in attendance. Voluntary service to be of use must be disciplined and organised, subject and subservient to one directing head. Bearers, nurses, and attendants must have strict and scientific training, must thoroughly learn their profession, as all other professions are learnt. Nursing is as difficult an art as any other, and though one individual may have more aptitude than another, none can dispense with efficient training, none can bestow that training save efficient doctors and surgeons, who would save themselves much trouble and failure if they would devote some of their time and talents to such education."

MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—The Winter Commencements took place in the Examination Hall of Trinity College on Wednesday, December 19, 1877, under the presidency of the University Caput. The following degrees in Medicine and Surgery were conferred:—

Baccalaurei in Chirurgid.—Joseph Franciscus O'Donnell, Johannes Fitzhenry Woodroffe (*stip. con.*).

Baccalaurei in Medicinâ.—Brabazon Newcomen Casement, Johannes Duke Fausset, Thomas Fredericus Willow Fogarty, Clemens Mallins, Joseph Franciscus O'Donnell, Blacker Castles Powell, Roger Wetherall Taylor, Robertus Norman Thompson, Eduardus Gulielmus Wood White, Johannes Fitzhenry Woodroffe.

Magister in Chirurgid.—Arturus Annesley West.

Doctores in Medicinâ.—Johannes Duke Fausset, Lambertus Hepanstall Ormsby, Gulielmus Henricus White.

The degree of Bachelor in Surgery (B.Ch.) was conferred upon John Fitzhenry Woodroffe, *stipendiis condonatis*, in consequence of his having double first place at the recent examinations for the degrees of Bachelor of Medicine and Bachelor in Surgery.

Erratum.—In the Pass-list of the University of Dublin, published December 22 (page 687), the name "John F. Doodroffe" should have been "John F. Woodroffe."

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At the Quarterly Examination held on December 10 and following days the undernamed gentlemen passed their final examinations for the Letters Testimonial, and having made and subscribed the declaration, were admitted Licentiates of the College, viz.:—

Armstrong, Henry.
Armstrong, John Henry.
Asbury, Alfred.
Ashe, St. George.
Beale, Thomas William.
Beamish, Samuel.
Bourke, James Michael.
Carmichael, John.
Cockran, Christopher Henry.
Connolly, William Rogers.
Dillon, John.
Egan, John Johnston.
English, Thomas.
Fox, Patrick Hahon.
Heuston, Francis Thomas.
Hone, Andrew John.
M'Donnell, Denis.
Nicholson, John Joseph.
O'Hara, Henry Michael.
O'Kelly, Thomas Edward.
Pentland, Alexander.
Roberts, Frederick.
Ross, Frederick Ogilby.
Ryan, Peter.
Ryan, Thomas.
Sproulle, Simon Davenport.
Spotton, George.
Sweeny, Terence Humphrey.
Tench, Charles Highgate.
Lane, Alfred Vavasour.
Wall, Arthur Henry.
Walsh, John Joseph.
Walton, John.
Westby, George.
Woods, John.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, December 27, 1877:—

Campbell, William Frederick, Chippenham-road, St. Peter's-park.
Lloyd, George Jordan, South Wreath, near Birmingham.
McCarthy, George, Kinmare, Ireland.
MacIlhatton, Alexander, Treorky, South Wales.

The following gentleman also on the same day passed his primary professional examination:—

Dunlop, James Hay, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BURD, EDWARD, M.D. Cantab., Consulting Physician to the Salop County Prison, *vice* Henry Johnson, resigned.

COOMBS, ROWLAND H., L.R.C.P. Lond.—Medical Officer in Ordinary to the Bedford General Infirmary, *vice* Dr. George Wharton, deceased.

NAVAL, MILITARY, &c., APPOINTMENTS.

ADMIRALTY.—Staff Surgeon William Inman has been placed on the Retired List of his rank from the 24th inst.

BIRTHS.

FEAR.—On December 14, at Brenchley, the wife of W. Fear, M.R.C.S. Eng., of a daughter.

HAMMOND.—On December 27, at Nuneaton, the wife of W. Hammond, L.R.C.P. Edin., of a daughter.

KILIAN.—On December 30, at 49, Harscampstrasse, Aix-la-Chapelle, the wife of Paul Kilian, M.D., of a daughter.

MCENERY.—On December 22, at The Lodge, Cerne Abbas, Dorset, the wife of William McEnery, L.K.Q.C.P. Ire., of a son.

SMITH.—On December 28, at 29, Charles-street, Berkeley-square, the wife of Barton Smith, M.B., M.R.C.S., of a daughter.

WALLACE.—On December 26, at 243, Hackney-road, the wife of Frederick Wallace, L.R.C.P. Lond., of a daughter.

MARRIAGES.

COLLINS—GRAVES.—On December 27, at Derryloran Church, Cookstown, Tom Collins, M.A., Head Master of the Grammar School, Newport, Salop, to Lota, youngest daughter of Henry Graves, M.B., F.R.C.S.I., Cookstown, Ireland.

EDMONDES—BOWEN.—On December 27, at Olveston, Gloucestershire, Francis Quinton Edmondes, Capt. R.E., to Margaret Sabina, eldest daughter of Surgeon-General Bowen, half-pay, A.M.D.

MAHONY—SACRÉ.—On December 27, at St. Matthew's, Oakley-square, Philip la Breuiffe Mahony, L.R.C.S.& P. Edin., to Josephine Marianne, only daughter of the late Joseph François Sacré.

DEATHS.

COTTON, RICHARD PAYNE, M.D., F.R.C.P., at 33, Cavendish-square, W., on December 26, aged 57.

CORMICK, WILLIAM, M.D., F.R.C.S., L.S.A., K.C.L.S., Physician to H.R.H. the Crown Prince of Persia, at Chichester House, Craven-gardens, Shepherd's-bush, on December 30, aged 57.

TURNBULL, LAURANCE JAMES, youngest son of G. H. Turnbull, M.D., at Kelso, N.B., on December 31.

WALLIS, CHARLES CORNWALLIS, F.R.C.S., at Castle Cary, Somerset, on December 19, aged 79.

WHITE, DUNBAR, M.D., at Whithorn, Wigtownshire, N.B., on December 27, aged 73.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Alton Union.—Mr. Thomas Wilson has resigned the Second District; area 19,888; population 4778; salary £110 per annum.

Bodmin Union.—Mr. Arthur Gaved has resigned the Seventh District; area 7160; population 1343; salary £22 10s per annum.

Bridgwater Union.—Mr. J. M. Ling has resigned the Huntspill District; area 12,118; population 3485; salary £60 per annum.

Burton-upon-Trent Union.—Dr. S. J. Smith has resigned the Etwall District; area 17,527; population 4307; salary £100 per annum.

Newtown and Llanidloes Union.—The Llanidloes District is vacant; area 62,965; population 6580; salary £75 per annum.

Spalding Union.—Mr. T. Stiles has resigned the Pinchbeck District; area 15,441; population 3846; salary £51 per annum.

APPOINTMENT.

Wakefield.—Thomas Fairley, F.C.S., as Analyst for the Borough for one year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

ESSEX LUNATIC ASYLUM.—Second Assistant Medical Officer and Dispenser. Candidates must be single, and duly registered according to the Medical Act. Applications, with testimonials, to Dr. Campbell, on or before January 10.

HANTS COUNTY LUNATIC ASYLUM.—Second Assistant Medical Officer. Candidates must be qualified and registered, their age should not exceed thirty years, and they should also be unmarried. Applications, with testimonials, to Dr. Manley, at the Asylum, on or before January 9.

NEWCASTLE-UPON-TYNE INFIRMARY.—Senior House Surgeon. Candidates must be registered in medicine and surgery, unmarried, and free from the care of a family. Applications and testimonials to the Chairman of the House Committee, before January 9.

SUNDERLAND AND BISHOPWEARMOUTH INFIRMARY.—Senior House-Surgeon. Candidates must be doubly qualified and registered. Applications and testimonials to the Secretary of the Medical Board, not later than January 24.

IODOFORM IN FISSURE OF ANUS.—M. Tarnier recommends the spreading of a small quantity of the powder of iodoform over the surface of a cotton plug, and bringing this in direct contact with the fissure. Four or five dressings suffice in some cases to produce a cure.—*Union Méd.*, December 27.

ACADÉMIE DE MÉDECINE.—At its meeting on December 18, the Académie elected unanimously M. Richet as President for the ensuing year. In the section of External Pathology, M. Panas was elected in place of the late Prof. Dolbeau, by the suffrages of fifty-seven of the seventy-four academicians who were present.

DANGER FROM "BRUNSWICK SAUSAGES."—Quite recently no less than 134 persons have been attacked at Leipzig by trichinosis, which was traced to their having eaten sausages imported from Brunswick. The Viennese magistracy have ordered all the so-called Brunswick sausages brought to Vienna to be confiscated and submitted to a microscopical examination.—*Wien. Med. Woch.*, Nov. 24.

A New Revulsive.—Dr. Couturier states that M. Lardy's extract of pimentum is likely to prove a most valuable revulsive, not being so fugacious as mustard nor so irritating as antimony or croton oil. It begins to act in from ten to thirty minutes, according to the delicacy of the skin, causing heat, a slight tingling and redness, which go on increasing for about three hours, when they remain stationary. The plaster may be applied for eight to ten hours in children, and for twenty to twenty-four in adults. No great irritation capable of impeding occupations ensues, and it may be best compared with that of a sinapism arrived at half its power, and so maintained for the twenty-four hours.—*Union Méd.*, December 22.

A Danger in Etherisation.—As it is now sought to substitute ether for chloroform as an anæsthetic agent, it is well to draw attention to the necessity of employing it with caution in presence of a candle or other lighted body. At Lyons, where it is almost exclusively employed as an anæsthetic, the receptacle containing it has on many occasions been known to explode when a lighted body has been in the room, although at a considerable distance from it. Nay, more, on several occasions this has occurred when the actual cautery has been used for operations on the face, or even for hæmorrhoids, fistula, or operations on the lower extremities—owing to the density of the ether causing it to sink into the lower strata of the atmosphere. In chambers less ventilated than hospital wards the occurrence would be still more frequent. The combustion usually is so rapid that only the slightest burn is produced; but it may be otherwise if muslin, cotton, or any other inflammable substance, is near. Even Paquelin's thermo-cautery, notwithstanding its limited radiation, will inflame ether-vapour at a distance just as easily as the actual cautery.—*Lyon Méd.*, December 23.

Alcoholism and Diabetes.—In a paper read at the Havre meeting, "On Wounds in Alcoholic Diabetics," Prof. Verneuil arrives at the following conclusions:—1. The co-existence of diabetes and alcoholism, which has been as yet but little investigated, is not very rare, the frequency being explicable by the regimen to which some diabetics are submitted. 2. The knowledge of this morbid association may throw light on some obscure points in the history of diabetes, especially relating to pathological anatomy and diagnosis—certain lesions found more or less exceptionally in diabetics being doubtless due to the action of alcohol, and certain fatal terminations of diabetes being rather imputable to alcoholism. 3. Diabetes and alcoholism, considered apart, appear to act in a similar manner on the progress of wounds, and induce very analogical traumatic accidents. Alcoholic diabetes perhaps modifies in a special manner the reparative process; but we have no precise knowledge on this point. It, however, seems to be quite probable that it imparts to the prognosis an aggravation for which the alcoholism is chiefly responsible. 4. When called to treat a diabetic patient, the practitioner should always inquire whether alcoholism co-exists or not; and whenever this is not the case, he should always try to prevent its occurrence. When alcoholic diabetes is present, great care must be taken in instituting operations, and even explorations or surgical manœuvres.—*Gaz. Hebd.*, No. 42.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Dr. F. D. Edgerton.—Received with thanks.

Royal Navy.—Sir Gilbert Blane, the founder of the gold medal, was the first baronet.

M.D., Kingston.—Sir J. J. Trevor Lawrence, Bart., your representative in Parliament, is a Member of the Royal College of Surgeons of England. He received his professional education at St. Bartholomew's Hospital, and is the only son of the late Sir William Lawrence, the first baronet, so long the Senior Surgeon to the Hospital.

The late Dr. Collier practised for many years in Spring-gardens. It was an error on the part of the writer in the *Times* to state that the honorary Membership of the Royal College of Surgeons was offered to him and declined. Such was not the case, as he was admitted a Member of the College by examination, and after compliance with all the regulations of that institution. There were only two honorary members of the College ever made—viz., those world-renowned naturalists, John Hunter, and the Baron George Cuvier.

Dr. Campbell, Edinburgh.—The dramatic poem by Lessing, of "Nathan der Weise," has just been translated into English blank verse by Dr. Andrew Wood, F.R.S. Ed., one of the members of the General Medical Council; and in an elaborate and able review of the work in our contemporary the *Educational Times* it is stated that another member of the profession to which Dr. Andrew Wood belongs, viz., Dr. Robert Willis, of Barnes, so long the Librarian of the Royal College of Surgeons, translated "Nathan the Wise" in 1868, and this translation was selected as the topic of a discourse not long since by one of the leaders of the so-called school of heterodox preachers of London.

Dr. Williams.—The celebrated Boerhaave was a singularly sincere and devout character, and a strong example to oppose to the aspersion, "Religio Medici opprobrium Medicorum." The Czar Peter is reported to have lain all night in his pleasure-barge, against Boerhaave's house, to have the advantage of two hours' conversation with him on various points of learning, the next morning before college time.

Dens Sap. and L.D.S.—We have reason to believe that, on reconsideration, and in justice especially to the large number of qualified members of the dental profession, the resolution referred to may not be confirmed. Should the Bill pass as now drawn, the individual mentioned by "L.D.S." will have as much right as himself to be placed on the Dental Register, as he will be considered in the *bonâ fide* practice of the profession, although so curiously associated with other businesses. The village "leech doctor" of "Dens Sap." can also, no doubt, easily prove, if necessary, by all the old women of the place, that he has long been in practice as a "tooth-drawer," and claim to be registered in company with the Bells, Salters, Merryweathers, Napiers, Cartwrights, etc., Fellows of the Royal Society, and Fellows and Members of the College of Surgeons. No one can, however, be compelled to register; and the dentists who possess the Fellowship or Membership of a Royal College of Surgeons, or any registrable surgical diploma, will probably be content to be on the Medical Register only. Thus it may become a mark of distinction for a dentist not to be on the Dental Register.

A White Minstrel.—Mr. James Merryweather, M.R.C.S., the well-known dentist, lives in the house, Brook-street, Grosvenor-square, so long occupied by the divine Handel. A small stone tablet to that effect is inserted in front of the house. We see no reason why the houses of renowned members of our profession should not be so indicated. Sir Astley Cooper's residence in Conduit-street is now the house of business of a "*Jew clothier.*"

Dr. MacC.—In 1871, Dr. McCoy, colonial surgeon, of Sierra Leone, sent to the Royal Veterinary College, London, a report on the then so-called "loin disease" of horses; and the opinion formed thereon by the Professor of the College was, that the disease arose out of the poisoned state of the blood, the disease being conveyed into the system by means of the atmosphere.

"On mules and dogs the infection first begin,
And last the vengeful arrow fixed in man."

Job Salter, Liverpool.—Mrs. Mapp, the celebrated bone-setter, who flourished in 1736, did the thing in grand style, coming to town from her house at Epsom in a coach-and-four once a week, when she saw patients at the Grecian Coffee-house. We thought the person mentioned by you was dead.

The Boarding-Out System.

The Kingston Board of Guardians have found the boarding-out system so very advantageous to the children and ratepayers, that they have resolved, with a view to the children's connexion with the Union House being practically discontinued, that the relieving officers should make arrangements for payment to the foster-parents, without requiring at the time the attendance of the children.

A Mutual Autopsy Society.

According to the *Temps*, such a society exists in Paris. It consists of doctors, anthropologists, and *savants*, who pledge themselves to give up their bodies for dissection by the survivors. The members meet on the death of one of them in the *salon* of a restaurant, and, after the table is cleared, a box is opened, containing a series of bottles in which the remains of the deceased, the provider of the feast, are preserved in spirits of wine.

Hygiene in a College.

Professor Hitchcock recently read a paper at a meeting of the Public Health Association in Chicago, "On Hygiene in Amherst College." He gave the results of an experiment, begun nearly eighteen years ago, in systematic physical education. The trustees of the College about twenty years ago founded a professorship of physical education and hygiene, and erected a gymnasium; and gymnastics became an obligatory part of the College curriculum. The professor in charge of the department must be a highly educated physician. He has the responsibility of the general health of the College; gives each freshmen class a course of lectures on the laws of health, with particular reference to the conditions of college life; and these lectures are followed up with a course in anatomy and physiology. The physical principles of elocution he also teaches. Each class meets the professor in the gymnasium on four days in each week for a half-hour's drill in light gymnastics: unless by special permission excused, every member of the class must be present. In light gymnastics, wooden dumb-bells, weighing less than a pound a piece, are employed, and all the movements are timed to music. Of the heavy apparatus, about one in eight of the students makes use of it. Extreme gymnastics, if not absolutely discountenanced, are not advised, and are quite the exception. The development of muscle is not the object, but health. Perfect success, it is stated, has attended the experiment. The students of the College have, through the four years of their course, improved in health from year to year.

Anatomist.—Francis Glisson, M.D., who discovered the capsula communis or vaginæ portæ, was born in 1597. Dr. Valentine Mott, of New York, was the first to suggest, and the first to effect, the ligature of the common iliac artery.

ALMS-GIVING.

Of the £26,082 collected in 1877 for the Metropolitan Hospital Sunday Fund, the congregations of the Church of England contributed £18,399 the Congregationalists £2018, the Jews about £1000, and the Roman Catholics £490. The whole cost of collection and distribution of the Fund barely exceeded 3 per cent.

COMMUNICATIONS have been received from—

Mr. J. KNOWSLEY THORNTON, London; Dr. HERMANN, London; Dr. THOS. BARLOW, London; Mr. J. CHATTO, London; Mr. T. M. STONE, London; Mr. B. R. WHEATLEY, London; Messrs. HENRY and SON, London; Dr. SULLIVAN, Rome; Dr. JACIELSKI, London; THE SECRETARY OF THE EPIDEMIOLOGICAL SOCIETY, London; THE REGISTRAR OF THE APOTHECARIES' HALL, London; Dr. DAUITT, London; Mr. KESTEVEN, London; Dr. W. A. F. BROWNE, Dumfries; Dr. CLEMENT GONSON, London; Dr. GAILLY HEWITT, London; Dr. F. CAUBCHILL, London; Captain SAXBY, London; Mr. HENRY GREEN, London; THE SECRETARY OF THE CLINICAL SOCIETY, London; Mr. W. B. WALL, Neyland; Dr. J. WICKHAM BARNES, London.

BOOKS AND PAMPHLETS RECEIVED—

Royal London Ophthalmic Hospital Reports, vol. ix., part 2—W. H. Baker, M.D., Lacerations of the Cervix Uteri as a Cause of Uterine Disease—Henry H. Vernon, M.D., Report as to the Best System of Scavenge for the Borough of Southport—James Duthie, Our High Death-Rate and its Insanitary Causes—Science for All, part 1—John C. Thorowgood, M.D. Lond., Notes on Asthma—Student's Pocket Index—Surgeon-Major J. E. Tuson, M.D., Observations on the Efficacy of Burning Sulphur Fires in Epidemics of Cholera.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—La Province Médicale—Revista de Medicina y Cirugia Practicas—Child's Companion—Cottager and Artisan—National Anti-Compulsory Vaccination Reporter—Morningside Mirror—Leisure Hour—Sunday at Home—Students' Journal and Hospital Gazette—Gardeners' Magazine—Archives Générales de Médecine—Monthly Homœopathic Review—Veterinarian—Edinburgh Medical Journal—New York Druggists' Advertiser—Practitioner—Medical Temperance Journal—American Practitioner—Hardwicke's Science Gossip.

APPOINTMENTS FOR THE WEEK.

January 5. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Lettsomian Lectures—Mr. Francis Mason, "On the Surgery of the Face." Lecture I.

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "On Heat: Visible and Invisible."

7. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

8. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

ROYAL INSTITUTION, 3 p.m. Prof. Tyndall, "On Heat: Visible and Invisible."

ROYAL MEDICAL AND CHIRURGICAL SOCIETY, 8½ p.m. Mr. H. T. Butlin, "On the Microscopic Anatomy of the Smooth Tongue (Chronic Superficial Glossitis)." Mr. W. Sedgwick, "On Maternal Impressions."

9. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex; 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

10. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

11. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

CLINICAL SOCIETY, 8½ p.m. (Annual General Meeting.) Dr. Althaus, "A Case of Chorea in the Adult Male, complicated with Epilepsy." Mr. Howard Marsh, "A Case of Severe Hæmorrhage after Operation for Cleft Palate, arrested by Plugging the Posterior Palatine Canal." Mr. Holmes, "Sequel to a Case of Excision of the Os Calcis, reported in vol. viii. of the Society's *Transactions*"; also, "A Case of Excision of the Lower Part of the Rectum."

VITAL STATISTICS OF LONDON.

Week ending Saturday, Dec. 29, 1877.

BIRTHS.

Births of Boys, 958; Girls, 873; Total, 1831.
Average of 10 corresponding years 1867-76, 2039·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	915	842	1757
Average of the ten years 1867-76	825·5	837·8	1664·3
Average corrected to increased population ...	...	...	1781
Deaths of people aged 80 and upwards ...	...	...	67

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1867-76 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	1	10	4	...	15	1	4	2	2
North	751729	11	22	15	4	11	2	8	1	4
Central ...	334369	1	8	3	1	11	...	3	...	1
East	639111	8	37	4	1	7	2	3	1	2
South	967692	8	32	5	6	38	2	5	2	3
Total	3254260	29	109	31	12	82	7	23	6	12

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·574 in.
Mean temperature	37·8°
Highest point of thermometer	51·4°
Lowest point of thermometer	28·7°
Mean dew-point temperature	31·7°
General direction of wind	W.
Whole amount of rain in the week	0·55 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, December 29, 1877, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1877.*	Persons to an Acre. (1877.)	Births Registered during the week ending Dec. 29.	Deaths Registered during the week ending Dec. 29.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3533484	46·9	1831	1757	54·4	28·7	37·8	3·23	0·55	1·40
Brighton	102264	43·4	44	36	50·0	28·3	37·5	3·06	0·87	2·21
Portsmouth ...	127144	28·3	47	60	51·5	29·0	40·2	4·55	0·57	1·45
Norwich	84023	11·2	47	47	52·0	28·0	36·0	2·22	0·56	1·42
Plymouth	72911	52·3	36	46	53·5	30·5	41·3	5·17	1·00	2·54
Bristol	202950	45·6	126	88	52·0	26·0	38·2	3·41	0·65	1·65
Wolverhampton ...	73389	21·6	36	36	51·0	24·7	35·1	1·73	0·70	1·78
Birmingham ...	377436	44·9	236	178	...	...	...	...	...	...
Leicester	117461	36·7	63	46	...	...	...	...	...	...
Nottingham ...	95025	47·6	50	46	50·8	21·0	35·4	1·89	0·69	1·75
Liverpool	527083	101·2	333	257	51·5	30·0	39·7	4·28	1·20	3·05
Manchester ...	359213	83·7	212	199	...	...	...	...	...	...
Salford	162978	31·5	101	70	47·3	25·8	35·3	1·84	1·54	3·91
Oldham	89796	19·2	76	44	...	...	...	...	...	...
Bradford	179315	24·8	105	70	50·0	28·2	36·4	2·44	0·79	2·01
Leeds	298189	13·8	193	144	53·0	27·0	37·0	2·78	0·56	1·42
Sheffield	282130	14·4	165	120	50·0	25·5	36·7	2·61	0·76	1·93
Hull	140002	38·5	95	57	47·0	24·0	34·0	1·11	0·36	0·91
Sunderland ...	110382	33·4	93	69	47·0	29·0	36·3	2·39	0·48	1·22
Newcastle-on-Tyne	142231	26·5	93	51	...	...	...	...	...	...
Edinburgh	218729	52·2	111	94	48·7	23·8	33·6	0·90	0·80	2·03
Glasgow	555933	92·1	350	249	47·0	28·5	35·3	1·81	0·92	2·34
Dublin	314666	31·3	165	163	52·6	28·0	39·3	4·06	0·75	1·90
Total of 23 Towns in United Kingdm	8166734	38·4	4608	3925	54·4	23·8	37·0	2·78	0·76	1·93

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·57 in. The highest reading was 30·03 in. on Sunday evening, and the lowest 29·16 in. on Wednesday morning.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1877 by the addition of six years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Salford, however, forms an exception to this rule, as the estimate is based upon the rate of increase of inhabited houses within the borough during the six years ending July 1, 1877. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

PULMONARY TUBERCULOSIS AND CASEOUS PNEUMONIA.

By PROFESSOR CHARCOT.

BEING A GENERAL RÉSUMÉ OF HIS RECENT COURSE OF LECTURES.

BEFORE treating of pulmonary tuberculosis it will be well to give a short description of the anatomical characteristics of tubercle in general. The well-known tubercular nodule—grey, semi-transparent, resistant to the touch—which may be met with in any organ, is composed of an aggregation of much smaller nodules, which may be termed *elementary tubercles*, or *tubercular follicles*. These may be best studied by examining the tubercles sometimes found in the middle of the granulations of fungous arthritis. On subjecting these to a high microscopic power, the elementary tubercles will be seen to be composed of three distinct parts—an *external* zone of small round cells of an *embryonic* type (*i.e.*, with a nucleus very large in proportion to the size of the cell), but smaller, closer, more confluent than in ordinary granulation tissue; a *middle* zone of cells, larger than those just mentioned, and corresponding to the *scrofulous* cell of Rindfleisch; whilst the *centre* is occupied by one immense cell of granulated protoplasm, having twenty, thirty, or even forty nuclei ranged in regular order just within its periphery. This cell sends out processes which seem to dip into the body of the tubercle. This is the giant-cell to which so much importance has of late years been attached. There is, in addition, a stroma of soft protoplasmic material, or in some cases of distinctly fibrillary substance, which connects together the various histological elements of the tubercle. The tubercle assumes a cellular or fibrous form, according to the nature of the stroma and the relative proportion it bears to the cellular element. The only remaining character to be mentioned is the central opacity the result of vitreous or caseous degeneration. This begins with the giant-cell, and extends outwards from it, leading to fusion of the cellular elements, and their infiltration by fatty granulations. The breaking down of such patches gives rise to cavities.

None of the elements of an elementary tubercle can be looked upon as truly specific, for, on the one hand, the giant-cell is sometimes absent in tubercle, whilst, on the other, it is met with in elephantiasis, in lupus, in syphilis, etc.; there is manifestly nothing specific in the cells of the middle and outer zones, and the stroma is just such as is seen wherever embryonic tissue is in process of evolution. The tubercle, however, is embryonic tissue of a very special kind, and it has the following distinguishing characteristics:—(1) Its nodular form and the concentric arrangement of its elements, (2) the absence of vessels, (3) its tendency to vitrification or casation, (4) the frequent existence of giant-cells. This giant-cell has recently been shown by Brodowsky to be analogous to the protoplasmic formations from which the bloodvessels take their origin. Thus the tubercle has the elements of bloodvessels arrested at an early stage of development.

The agglomerated tubercle, as seen by the naked eye, is composed of elementary tubercles surrounded and united by a common zone of small cells. The agglomeration may reach the size of a hazel-nut, or even of a walnut. Such masses may be met with in the kidney, the bones, and sometimes in the lung. When met with in complex structures, such as the internal organs, tubercle presents two further characteristics. (1.) It tends to accumulate round the tubular elements of the organ—in the lung, round a bronchus, as in the broncho-pneumonic form of phthisis; or round a vessel, which is its most frequent seat in acute general tuberculosis; or round the lymphatics in the interlobular cellular spaces. (2.) It extends by involving and assimilating the neighbouring tissues, which then become an integral part of the growth.

The *mode of invasion* can be ascertained by examining the periphery of a tubercular mass, say in the lung. Little processes can be seen budding out from the mass. These encroach on an alveolar cavity, pushing aside and squeezing the epithelial cells, and finally they completely fill the cavity. This method of invasion is seen both in acute pneumonia and in chronic phthisis. As before said, in the lung the tubercle most frequently accumulates round the bronchi, especially the terminal bronchioles, but it rarely surrounds them completely; much more frequently it forms a crescentic agglomeration on one side. Should it soften and burst into the bronchus, we have a small lateral cavity. The alveoli which surround this tubercular centre, which has, perhaps, broken down at one point, show scarcely any signs of epithelial irritation or of inflammatory exudation. We may thus, M. Charcot says, exclude catarrhal pneumonia from the process. According to him, this is a condition much more frequently met with in chronic tuberculosis with excavations than is generally believed.

We are now in a position to pass on to the inquiry into the real nature of caseous pneumonia. Pathologists have been divided into two great schools on this point: one school, with Laennec at its head, maintains that tubercular material is found in the lungs under two aspects—(1) as a grey, semi-transparent material of a consistence a little less than that of cartilage, representing the first stage of alteration; (2) at a later period of development it exists as a yellow, opaque, friable substance (crude tubercle), which eventually breaks down from the centre to the periphery, and gives rise to cavities. The tubercles may be present in the organ either as isolated rounded bodies (miliary tubercles), or infiltrating, *en masse*, a variable number of alveoli (grey or yellowish-grey infiltration). As to the *tubercular nodule*, such as is described at the present day, Laennec only recognised it under the form of the "grey granulations" described by Bayle, which the latter author looked upon as absolutely distinct from the tubercular matter of Laennec. Laennec considered these to be rare in tuberculosis of the lung.

The other school, led by Virchow and Reinhardt, maintains that the grey or yellow tubercular matter of Laennec has nothing in common with tubercle, but that it is the result of an inflammatory process, differing only from simple inflammation in this—that the inflammatory products, instead of being reabsorbed or carried off in the sputa, suffer, at a given moment, a special modification called caseous degeneration. These products, at first grey and semi-transparent, correspond with the grey tubercle or grey infiltration of Laennec; when, at a later stage, they become yellow, they answer to the crude or yellow tubercle of Laennec. Under the name of *caseous pneumonia*, then, is included nearly all that Laennec attributed to the growth of *tubercular matter*.

Dr. Charcot has been led by his own researches to abandon this latter doctrine, which he was never able to accept heartily, and the opinion which he wishes to lay down in his lessons may be summed up as follows:—

(1.) Yellow solidification of the lung in phthisis, whether acute or chronic, is not the result of the metamorphosis of the products of ordinary inflammation. It represents the *central caseous degeneration of a tubercular agglomeration*, for it occupies the centre of an embryonic growth which, except for its size, differs in no way anatomically from the classical tubercular growths described in modern writings.

(2.) The products of common inflammation are doubtless almost always present amongst the complex lesions of caseous pneumonia; but they are only a secondary result of the morbid process, and not the prime agents in the disease.

These views, which in many ways resemble those of Laennec, coincide in the main with those which have been put forth by MM. Grancher and Thaon in France, and by Wilson Fox in England; but M. Charcot thinks it necessary to complete and rectify the descriptions of these authors on certain points. In his investigations he has laid particular stress upon the acute forms of the so-called pneumonic phthisis, because he considers that if he can succeed in showing that there is a tubercular lesion in these forms of phthisis which resemble lobar pneumonia, or acute lobular pneumonia, he will have shattered the defence behind which the partisans of the simple inflammatory theory shelter themselves; for they attach especial importance to the fact that all kinds of simple pneumonia, whether lobar or lobular, may in certain cases pass on to caseous pneumonia, and thus determine pulmonary phthisis.

So far as acute lobar pneumonia is concerned, Dr. Charcot believes it may be left out of consideration, for he asserts that not one of the reported cases, if carefully examined, corresponds anatomically or clinically with lobar pneumonia, but that they are referable to the class of *generalised lobular* or *pseudo-lobar* pneumonia. He quotes two cases out of a large number he has collected. In the first of these the patient died fifteen days after the commencement of his illness, which was accompanied throughout by well-marked febrile symptoms, thus offering an excellent example of what has been sometimes called acute pneumonic phthisis. At the autopsy no grey granulations could be found in the lungs or elsewhere. The inferior lobe of the right lung was everywhere invaded by numberless, closely packed, but nowhere confluent, nodules. Between the nodules the lung-tissue appeared at places healthy or simply congested, at other points splenified. Some of the

nodules had undergone grey hepatisation; others were yellow, of the consistence of cheese. There were a few thinly scattered nodules in the upper lobe of the right lung and in the lower lobe of the left.

The second case belonged to the type of galloping consumption, the disease lasting only three months. At the autopsy the right apex was found to be solidified, and on section had the colour and consistence of Roquefort cheese. The divisions between the lobules were still marked by the existence of grooves, answering to the interlobular spaces. Similar nodules whose colour varied from pale rose to yellow were present in the lower lobe of the same side and in the upper lobe of the opposite lung.

A superficial microscopic examination in these cases displayed all the details hitherto described in cases of simple broncho-pneumonia—that is to say, nodules were seen situated round the bronchi, or occupying acini of the lung. When these nodules, however, were examined under a high power, they were seen to be composed of two regions. (1.) *A central region* consisting of a homogeneous, translucent, apparently vitreous substance, much like tissue which had undergone amyloid degeneration, but not giving the typical reaction. The position of the bronchioles could be recognised by rings of elastic tissue, filled up by epithelial cells and degenerated leucocytes. The middle coat of the arteries could be distinguished, and everywhere could be seen the bands of elastic tissue, marking the limits of the alveolar cavities, which were filled with caseous detritus.

(2.) All round this central region, which corresponds with the description of the caseous centre of elementary tubercle, existed a second zone. This was mainly composed of embryonic tissue, which filled the cavities of the alveoli, and infiltrated their walls; and hence in this region the alveolar contour marked out by the strands of elastic tissue was less distinct than in the first region. The outer boundary of this zone was irregular, corresponding to the usual progressive mode of invasion of embryonic tissue. What renders the study of this zone still more interesting is the habitual presence in it of giant-cells, which could be seen in this case disposed in regular order, completely surrounding the central zone. If the outer zone be thin, then there is but one row of these cells; but if it be thicker, then there may be two such rows. Here and there the row had been broken into by the caseous degeneration of the inner zone.

M. Charcot considers it impossible not to look upon these nodules as tubercular agglomerations. The solidification of the tissue is not simply due to the presence of the products of ordinary inflammation, such as leucocytes, epithelial cells, fibrinous exudation, etc., but it results from the invasion, first of the alveolar walls, and then of their cavities, by a peculiar embryonic tissue. Caseous degeneration affects first those parts of the nodule nearest the bronchiole, the centre of the new growth; and later on it invades the peripheral parts. The embryonic zone, remarkable for the presence of giant-cells, represents the less advanced phases of the process, and it is there especially that the anatomical characters of the morbid products are clearly distinguished. Between the nodules the lung-tissue presents the characters of common broncho-pneumonia; thus, some of the alveoli are filled with pulmonary epithelial cells, swollen or in process of proliferation (splenification), others are filled with leucocytes, fibrinous substance, or gelatinous exudation (brocho-pneumonic hepatisation). A tubercular nodule may be completely surrounded by such inflammatory products, which have the appearance of a second zone, outside the embryonic zone. These different products of common inflammation may present all the different degrees of granulo-fatty or mucous degeneration, but they never form a homogeneous coherent mass of vitreous or caseous appearance like that seen in the centre of a tubercular nodule. From this M. Charcot concludes that even in the so-called "acute pneumonic phthisis" caseous degeneration never has the origin attributed to it by authors, but takes its rise in the middle of the tubercular agglomeration, growing at the expense of the specific embryonic neoplasm, and he considers that the products of simple inflammation never take a prominent part in "yellow solidification" of the lung. Naturally, if alveoli filled with simple inflammatory products are intermingled with tubercular nodules undergoing caseous degeneration, they will become involved in the process, but their implication is a purely secondary and subsidiary part of the process.

What has just been said of acute forms of caseous pneumonia is true, *à fortiori*, of the more chronic forms. Just as in the acute cases, so here, we find nodules limited by an embryonic zone, with or without the addition of simple inflammatory lesions. Vitreous or caseous degeneration commences at the centre of the nodules, and increases at the expense of the embryonic neoplasm. Simple inflammation, if present, assumes the chronic form, giving rise to cirrhosis of the lung, which is characterised by embryonic transformation, with thickening of the alveolar walls. In these cases we find the "cubical" metamorphosis of the epithelium of the lung which is so common in chronic phthisis.

M. Charcot considers that the mistake by which the lesions of caseous pneumonia have been attributed to alterations in the products of simple inflammation has arisen partly because observers have looked on the widely different morbid appearances met with in that disease as only different phases of the same morbid process, partly because the rules of the topographic method have been neglected, whence it has resulted that the embryonic zone, which limits the caseous region of the tubercular nodules, and separates it from lung-tissue which is simply inflamed, has been passed over unobserved.

M. Charcot concludes by saying—"Nothing, to my mind, is better established than the existence of infiltrated or discrete tubercle, as a fundamental element in the different forms of pulmonary phthisis. On the other hand, nothing is more doubtful than the existence of caseous pneumonia, independent of tuberculosis and constitnting the prime agent in the phthisical process."

HARVEIAN LECTURES
ON THE
MECHANICAL SYSTEM OF UTERINE PATHOLOGY.

DELIVERED BEFORE THE MEMBERS OF THE HARVEIAN SOCIETY.

By GRAILY HEWITT, M.D., F.R.C.P.,
Professor of Midwifery and Diseases of Women, University College.

Abstract of Lecture III.

Continuing the analysis of uterine symptoms: *Amenorrhœa* was mentioned as occasionally produced by compression in cases of uterine distortion.

Sterility is necessarily produced by such compression of the uterine canal as prevents passage of fluids. Another cause of sterility in these cases is the altered condition of the lining of the uterus, when retention of secretions occurs this damaging the products of conception.

Abortions have as their most common cause flexions of the uterus. Repeated observation of the frequency with which abortion and flexion are witnessed in conjunction first led the author to this conclusion. Other causes of abortion—syphilis, lead poisons, accidents, mental emotions—account only for a comparatively few cases. Retroflexion is already admitted as a cause of abortion. It is not well known that anteflexion is a very common cause. Considering the part the uterus has to play in pregnancy, it is not surprising that decided distortions should have a disturbing influence. The organ is then more exposed to disturbance by straining efforts. The tissue-alteration produced by flexion must also interfere with its extensibility; and the condensation, puckering, and atrophy present at the seat of flexion are decidedly inimical to the healthy progress of pregnancy. Further, actual disease of the decidua may result (cases by Slavjansky). In many cases, as pregnancy advances the flexion is relieved, but otherwise abortion generally occurs. Natural cure in this way is easier in anteflexion than in retroflexion cases.

Reflex Phenomena.—Of these, sickness or nausea stands first. This symptom is almost universally observed more or less marked when the uterus is diseased. It may be very slight, or it may be so severe and continuous that finally there is a fear of starvation occurring. It may be looked for almost as commonly as dyskinesia. In dysmenorrhœa cases, sickness is often a very prominent symptom. This nausea and vomiting are reflex in nature, the irritation being in the uterus. In some cases, like symptoms are observed from dislocation and compression of the ovary. Organic disease of the uterus also may occasion it. Putting aside these causes, we find the most common cause of uterine irritation is flexion of the organ. Indeed, severe reflex uterine symptom is invariably due to flexion. It is worse when the flexion is conjoined with considerable

uterine congestion. In the slighter continuous forms it is frequently conjoined with very undue softness of the uterus. The erect position—even sitting—in such cases induces nausea in consequence of a slight temporary increase of the flexion so produced.

Other reflex symptoms—*Hysteria, Convulsions, etc.*—were next briefly discussed.

Disorders of the Functions of the Rectum and the Bladder are witnessed with great frequency in cases of flexion. When the axis of the uterus is more or less at right angles to the proper one, the rectum is often obstructed. Defæcation is hindered in retroversion, and flexion especially so. Occasionally the fundus uteri invaginates the rectum, and acts as a complete ball-valve. Diarrhœa is sometimes the result of friction of the bowel produced by flexion. Pain in defæcation is another common symptom.

Prolapsus of the bowel occasionally results. As regards the bladder, frequency of micturition is most commonly the symptom, and anteflexion the cause. Pain after emptying the bladder is due to this also. Retention of urine is most commonly caused by retroversion or retroflexion.

The Changes in the Uterus were next considered. Change of shape and position has been shown to be the most important of these changes in congestion or engorgement of the uterus. It has a very intimate connexion with change in shape; hence, in fact, diversity of opinion. Finally, the question really is, What is the cause of the uterine congestion? Congestion pure and simple is not perhaps rare, but it is rarely witnessed. It may give rise eventually to hypertrophy, but it does not usually occasion marked symptoms. It is when conjoined with flexion that it assumes clinical importance. Congestion is inevitable when the uterus is compressed at its centre, which happens more or less when the uterus is flexed. Klob and Thomas also take this view. The two extremities of the uterus, or one more than another, exhibit this result in particular cases. That mere congestion does not occasion flexion has been ably argued by Dr. John Williams. That flexion is only important when conjoined with congestion—a view advocated by many—is erroneous. No doubt the advent of congestion aggravates the suffering; it is equally certain that its removal is a blessing to the patient, but the fact that the congestion disappears or undergoes material diminution by simply straightening the uterus shows what is the real relation of the connexion between the two. It is sufficient to carefully watch the behaviour of the uterus in such cases, to become convinced of the importance of the flexion. There are many varieties of congestion, the uterus attacked by it being in different states in different cases. Mere softness of the uterus must not be confounded with it, though a soft uterus is very liable to become congested. The manner in which local hypertrophies of the os originate from long-standing flexion-congestion at these situations were next described. "Congestive hypertrophy" is the term proposed to describe changes hence resulting ("areolar hyperplasia," Thomas). The other changes observed at the os—swelling, turgescence, redness, abrasion of epithelium, etc.—have a close connexion with congestion produced as above described. "Chronic inflammation," the term which has been applied to the conditions giving rise to these changes, is more accurately described as "congestion."

The Varieties of Uterine Distortions.—These come under two principal heads—(*a*) anterior flexion; and (*b*) posterior flexion. Lateral flexions are rare. The local secondary effects are very important—the undue thickening of the uterine wall at some situations, the great thinning of it at others: it may be found as thin as brown paper at the internal os. Hence the great difficulty of absolute cure in long-standing cases.

Disorders of innervation have been already discussed.

Peri-uterine Inflammation.—On this latter subject the only remark for which there is space is that in some cases an œdematous effusion is liable to occur near the uterus as a result of displacement.

Principles of Treatment.—"Preventive medicine" is the medicine of the future. From this point of view the previous considerations suggest important generalisations.

The mechanical diseases of the uterus being the most important, and such disease almost never occurring except when the uterus has become greatly weakened in consequence of the general conditions of the body being at a low ebb, it follows that the greatest care should be exercised in nourishing and sustaining the strength of the body as a preventive measure. Exercises and exertions will have to be regulated. Pain following exertions will not lightly be regarded. The effects of long-continued nausea will not be overlooked. As regards the cure of the disease—first it must be admitted all are not alike. Duration of the disease alters the curative aspect of cases; the consistence of the uterus also, the soft uterus being more easily curable. The great object is to restore the uterus to its proper shape: 1. By positional treatment, which is capable of doing very much, and sometimes all that is required. This fact is a very important one, as it enables us to treat rationally, and without necessity for local means, cases of commencing disease in young women. Instances of this were given. The horizontal position is best either prone or supine, according to the nature of the case, *i.e.*, whether the flexion is backwards or forwards. In severe cases it is not enough, but is still absolutely necessary, otherwise failure will result, and as a part of the treatment may have to be insisted on for a long time. The knee-elbow position is a further aid. 2. Mechanical internal treatment is required in long-standing cases. Pessaries, by which pressure is made upwards in front of or behind the uterus, are of the greatest service aided by positional treatment. For backward flexions modifications of the Hodge pessary, for forward flexions the author's cradle pessary, are recommended. Pessaries ill fitted are worse than useless. If the uterus be hard the sound must also be frequently employed to aid in the unbending. Tents also effect this object. Uterine stems, improved by Meadows, Bantock, Chambers, and others, are of great assistance in some cases. The congestion which forms so important an element in cases of this kind is generally at once relieved by straightening the uterus by position, by a pessary, or by the sound.

The *general* treatment is of the utmost consequence. One of the principal merits of the uterine pathology now expounded is, in the author's opinion, the explanation offered of the process by which health passes into disease, and why the sound uterus becomes predisposed to injury from accident, or more slowly by the debilitating influence of sheer semi-starvation. A generous diet is always required. Tonics are useful. Fresh air, but not long walks or long drives, unless in the semi-horizontal position. Baths, frictions, and other hygienic measures are useful adjuncts.

In conclusion, expressing his regret that time did not admit of even an arrangement of the facts which he would have been glad to bring forward in support of the arguments employed, Dr. Graily Hewitt said:—"My appeal is confidently made to unbiased intelligent observation, for confirmation of the accuracy of the facts on which these conclusions are based. How far I have succeeded in my endeavour to deduce from clinical facts a rational and intelligible system of uterine pathology, it must be for you to determine."

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN DECEMBER, 1877.—The following are the returns (by Dr. Meymott Tidy) of the Society of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, etc.	Nitrogen: As Nitrates, etc.	Ammonia.		Hardness. (Clarke's Scale).	
				Saline.	Organic.	Before Boiling.	After Boiling.
Thames Water Companies.	Grs.	Grs.	Grs.	Grs.	Grs.	Degs.	Degs.
Grand Junction .	19·20	0·134	0·120	0·000	0·008	12·6	3·7
West Middlesex .	19·80	0·083	0·135	0·001	0·008	13·2	4·2
Southwark and Vauxhall .	18·70	0·127	0·120	0·001	0·009	12·1	4·2
Chelsea . .	18·90	0·065	0·120	0·001	0·010	12·6	3·3
Lambeth . .	20·30	0·083	0·120	0·001	0·009	13·7	3·7
Other Companies.							
Kent . . .	27·90	0·093	0·310	0·000	0·003	18·6	6·0
New River . .	20·20	0·036	0·150	0·000	0·007	14·3	3·3
East London .	11·90	0·036	0·096	0·001	0·007	9·0	3·7

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—namely, in that of the Grand Junction.

ORIGINAL COMMUNICATIONS.

THE ROMAN FEVER.

By JOHN SULLIVAN, M.D., M.R.C.S.

The Campagna of Rome, a vast and desolate tract of land, is an undulated plateau, and commences almost at the gates of the city. In the days of the Republic and of the Roman Empire this Campagna was extensively wooded and thickly inhabited; it contained many flourishing towns and sumptuous villas. The sadly celebrated Pontine Marshes had also their towns and population; and so great was the quantity of corn grown thereon, that they were regarded in those times as the granary of Italy. Thus it happens that as population increases, and land cultivation advances, malaria recedes, disappears, or becomes greatly modified. But devastated by intestine wars, and overrun by the incursions of barbarians, or because agriculture became neglected through the feudal system under which vast tracts of land are still held by the Roman nobles, the Campagna of Rome has become the abode of solitude and of malaria.

Geological research informs us that the land upon which Rome and its Campagna now rest was upheaved by volcanic action from the depths of the sea. According to Mr. Struther Smith on "The Climate of Rome," the subsoil consists of a conglomerate called *tufa*, which is divided by geologists into two distinct formations, according to its age and the conditions under which it was deposited. The more recent formation is arranged in horizontal layers, and is more incoherent than the other. The valley of the Tiber, lying between the escarpments of the table-land, is, of course, alluvial, the ground on either side being raised, and marked by the frequent overflowing of the river. Thus we have a soil, the tufa and the alluvia of the Tiber, adapted by the nature of its formation for the generation of malaria.

In the early periods of Roman history the climate was not so mild, or so soothing to delicate lungs, as it is confessed to be in our time. Livy tells us how the roads were obstructed and the navigation of the Tiber interrupted by the severity of winter. Horace describes the river as bound with ice, and Mount Soracte covered with snow. Now we see nothing of the kind; a fall of snow is of rare occurrence in Rome, and never lasts beyond a day or two. But there is one peculiarity inherent in the soil which has undergone no change: I mean the property of generating malaria. Horace reminds us that in the month of August the least fatigue brought on fever. He describes the autumn as "lethifer antumnus," and the hot south wind as "plumbeus auster"; and I certainly can say, from experience, that it is a wind calculated to make a man, if not lead-coloured, at any rate to look uncommonly blue. The persistence of the cause in some localities is remarkable. The Esquiline hill has always been considered unhealthy, and Cicero informs us that there once existed on it a temple dedicated to the Goddess Fever; and another on Mount Palatine. This Goddess Fever was held in great fear and veneration by the ancient Romans.

Since, therefore, malarial fever is a product natural to the Roman soil, let us inquire into the peculiar mode of its development, the type which it most frequently assumes, the diseases which it simulates, and finally what may be the combination of morbid symptoms which impart to it the character of "Roman fever." Other impurities than those of vegetable origin on the earth's surface will not generate intermittent fever; they may give origin to typhoid or enteric fever, as in Naples, where typhoid is endemic. In the close vicinity of some of the fine hotels in that city we may see the accumulated filth of a large population empty itself and lie exposed to the air which it infects. The wonder is that, considering the entire absence of all hygienic and sanitary precautions in that city, typhoid does not cause more extensive ravages.

There are numerous instances of travellers who, having gone from Rome to Naples, have caught the endemic affection there, which did not become developed until after their return. Then, should the typhoid and malarial principles accidentally meet, may be witnessed the singular effect of two distinct etiological conditions existing at the same time and in the same organism. The accidental association of the two forms of disease has been recognised by Italian writers from a remote period.

The learned Professor Baccelli, in a clinical lecture delivered by him in the University of Rome, and published in 1876, has advanced opinions respecting the nature of the malarial fever in Rome, which may appear rather new and startling to those who have had much experience in the treatment of malarial disease in hot climates. He is of opinion that the mud or alluvia deposited in subterraneous habitations or cellars along the banks in the suburbs of Rome, after the Tiber has ceased to overflow and has retired to its natural level, abounds in organic matter, which may contain the elements of infection both of typhoid and of malaria; that either a malarial and a typhoid element can co-exist, but in determined quantities, or that a malarial subcontinued fever may burst out with all the symptoms of a typhoid. In the first case two morbid principles, each preserving its peculiar character, would meet in the same body. In the second, the two would be in close union, or in a state of mutual fusion, but still under the dominant influence of malaria. Both losing their special autonomy, they would jointly form a special type of fever, to which the Professor gives the name of "subcontinued typhoid."

He holds that this fever may be a combination of two elements, giving rise to a twofold morbid process, to lesions of a twofold nature co-existing in the same organism, the one occasionally getting the better of the other. Although, from the mode of invasion of the fever, we might be inclined to suspect its double origin, we shall soon detect, on careful examination, that one infection is more potent than the other, and that is always the typhoid, but not to such an extent as not to allow the malarial element to peep through, especially at the beginning and decline of the fever. Supposing the malarial element to predominate, it will be a tertian, or a double tertian, rarely a quotidian, or more rarely still a quartan. When the typhoid element prevails, Professor Baccelli then is of opinion that the fever will be subcontinued, in which complete intermittence is never observed. He therefore concludes that a typhoid infection may declare itself under the guise of malaria, and a malarial under that of typhoid. That is to say, that it is difficult in practice to draw the line of distinction between the two infections, or to define the proportions they bear to one another. We must therefore treat the double infection, which he defines as the "subcontinued typhoid."

Professor Baccelli has kindly explained to me the apparent contradiction which attracted my notice when I contrasted the opinions already quoted by his definition of the malarial fever in Rome with the first diagnosis he has made between it and true typhoid fever: that, as all severe types of marsh fever become pernicious or dangerous to life by some prominent symptom, or by the complication of some vital organ; that as some forms are pneumonic, some bilious, some nephritic, according to the organ especially involved,—so might a form exist as the Roman fever, attended with an exaggerated or profoundly nervous prostration resembling or simulating typhoid.

It is a matter of regret that the term "subcontinua tifoide," which may sometimes admit, even in the language of science, of an interpretation in a sense different from that intended, should ever have been applied by so eminent an authority to the malarial fever in Rome, as it is calculated to excite alarm and confirm travellers in the unfounded belief that this fever partakes of the nature of a typhoid or enteric fever, although it might under conditions be pseudo-typhoid.

From the long experience I have had of malarial disease in many and varied climes, of every type and complication, even identical with malarial fever in Rome, I cannot incline to the belief that the accidental conjunction of two diseases, distinct alike both as to their nature and to their cause, should create, or be capable of creating, a new form or modification of malarial fever, to be known vulgarly by the name of "Roman fever."

If the mud deposited by the yellow Tiber, although mixed with human refuse, contain the two elements of an opposite nature, then must the fevers generated from such a source always produce symptoms common to both fevers—the enteric and the malarial—and this we never see, or it is at least of rare occurrence. Two opposite effects cannot be derived from the same source, although the two may co-exist, each from a distinct source, in the same locality. If the

malarial fever in Rome be typhoid, it must be essentially so, but we know that it does occur in the absence of all typhoid infection.

A well-known physician in Rome told me that he had been once called to attend a patient in one of the principal hotels in Rome. On entering the room of the patient he perceived an intolerable odour, which he soon discovered to have proceeded from the bursting of a pipe connected with an adjoining latrine. This patient, together with five others in the same hotel, were all attacked with enteric fever, from which, with one exception, they all escaped.

Thus, as marsh fever may be met with in localities where no marshes exist, but where the conditions essential towards its production may be found in an occult state, so may sporadic or isolated cases of enteric fever be found in localities apparently cleanly and healthy, but the cause may always be traced to the true source of infection.

The case from the onset must either be malarial or typhoid. It cannot be both: the source which generates the one cannot generate the other. A typhoid fever cannot be malarial, although it may be influenced by malaria; neither can a malarial fever be typhoid, although accompanied with neuro-paralytic symptoms simulating typhoid. We know that any eruptive disease, as measles or scarlatina, or any affection, as asthma, rheumatism, or gout, may be associated with or be greatly modified by malaria. But the association cannot give rise to a new form of disease (similar to what might be supposed by the inexperienced to exist between malarial and typhoid fever), but only to a modification of two already formed and accidentally associated.

I believe that what is very improperly called Roman fever (as fevers of the exact malarial type are to be met with in other localities) is, when it takes the subcontinued form, a pernicious fever, in which the intensity of the poison so profoundly impresses the nervous system that a general congestion, due to a general, not a partial neuro-paralysis, will be the result, as in typhoid fever.

An intermittent fever may become pernicious by reason of some complication, and is amenable to the specific antiseptic quinine, but not to the exclusion of the special treatment required for the complication. If during the course of an intermittent fever, or when the system is under the influence of a masked or latent malaria, atmospheric changes should give rise to a rheumatic or to a pneumonic form in one person, excess of heat to the bilious form in another, why may not causes which profoundly impress the nerve-centres give rise to an apparent though transient condition of stupor, or to a pseudo-typhoid form of malarial fever?

Many of our countrymen who visit Rome under the ægis of a Cook's ticket, which allows them to remain only a few days, in their thirst after knowledge, are anxious to "do" Rome and all its wonders in as many days as would require months for travellers with greater opportunities; and after having rushed from one scene of excitement to another, heated by exposure to a noonday sun, or perhaps overstimulated by some excess in diet, will enter suddenly into a cold church of vast proportions, or, what is worse, descend into the Catacombs, where malaria frequently abounds. Such imprudent persons are liable to be seized with a fever peculiar to the Campagna of Rome, when the nervous system passes from a state of excitement to exhaustion, and is more easily impressed by miasmatic influences. All causes which depress the human system, morally as well as physically, dispose it for the reception of malaria. Hence we find that, in convalescence from any acute disease, the system, when debilitated, is more prone to yield to the influence of malaria than it would previous to the attack, when the powers of resistance are greater.

I remember the case of a young man who had resided many years in an unhealthy malarial district, and yet had never suffered from intermittent fever, who, after having recovered from a severe attack of measles, succumbed, for the first time, to the influence of malaria; and so severely did he suffer from its effects that he was compelled to remove to a more healthy locality.

Dr. Aitkin, a very practical English physician in Rome, assured me that he had attended more than one case of enteric fever, which had been contracted in Naples, which was followed, during convalescence, by an attack of intermittent fever. Quinine, so valuable in the latter disease, could not be administered in the former. The diagnosis of subcontinued malarial fever is of great importance, as it may be mistaken for typhoid. The germs of marsh miasma paralyse the ganglionic nerve-system, cause a dissolution of the elements of the blood. Hence the condition of dyscrasia, hæmorrhages, etc.; but we never meet with true phlegmasia. The typhoid germs infect the blood and the entire nervous system. The lymphatic glands are all involved in the morbid process.

(*To be continued.*)

THE STRUCTURE AND FUNCTIONS OF THE NERVOUS SYSTEM.

By JAMES ROSS, M.D., M.R.C.P.,
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III.—FUNDAMENTAL PROPERTIES OF THE NERVOUS SYSTEM.

(*Continued from page 669 of last volume.*)

THE next structural peculiarity of the organism which we shall notice introduces us to likeness, instead of unlikeness, in the arrangement of parts, accompanied by a similarity in the distribution of the nervous centres. A plane, passing longitudinally through a man, and from front to back, would divide the body into two bilaterally symmetrical divisions. And what is true of the body, as a whole, is to the same extent true of the nervous system—since the same plane would also divide it into two bilaterally symmetrical parts. Now, it may be laid down as a general law, that when the actions of any part of an organism and its relations with other parts are few and uniform, there will be a corresponding simplicity and uniformity about its nervous connexions; and that, on the other hand, when the actions to be performed and its relations with other organs are very numerous and complex, multiformity and complexity will characterise its nervous connexions. The bilaterally symmetrical viscera can act with a large amount of independence of one another. The kidneys, for instance, act simultaneously, because the blood conveys to them, at the same time, the agent which excites their functional activity, but the action of the one is in large measure independent of that of the other. It is different, however, with the external organs taken as a whole. The two sides of the body must move together, even when the incitement to action comes from one side only; and the actions of the limbs in performing a definite function, such as locomotion, must be duly co-ordinated with one another. These differences of functional interdependence between the internal and external bilaterally symmetrical organs amongst themselves are represented by corresponding differences of structural connexions between the two sides of their respective nervous systems. The two gangliated cords situated on each side of the vertebral column, and which represent the sympathetic system, are connected transversely only by plexuses of fibres and small ganglia; while the two sides of the cerebro-spinal system are fused practically into one bilobed ganglion. In the spinal cord the ganglionic substance of each lateral half is connected not merely by commissural fibres, but by a strand of grey matter, which undoubtedly permits much more numerous and complex connexions to be formed between the two sides of the spinal cord than can take place between the symmetrically placed ganglia of the sympathetic.

The next structural peculiarity we notice is, that the body is made up of a number of segments placed end on end, and there is a corresponding distribution of the nervous centres. That this is the case with the greater part of the sympathetic is readily recognised. Each segment of the body is represented by a vertebra and its appendages; and each vertebra has a ganglion lying on each side, or two in front of its body, one for each lateral half. There are twenty-four true vertebræ, but there are not twenty-four pairs of sympathetic ganglia corresponding to these; because the three upper cervical on each side have became fused into one, while the two middle and the two lower cervical have respectively become fused into one. The sacrum consists of five vertebræ which have become partially fused into one piece, and there are usually five pairs of ganglia corresponding to them, but their number is liable to variation; while the coccyx, although consisting at an early age of four pieces, is practically fused into one bone, and in front of it there is one, or at most two, ganglia. The cranial bones, according to some anatomists, represent three vertebræ which have become variously modified and fused in the course of development; but the sympathetic

ganglia corresponding to these are not able to be traced separately. It is probable that they have become fused partly with the large upper cervical ganglion, and partly with the medulla, in order that the whole system may be brought into relation with the higher centres of the cerebro-spinal system.

But the internal organs in the different segments of the body are neither structurally nor functionally separate, and we may therefore expect that the ganglia in each segment will be connected with those of the segment above and below it; so that all of them will form a chain of ganglia, longitudinally as well as transversely connected.

But the functions of the internal organs are relatively simple; In the digestive organs, for instance, the same series of processes have to be gone through after every meal, varying only with the quantity and quality of the food. And this simplicity of functional interdependence is represented by correspondingly simple interganglionic connexions. The main connexion between the ganglia is represented by a cord formed of a bundle of fibres passing down on each side of the vertebral column, and uniting the homologous ganglia with one another; and when the connexion requires to be closer, as when a large organ occupies several segments, it is effected by the plexuses already mentioned.

The relations between the different segments of the trunk and the different parts of the cerebro-spinal system are not so readily made out in man. In the articulata, on the other other hand, these relations are readily detected, since a bilobed nerve-centre is found in each segment of the body, forming a chain of ganglia connected longitudinally by a double cord. In these creatures, however, even the actions of the organs of external relation of each segment possess a considerable amount of independence of the actions of the external organs of other segments. In the higher animals the general actions of the external organs are closely dependent upon one another. The body must move as a whole; and, although the vertebral column maintains its segmented character, yet during locomotion it is kept rigid by muscles, especially in man, so as to be practically one piece. And corresponding to this fusion of the functions of the external organs there is a corresponding fusion of their nerve-centres. The nerve-centres of each segment are united with those above and below them, not simply by bundles of fibres, but by ganglionic substance. In the human cord, for instance, the grey matter of each lateral half is continuous from the lower end up, not merely to the medulla, but through the grey matter of the floor of the fourth ventricle, and that surrounding the aqueduct of Sylvius to the grey matter lining the third ventricle. By this means the ganglia of the segments have become so fused longitudinally and laterally, that the grey matter of the cord forms a continuous tube extending from the conus medullaris to the tuber cinereum. One consequence of this fusion of homologous ganglia is, that the parts of the cord which correspond to the different segments of the body have undergone considerable displacement. The cord usually ends at the lower border of the body of the first lumbar vertebra, but the nerves which descend to pass out through the remaining lumbar intervertebral foramina, and through the anterior sacral and coccygeal foramina, show that the lower part of the cord presides over the functions of the lower segments of the body, although it has by the approximative fusion of the homologous centres suffered considerable longitudinal displacement.

We have just seen that, when the actions of a part are numerous and complex, multiformity and complexity will characterise its nervous connexions; and we must now notice that along with multiformity and complexity of nervous connexions there must go increasing massiveness of nerve-centres. The large size of the cerebro-spinal nervous system which co-ordinates the numerous and complex actions of the organs of external relation, in comparison with the size of the sympathetic system which co-ordinates the simple and uniform actions of the organs of internal relation, may be mentioned as an illustration of this law.

Other examples of the law are met with on comparing different parts of these systems with one another; such, for instance, as the cervical and lumbar enlargements of the cord, where the complicated movements of the limbs are primarily co-ordinated, in comparison with the remaining portions of it, where the simpler actions of the muscles of the trunk are co-ordinated. But the most striking contrast in size exists between the cephalic and vertebral portions of the cerebro-spinal system—a contrast so remarkable that it deserves special examination.

One reason of the large size of the cephalic portion is, that the impressions conveyed from the surface by the nerves of special sense are first co-ordinated by it; and since these impressions are much more numerous and complicated than those conducted by the cutaneous nerves, larger nerve-centres will be required for their co-ordination.

As I sit in my study, I receive tactual impressions from the chair on which I sit, and from various other objects which surround me; but on looking out of my window the impressions received by my eyes are almost infinitely numerous and complex. I see what I judge to be green fields, houses, horses, cattle, men, and women, and on looking up to the sky I am profoundly affected by an object which I know by indirect reasoning to be millions of miles from me. The centre, therefore, which co-ordinates the numerous and heterogeneous impressions conveyed by the optic nerves must be much larger than those which co-ordinate the comparatively few and uniform impressions conveyed by the cutaneous nerves. As a proof of this may be cited the fact that, in the lower animals, the first cephalic enlargement, termed the optic lobes, takes place in connexion with the central end of the optic nerves. The impressions conveyed by the other nerves of special sense are less numerous, and, with the exception of the auditory nerves, much less numerous than those conveyed by the optic nerves; but they are more numerous and complex than those conveyed by the cutaneous nerves, and, other things being equal, require larger centres for their co-ordination.

So far we have only spoken of single centres corresponding to the different segments of the body, and of the fusion of these centres into bilobed ganglia and continuous masses. But in the course of development superior centres arise, which co-ordinate and control the inferior centres; but before a superior can control inferior centres there must be a nervous connexion between them; hence the superior centre, which has to co-ordinate the actions of a large number of inferior centres, must be more massive than each of the latter. But in the higher animals not only do we meet with compound co-ordinating centres, but we also meet with doubly compound, and probably even trebly compound co-ordinating centres, each of them increasing in massiveness according to its position in the ascending scale of complexity. Now, in the lower animals the cephalic extremity has to move foremost and to encounter dangers, and it therefore becomes the end to which the actions of the rest of the organism must be subordinated; hence the compound co-ordinating centres must necessarily be aggregated in this extremity. If, then, it is considered that not only the simple centres which primarily co-ordinate the impressions conveyed by the nerves of special sense, but also the compound and doubly compound centres which co-ordinate all the impressions of external agencies on the organism with one another, and with the reactions of the organism as a whole to external actions, are lodged in the cephalic extremity of animals, it will be at once apparent why the cephalic is so much more massive than the vertebral portion of the cerebro-spinal nervous system.

Fig. 1.

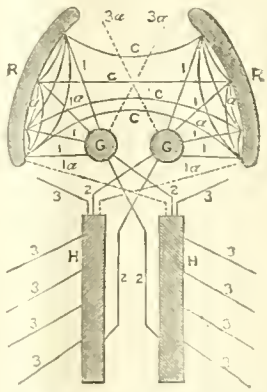

Fig. 1 (after Hermann).—*R*, grey substance of the cerebral cortex; *G*, ganglia at the base of the brain; *H*, central grey tube; 1, 2, 3, the fibres of the three systems of projection; *a* are associating, and *c* are commissural fibres; 3*a* represents the optic fibres, and 1*a* the combining fibres of Broadbent.

These, then, are the main laws which regulate the construction of a nervous system; and before proceeding further it will be useful to obtain a general view of the leading features of the structure of the cerebro-spinal system. The ganglion cells of this system are collected into four principal masse

of grey matter—1. The cortex of the cerebral hemispheres. 2. The basal ganglia; namely, the corpus striatum and optic thalamus. 3. The tubular mass of grey matter which extends from the tuber cinereum to the conus medullaris of the spinal cord. 4. The grey matter of the cerebellum.

If with Meynert we take our point of departure from the cortex of the cerebrum, and if, like him, we regard as the object of all nervous action the projection of the image of the various forms of sensory impressions derived from the external world upon the cortex, the fibres which radiate from the latter to the basal ganglia, those which unite the basal ganglia with the cord, and the peripheral nerves, may together be called the "projection system."

The inner system of projection (the corona radiata) unites the cortex with the basal ganglia; the middle system (the cerebral peduncles) unites the basal ganglia with the central grey tube; and the fibres of this system cross the middle plane to reach the opposite side of the body; and the external system is constituted by the peripheral nerves. The fibres of the inner, in passing to the middle projection system, are interrupted by the basal ganglia; hence these masses of grey matter may be called "ganglia of interruption." Dr. Broadbent, however, maintains that some fibres pass from the cortex to the central grey tube without being interrupted by the basal ganglia. The cerebellum, which is not represented in this scheme, appears as a lateral outgrowth from the central tube. Of the external system of projection, portions of the trigeminus and acoustic nerves arise from it, and it is also connected with the posterior columns of the cord through the restiform tracts, and with the motor tracts by means of the middle peduncles; so that it is intimately connected with the whole of the external system of projection. The peduncles of the cerebellum may be regarded as a middle system, and the medullary fibres as an inner system of projection. But the order of development of the nervous system is not from the cortex to the central grey tube, but from the latter to the former; hence it is more philosophical to make the central grey tube rather than the cortex the starting-point of our representation. According to this view, which is the one adopted by Mr. Herbert Spencer, the central grey tube, together with the peripheral nerves, constitutes a system of simple co-ordination; the basal ganglia, when acting upon the central grey tube and peripheral nerves, form a system of compound co-ordination; and the cortex of the brain, when acting on the inferior centres, forms a system of doubly compound co-ordination. The action of the cerebellum may be similarly represented. The peduncles, along with the corpus dentatum, the olivary body, and red nucleus of the tegmentum, form a system of compound co-ordination; while the cortex, acting on the inferior ganglia through the medullary fibres, forms a system of doubly compound co-ordination.

(To be continued.)

MEDICAL TEACHING IN FRANCE.—Those who are interested in this subject will find in the *Révue des Deux Mondes* for January 1 a very able article by Prof. Chauffard, Inspector of Medical Schools, in which he exhibits in detail the present condition of medical instruction in France, and describes the great improvements which have been adopted within the last two or three years, with the aim of rendering it more comprehensive, and with the hope of compassing all that is done in the German medical schools, without servilely copying their procedures, which indeed, in some respects, are too specialised.

SIGN OF CRIMINAL ABORTION.—MM. Gallard and Leblond brought under the notice of the Société de Médecine Légale what they regard as a certain sign of *early* abortion having been caused by criminal agency. During the first three months of the life of the ovum, in spontaneous abortion it is always expelled *en bloc* with the membranes entire. After the third month the membranes are usually ruptured, the abortion then occupying two stages. In the discussion which ensued it was objected that the exceptions to this rule were too numerous to allow of its acceptance as a legal guide, while criminal abortion may be induced by various means which do not involve rupture of the membranes. Still, the knowledge of these means is not spread much abroad, and, seeing the frequency with which the ovum and membranes are discharged intact after criminal abortion, the Society, while refusing to acknowledge this as a law, deemed it right to call great attention to it as a new mode of detection of a crime which so frequently goes unpunished.—*Gaz. Hebd.*

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CASES OF POISONING.

SHEFFIELD PUBLIC HOSPITAL.

Case 1.—Poisoning by Liquor Ammoniæ Fortior.
(Under the care of Dr. W. DYSON.)

W. W., aged one year and eight months, was admitted into the Sheffield Public Hospital and Dispensary on October 14, 1877. The mother stated that the child had until 10 a.m. had previously good health; that at that hour it climbed into a box in her bedroom, seized from the mantelshelf a small phial containing about a fluid ounce of strong ammonia solution which had been procured for the relief of headache, and that part of this solution was swallowed by the child, who immediately fell to the floor with a cry; that on her arrival the child was found breathing hurriedly and looking blue in the face, with the small bottle by its side; and lastly, that it had vomited mucus and blood which smelt strongly of ammonia.

On admission, at 11 a.m. (one hour after the occurrence), the patient's condition was as follows:—Three white patches on the tongue, and one or two on the inner side of the cheeks; none visible on the tonsils or pharynx, but considerable congestion of the mucous membrane of these parts. Deglutition exceedingly difficult. Frequent occurrence of vomiting, but not accompanied by blood; no smell of ammonia perceptible in the breath; respiration rapid and shallow, accompanied by laryngeal and tracheal râles; free passage of air into the chest; cyanosis slight. Dilute acetic acid was administered freely; an enema of brandy and milk was ordered. At 9 p.m., pulse 164; temperature 102·8° Fahr.; respirations 64; patient was asleep; signs of interference with the entrance of air into the lungs more marked, but not considerable. Râles distinctly heard all over the back of the chest; can swallow milk with facility.

October 15, 10 a.m.—Temperature 100° Fahr.; pulse at wrist imperceptible. Patient is unconscious; eyes half open; pupils moderately contracted, and equal. Convulsions came on during the night, and were now recurring at frequent intervals; too ill for a careful examination of the chest; bowels moved in the night; motion natural; no tenesmus and no blood; abdomen somewhat tender. Brandy and milk enemata to be continued. Death at 1 p.m. same day.

Autopsy, thirty-four hours after Death.—Body was well nourished; rigor mortis not present; the tongue, larynx, pharynx, and intra-thoracic organs removed *en masse*. Slight erosions on the back of the tongue, and behind the right tonsil. Œsophagus: Mucous membrane intensely inflamed except a small portion in the upper part. The inflamed part began by a well-defined line of demarcation at a distance of an inch below the laryngeal orifice, and extended to the lower end of the gullet, where it was continuous with a patch of inflamed mucous membrane in the stomach. Stomach: Mucous membrane had a moderate coating of mucus. A fan-shaped patch of intensely inflamed mucous membrane extends for about one inch at the cardiac end, and then suddenly ceases. In this patch a well-defined erosion about the size of a sixpence; the rest of mucous membrane apparently healthy. Intestines apparently healthy. Larynx and Trachea: Congestion of mucous membrane, especially marked between the rings of the trachea; no œdema, and little swelling. Bronchial mucous membrane intensely inflamed throughout. Right lung congested and œdematous; numerous patches of collapsed lung seen on the surface and a few in the interior. Left lung: Lower lobe completely airless from pneumonic consolidation (probably consequent on collapse). Upper lobe presents the same character as right lung—viz., congestion, œdema, with much interspersed collapse. Liver, spleen, kidneys, and heart healthy.

Remarks by Dr. Dyson.—It is surprising to find so few cases of accidental poisoning by ammonia recorded, seeing that the drug is so commonly used for domestic purposes, and so carelessly deposited as to be easy of access to children. A very small quantity appears to have been swallowed in this case, and yet sufficient to give rise to several erosions of mucous membrane, from one of which it is probable the

vomited blood proceeded. It is very difficult to explain the line of demarcation at the upper part of the œsophagus. It may possibly be due to the very violent attempts at swallowing which would result from so powerful an irritant. In this process the pharynx would be violently pulled upwards with the larynx under the root of the tongue, and thus escape contact with the irritant solution. The bronchial and pulmonary affection must have occurred from inhalation of the poisonous vapour; but even here it is surprising what a great amount of inflammatory action took place in the space of twenty-seven hours. There was no smell of ammonia detected at the antopsy, and had the post-mortem been made without the very good circumstantial evidence which had been previously given, the conclusion would have been that death resulted rather from acute bronchitis, followed by collapse, and that followed, as it often is in children, by pneumonia, than from inflammation consequent on an irritant poison.

ROYAL FREE HOSPITAL.

Case 2.—Chloroform Poisoning.

(Under the care of Mr. F. S. HAMILTON, Senior House-Physician.)
[Notes by Mr. ALFRED BATEMAN, B.A., Junior House-Physician.]

C. McK. A., a quack doctor, was admitted October 20. He was in distress, as papers found on him showed. He stated on the morning of October 21 (after he had regained consciousness) that he had suffered from syphilis. He was observed to have a purulent discharge from the urethra. He admitted that he had been a heavy drinker.

October 20.—Patient took ℥jss. of chloroform about 6.30 p.m., and was brought to the hospital at 7.15 p.m. He could walk without difficulty, though rather unsteadily, and seemed like one slightly merry with liquor. He had a cheerful countenance, and used very filthy language. His breath smelt distinctly of chloroform. The stomach-pump was immediately used, the patient resisting violently. The stomach was washed out with water; a brownish fluid smelling of chloroform was extracted. The patient then got up and said his bowels wanted to act, and was allowed to walk with the porter to the closet. In about five minutes he was carried back again quite unconscious, having evacuated the contents of the bowel in his clothing. Breathing irregular; occasionally stopped. Pulse very intermittent; stopped for five or six beats. Pupils dilated, fixed; conjunctivæ insensible. The stomach-pump was again used, and the stomach freely washed out, the patient vomiting some of the fluid injected. He now rapidly became cyanosed, and the stomach-pump had to be immediately withdrawn, and, the tongue being drawn out by forceps, artificial respiration was employed, aided by galvanism along the course of the phrenic nerves and over the diaphragm. The pulse and breathing improved under the artificial respiration, but the pulse was still intermittent. Two doses of four minims each of amyl nitrite were administered on lint without any appreciable effect on the pulse or condition of the patient. After watching him for about half an hour, an enema of three drachms of aromatic spirit of ammonia was administered with milk. At 9 p.m. his pulse was regular, 96, but compressible, fairly full. There was a great rattling in the throat, apparently in the trachea. Breath still smelt strongly of chloroform; pupils were still dilated widely and fixed, but equal. He was now removed over to Marsden ward, and as his extremities were becoming cold, mustard plasters were applied over the heart and to the calves, and hot-water bottles to the feet. The tongue was constantly kept forward by the forceps; and sponges were used to wipe as much mucus as possible from his throat. The rattling in the throat was diminished in this way, but there seemed to be fluid in the trachea. His respirations were irregular in depth and rhythm. 11 p.m.: He had convulsive movements of the muscles, only observed by the nurse, shortly before 11 p.m., and soon after was found with his teeth clenched and with rigidity of the muscles of the arms; the pupils unaltered; the radial pulse hardly to be felt. Three drachms of aromatic spirits of ammonia were again administered per rectum. Mouth was opened, and a cork inserted between teeth. 11.45 p.m.: Pulse improved, 130; respirations 32; pupils equal, rather contracted and fixed; rigidity of arms less marked.

21st.—1 a.m.: General condition much the same; pupils still rather contracted. 2.30 a.m.: Temperature 100·6°; respirations 40; pulse 140. Pulse thready and unequal in strength; respiration noisy, accompanied by moist râles in the throat. Pupils somewhat contracted; conjunctivæ insensible. No spasm of limbs. Ordered three drachms of ammonia and brandy-and-egg for enema. 3 a.m.: One of the first signs of returning consciousness was exclamatory expiration; slight twitching of the muscles of the mouth; the hands became half-clenched, and there was resistance to extension of the fingers; the pupils steadily diminished in diameter; the pulse steadily decreased in volume, but increased in frequency; the respiration also increased in frequency and depth; the hands and feet became quite hot, whereas they had been cold, and the temperature in the axilla stood at 100°; bowels acted, the stool being passed in the bed about this time. 4.30 a.m.: Sensible, and irritable at the presence of his wife. 5 a.m.: Patient was quite conscious; had been sick. Pupils were dilated, but reacted to light. His tongue no longer required to be held out by forceps; the cork between the teeth was extracted. He drank some water, and soon afterwards he vomited up about a pint of blackish-looking fluid, containing food fragments. These fragments had doubtless been too large to pass along the stomach-tube. 10.30 a.m.: Pulse hardly to be felt at the wrists. Patient quite sensible; talks clearly; has got out of bed to pass water. Complains of sore throat. 11.30 a.m.: Heart-sounds very weak; feet warm; no radial pulse. Pulse at femoral artery 132; respirations 48; cyanosis. Patient complains of pain at the bottom of sternum on drawing a deep breath. He was ordered thirty minims of aromatic spirits of ammonia by the mouth, which was repeated after fifteen minutes. 11.45 a.m.: No râles could be heard at apices in front, but in the back were moist and sonorous râles at the bases. Urine was of an orange-red colour, turbid, specific gravity 1018, acid; contained albumen one-tenth (due to gonorrhœa). 12.30 a.m.: He was ordered a mixture of brandy and milk. He is allowed to drink water and suck pieces of ice. Since he has been conscious he has vomited a little mucus once or twice. 4 p.m.: Pulse 144, not to be felt at the wrist. Patient quite sensible, says he feels stronger; asks if he will get better. Asks for water to drink. 5 p.m.: Temperature risen from 100° at 11 a.m. to 102° at 5 p.m. Patient complains of pain in abdomen, and is very restless. The pulse remains about 144. Ordered—℞. Tinct. digitalis ℥x., spt. ætheris ℥xx., every four hours. 6.30 p.m.: A linseed poultice was ordered to be applied over the epigastrium, as on examination there was tenderness in that situation. Patient was breathing without râle 48; his pulse was still imperceptible at wrist; complained of pain at bottom of sternum on deep inspiration, and of "pains all over him." On asking him where the pain was worst, he laid his hand first on the epigastrium, and then on the abdomen below. Pulse remained the same, and patient could not be allowed to sit up for the examination of the bases of his lungs; when on his right side, both lungs were found resonant at their bases, some crepitation at end of inspiration at base of left lung. Spleen dulness seemed enlarged. Liver was depressed two inches below its proper position, both at its upper and lower limits. The left lobe gave dulness two inches and a half below ensiform cartilage on rather heavy percussion. Pressure on epigastrium or on the region below it caused increase of pain. Auscultation over epigastrium gave loud fluid gurgling, and on palpation a sensation of gurgling as of a bladder half full of water. 8 p.m.: Respirations 46; pulse 146, of about the same character as before. Patient was restless, quite sensible; his feet were cooler, and hot-water bottles were again applied to them. Up to this time he had been taking brandy, eggs, milk, and beef-tea, partly by the stomach, and several times by the rectum. He was now ordered to take nothing for the present but pieces of ice. He had passed no water since 3 p.m., and felt an inclination to do so; two catheters were passed, but only a few drops of turbid urine escaped. 8.45 p.m.: Patient was left quite sensible and conversing rationally. He had taken one dose of the digitalis mixture shortly after 5 p.m. A few minutes afterwards he desired to use the bed-pan, and sat up on it on the bed. After passing a motion he fell over in a faint. Within a few minutes artificial respiration was carried on, but the heart had ceased to beat.

Post-mortem Examination, seventeen hours after Death.—Post-mortem rigidity well marked in upper and lower limbs and facial muscles; reddish-brown fluid in mouth; lividity

of trunk, limbs, ears, and back; papular eruption on back and chest; body well nourished; muscles on section dark. Brain: Vessels of dura mater and pia mater engorged; no adhesions of dura mater; no fluid in ventricles; puncta vasculosa well marked; velum interpositum and choroid plexus somewhat engorged; brain-substance firm in texture, presenting nothing abnormal. Circulatory: Pericardium healthy, and containing only normal amount of fluid. Heart normal size; right ventricle appeared flabby and empty, whereas the left ventricle appeared firm and apparently hypertrophied; the vessels over the left ventricle greatly engorged, and in their immediate neighbourhood were numerous bright red petechiæ. These petechiæ were also found crowded on the part of the auricular wall immediately joining the left ventricle, and also for about two inches up the back part of the aorta; also along the right edge of the right ventricle. Valves healthy; right side of heart quite empty, and in condition of diastole; left side of heart in condition of extreme systole, containing only a small quantity of clotted dark blood, and one semi-decolorised post-mortem clot. In the aorta, leading from heart, was found fluid very dark blood, being just as dark as that found in the venæ cavæ. Respiratory: Lungs intensely congested from apex to base, the upper lobe of left lung most congested of all; on pressure, diminished crepitation, and a copious dark sanious fluid flowed over the cut surface, together with dark venous blood from the vessels. The bronchi were deeply blood-stained; this staining extended up as far as the larynx. Digestive: Œsophagus for the first three inches in its anterior and lateral walls presented numerous circular and ovoid patches, from one-eighth to one-third of an inch in diameter, raised slightly, and of lighter colour than the surrounding parts, opaque, and apparently covered with mucous membrane. Immediately behind the glottis, for about half an inch, the mucous membrane was denuded of epithelium. Stomach contained about six ounces of light brown pultaceous matter, a large quantity of a similar fluid having flowed from the mouth. Mucous membrane towards the lesser curvature and the pyloric extremity was bright scarlet in patches, and appeared somewhat frayed on letting water drip over it. The vessels of the rest of the viscus were engorged. Intestines: The first five feet were congested, the redness being most marked along the edges of the valvulæ conniventes, the most marked redness being about three feet from the pylorus. The intestines were full of a very fluid light-brown substance. The vessels generally of the intestines were somewhat congested and red. Peritoneum: Omentum and intestines a little congested; a little turbid serous fluid in peritoneal cavity—about three ounces and a half. Liver weighed fifty-seven ounces; on section appeared dry and very pale yellowish-grey; the consistence was rather soft. (Microscopically the liver-cells were markedly infiltrated with fat.) Gall-bladder was full, with fluid brownish-green bile. Spleen weighed four ounces, and appeared healthy. Kidneys weighed ten ounces, appeared normal, but rather pale; the capsule of one was adherent over an area of about two square inches; supra-renal capsules healthy. Pancreas healthy. Bladder contained two or three ounces of urine.

UNIVERSITY COLLEGE HOSPITAL.

[For notes of the following casualties we are indebted to Dr. Hunt, under whose care they came when Resident Medical Officer.]

Case 3.—Recovery from Effects of Prussic Acid (Bitter Almonds).

A. J., a well-nourished boy, three years old, was brought to the hospital by his mother, who said that shortly before (under half an hour) he had eaten several bitter almonds, number unknown, as he took them from the shop which she kept. Patient was lying apparently unconscious in his mother's arms, slightly cyanotic, and markedly pale, with eyelids closed. On raising the eyelids the pupils were seen to be moderately dilated. The arms were stiffened through tonic spasm of the muscles, enough for the anxious mother to say that the "death-stiffening" had already commenced. In fact the mother thought she was carrying a dead child. No odour of hydrocyanic acid could be detected at the mouth; the breathing was very low, with no catch in the act of respiration. The pulse could not be felt at the wrist. There was no paralysis of sphincters. Immediately a dose of sulphate of zinc (thirty grains) in a large quantity of warm water was administered, though with some difficulty at first; and this was followed by the administration of a large quantity of the mixed oxides of iron. This preparation was speedily prepared by adding four drachms of the liquor ferri persulphatis (P.B.) to forty grains of protosulphate of iron dissolved in about one ounce of water, and then adding enough liquor sodæ to produce full precipitation and leave the mixture slightly alkaline. As the emetic had no effect, in a very few minutes a finger was pushed far down the patient's throat, and reflex vomiting excited in this manner. The vomited matters contained several fragments of undigested almonds, and had a most powerful smell of prussic acid. The child partly rallied, and the pulse could just be felt, very weak and very rapid, at the wrist. No marked Prussian blue colour was noticed in the vomited matters. Not being sure that all the almonds had been discharged, some more sulphate of zinc was administered, and large quantities of warm water; but tickling the throat had to be again resorted to, as the patient was returning to his comatose condition. This produced fresh vomiting, the vomited matters containing a larger amount of almonds, and having the same powerful odour as before, which did not disappear entirely for many minutes. The further course of the case was marked by slight improvement after vomiting, with speedy relapses towards the comatose state; so that it was not for nearly an hour and a half that all dangerous symptoms had subsided, and the pulse become fair at the wrist. Towards the end recovery was much hastened by the administration of small doses of brandy, which had a very marked effect on the pulse. The child was then put to bed, when it at once went to sleep, and was discharged perfectly well the next morning—eighteen hours after admission.

The most noticeable feature in this case was the frequent rallying after the act of vomiting, with the speedy relapses—which latter were evidently due to the formation of fresh hydrocyanic acid. Had an amount of the poison equal to that which was slowly evolved from the almonds been taken at once, no doubt the result would have been speedily fatal, notwithstanding the energetic treatment.

On being questioned, the mother said the child had given a cry when the symptoms commenced, but it was difficult to determine from her account whether it was the characteristic cry or not.

Case 4.—Recovery from Effects of Oxalic Acid.

W. J., male, aged thirty-one, was brought by the police at 3 a.m. He complained of very severe epigastric pain, with much tenderness at that region. The pain was so severe that patient was unable to keep still, rolling about the bed, or jumping up every now and then. There was only very slight expectoration of a mucous character. The tongue appeared as if thinly daubed with a coating of white paint; the lips were in the same state. Both lips and tongue were moist. There were no marked symptoms of collapse, nor was there any vomiting.

From the police it was discovered that patient had bought oxalic acid from three chemists, and had taken a large quantity, the remainder being brought to the hospital. The quantity actually taken could never be ascertained. He had been already seen by a general practitioner, who had prescribed chalk and an emetic, the latter having acted freely.

A further amount of chalk with liquor calcis was administered, and patient sent to bed. A hypodermic injection of morphia was given to relieve pain, and ice to suck. In the morning he complained of much headache, with considerable gastric pain and tenderness, which was partially relieved by bismuth and opium.

The following history was then obtained from the patient himself, but how far it was true it was impossible to discover:—He had been a very intemperate man, and always of a melancholic disposition. His father died, aged thirty-six, of fits. No other neurotic history in the family. Patient began to feel ill five days previously, complaining of a feeling of giddiness with stupidity. He continued at his work till the evening before admission, when he ran away from work. After that he professed to remember nothing. He has always been very intemperate.

There was retention of urine for some time, which was finally drawn off by catheter. On examination it was found to contain a large amount of albumen, with hyaline casts, leucocytes, and a very few calcic oxalate crystals; but no

appreciable precipitate was obtained on the addition of salts of lime. With the exception of a slight attack of pleuritic effusion on the left side, patient progressed fairly well. The symptoms of gastritis gradually subsided, and the expectoration was only once tinged with blood. Bowels were at first constipated, but acted regularly after an enema. There was no melæna. No return of the retention. Albumen did not diminish during his stay in the hospital. The temperature was always rather raised, but only twice rose above 100°, the highest being 101·2°. Patient was discharged on the eighth day.

Case 5.—Erythema after eating Mussels.

Patient, a healthy-looking man, aged thirty-five (about), was admitted about an hour after eating some mussels. He said it was the first time he had ever partaken of any. His wife and child joined him in eating the mussels, and were both unaffected; they had often taken them before. Patient complained of considerable headache, mostly frontal, with irritation and pain at the stomach. All the visible skin was intensely congested, including the scalp, where the congestion was as much marked as anywhere. There was considerable cutaneous irritation. No blebs of any description were to be seen. Mental condition was perfect, and there was no tendency to syncope. There was nothing remarkable in the pulse. Patient did not seem much frightened by his condition. An emetic of ipecacuanha was administered, which acted pretty freely. In about half an hour the redness of the skin had markedly diminished. Patient was admitted and put to bed. He immediately fell asleep. In the morning, twelve hours after admission, he was discharged at his own request, perfectly well.

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Medical Times and Gazette.

SATURDAY, JANUARY 12, 1878.

THE UNIVERSITY OF LONDON.

The ordinary half-yearly meeting of Convocation of the University of London will be held at the University Buildings, Burlington-gardens, on Tuesday, the 15th inst., at five o'clock in the afternoon, when the questions that have now for nearly twelve months been agitating the University will again be brought before the House. We consider it desirable on this occasion to bring before our readers a brief sketch of recent events, in order that they may be the better able to comprehend the present state of affairs.

Convocation has twice resolved in previous years (once by a narrow majority, and once in a House so small that the numbers are not given) that it is advisable to admit women to degrees in the University. On the first of these occasions the Senate refused, by a majority of seventeen to ten, to accede to the request of Convocation; and on the second occasion it took no notice whatever of the resolution. This was the position of affairs when an Act of Parliament was passed, called Russell Gurney's Act, enabling the licensing bodies, if they should see fit, to admit women to their examinations. None of these bodies, with the exception of the Dublin College of Physicians, took any notice of the Act. But the Senate of the University of London, on the motion of Mr. Osler, a lawyer, unexpectedly, and we may say without notice, resolved to adopt it. In spite of a resolution passed by Convocation at the meeting in May last, the Senate proceeded to frame regulations for the admission of women under the Act. It was then perceived by the graduates that the Senate, in admitting women to degrees in one Faculty by a permissive Act of Parliament, was doing what it could not do in other Faculties except under a new Charter, which it could obtain only with the consent of Convocation. It was discovered further that the Senate was also admitting women (contrary, it is true, to the meaning of the Act, yet strictly according to its wording) to seats in Convocation with all their privileges. Under these circumstances, an extraordinary meeting of Convocation was held in July, at which Convocation pointed out to the Senate how its privileges had been invaded, and requested the Senate not to proceed further under Russell Gurney's Act. The Senate gave an ambiguous answer to this request, and raised a new issue by offering to apply for a new Charter that should admit women to all degrees; paying no attention whatever to the claims of Convocation. It is under these circumstances that a new Charter will be submitted to Convocation on Tuesday. But here another fact must be mentioned. On two occasions, in 1874 and 1875, Convocation had unanimously resolved "that certain constitutional changes were desirable in the event of any new or supplemental Charter being applied for." It is not remarkable, therefore, that a majority of the graduates should feel surprised that, when the proposal for a new Charter is made to them, the Senate should ignore altogether their requests, and that too at a time when the privileges and relations of the two bodies require to be made clear and definite. It might, in fact, be said that when a deputation representing a large majority of Convocation calls attention to the question of invasion of privileges by the Senate, no notice is taken by the Senate, and that when, on the other hand, a Charter is sent down for consideration by Convocation, it is asked not to embarrass the question by constitutional claims!

We have thus reviewed the past; let us now briefly consider the present state of affairs. There are several respects in which Convocation desires to have its privileges and relations with the Senate altered. Convocation desires to be more largely represented on the Senate; it desires that the term of office of Senator shall be limited to a certain number of years, with power of re-election; and that the powers of Convocation in constitutional matters shall be more distinctly defined. For these reasons, if we are not misinformed, a large number of graduates will reject the acceptance of the new supplemental Charter offered by the Senate. Nor is this the only reason that is likely to move the graduates to oppose the Charter. As we have said, Convocation has never recommended the admission of women to the same degrees as men, but simply the admission of women to degrees in

the University; and a considerable section of the "women's party" in the University, exhibiting a certain amount of common sense, is expected to decline all degrees for women, unless the degrees are of a different class, and obtained by different examinations from those open to men. The University is manifestly divided, or rather, it might be said, in a condition of complete confusion, on the question of degrees to women; and the matter, instead of being ripe for settlement, is in the very reverse condition. When it has been discussed in Convocation, it has been treated chiefly from the sentimental side; and neither the Senate nor Convocation have any evidence or report before them in favour of so vital a change in the constitution of the University. Neither possesses information on the kind of education most suitable for women, to fit them for employment in life, or on the working of the supplemental Charter which the University obtained some years ago, enabling it to examine women in general education. Nor does either body know the results in other universities, at home and abroad, of the admission of women to examinations, where such plans may have been adopted. It appears to us to be a most unwise step to enter thus unprepared on such an important change in one of our most important graduating bodies.

For the reasons that we have stated, we trust that the graduates of the University of London will decline to accept the supplemental Charter of the Senate on Tuesday. We have watched with the greatest interest their action during the last twelve months; and we are confident that now, when a crisis has arrived, they will not forget their constitutional rights and their own past resolutions. They will not be unmindful of what is due to themselves as well as to their University, nor how far they may be doing much good or much evil by removing women to a doubtful position from a sphere which it has always been their privilege and their pleasure to adorn. But if anyone wants to see the question from a characteristically feminine point of view, let him turn to the *Spectator* of January 5.

THE TEACHING OF PRACTICAL MEDICINE.

Some time ago we received, in the shape of a pamphlet printed for private circulation, two lectures delivered by Professor Gairdner, of Glasgow, on the occasion of the opening of the winter session in that University. The whole scheme of medical education in Scotland differs materially from that pursued with us in London, but especially in the want of that intimate connexion between the college and the hospital which is the rule in London. In Glasgow, however, the removal of the University from the older part of the town to a western suburb necessitated the construction of a clinical hospital, which otherwise was greatly wanted in that neighbourhood, near to the seat of the University. In this way a more intimate connexion between the two institutions has been attained than would otherwise have been possible. In this way, too, Dr. Gairdner is able to follow up the systematic teaching of the class-room with the practical work at the bedside, and it was as an introduction to these two courses of instruction that the lectures alluded to were delivered.

The address to the students in the Class of Medicine was devoted to a consideration of these three topics—"Lectures, Books, and Practical Teaching." The relative values of these three methods of instruction have been much debated, with, as it seems to us, no particularly good results. A better form of discussion would certainly be this: How best to combine the advantages of all three. We had probably, in bygone days, examples of the two opposite poles in medical teaching reproduced before us in the Scotch and English systems. In the Scottish Universities a series of lectures was constructed more or less carefully by the professor, and these were read out year by year in exactly the same style and manner as in the year gone by. Sometimes, indeed, the same course of lectures would be handed down from one generation of professors to another; and this was, in many cases, all the instruction, theoretical or practical, the student got. In England the plan was different: what knowledge the student could pick up was acquired either during an apprenticeship or by walking the hospitals. The text-book is a thing of much more recent date. Like most of his fellow-countrymen, Dr. Gairdner is strongly impressed with the utility of regular instruction *ex cathedrâ*, but his difficulty is how to construct a course of lectures suitable for modern needs. Thus he says:—

"I will assume, for a moment, and I think I may fairly assume, at this stage of your progress, as within the experience of all of you, that to learn a science or an art from the personal instruction of a living man is something very different from learning the same facts out of a book. In the book you have the facts, no doubt, and the arguments too; nay, you may have them much more fully and exhaustively than they can be presented by the living voice. But in every demonstrative and experimental science and art there is much that the average man cannot learn out of a book at all; and much that, even if he should have committed the whole book to a retentive memory, he had far better learn over again, from experimental and personal teaching. If we could discover what is that subtle essence which gives the face and voice of a teacher of the right sort so much more power to impress truth of this kind than a book has, we should have mainly solved the problem of constructing a course of lectures in accordance with the wants of the present time.

"Now, if you will think of it, I believe you will find that the chief advantage that a living man has, to you, over a book, is that you have, or may have, a more living *faith* in him; *i.e.*, you have means of testing his statements, and submitting his doctrines to criticism and personal inquiry. Of course you may be quite wrong; the professor may be wanting in knowledge himself—an ignoramus or a humbug, and so quite unworthy of your faith. But still, on the other hand, if he is a right-minded man, and tolerably sure of his ground, he will lay himself open to your inquiry and criticism, and if he is not sure of his ground he will tell you so, and make a clean breast of it. Now, when I turn to any of the commoner class of text-books, there is nothing I am more struck by than this: that in the effort after completeness all kinds of supposed facts, and all kinds of theories, are jostled in, somehow, *pell-mell*; with the result that the anxious inquirer or reader is often greatly puzzled in trying to remember what is of the first, and what only of secondary importance. Let us say nothing, for the moment, of positive inaccuracies and errors. The great fault of almost all books, and of many lectures, to the student is, in the wise words of Dr. Allen Thomson last autumn, that they attempt too much. They lose sight of the fact that a very little real knowledge is all that can profitably enter the human mind, and still more the average human mind, in a limited period of time. All that is over and above this is mere learning by rote; or, in other words, what is commonly though inelegantly called *cram*. And out of *cram*, though you may make a bookworm or a prodigy of learning, you cannot possibly evolve a physician, or even a reasonably safe practitioner of the healing art. For you may take it as quite established by experience that you—students, let us say, of the third year—*cannot*, in one or two sessions, learn the whole art and mystery of the Practice of Medicine. All that you can possibly do is to learn well a few of the better known and more clearly

established facts and principles; and, what is most important of all, in mastering these thoroughly, you can so inform your minds as to render them a fitting soil for the further teaching derived from experience, from reading, and from social and professional intercourse. In other words, in learning a few things well, you can teach yourselves, or be taught, how to learn many other things well by-and-by.

"Now here, I think, is the special function of the professor, as compared with the book. He has not only to direct you *what* to learn, but he has to teach you *how* to learn. And above all, he has to present himself to you in the attitude of one willing and able to learn himself—*naturæ minister et interpres*, as Lord Bacon has it. For, in a highly progressive science and art like medicine, the first duty of the teacher is to inform you that it is progressive; and this he can do best, or perhaps only, through his own personal example. He will teach you facts, not as closing the door, but rather as opening it to new facts; he will teach you principles, but not as fixed and unalterable dogmas. To quote Lord Bacon once more, he will deal much in the *axiomata media*, or provisional generalisations from facts already known; little in *first* principles, or speculative and abstract hypotheses as to the nature and causes of disease. Thus he will endeavour to imbue your minds vividly with what is least doubtful and most important; but along with this he will not forget that the first and last of lessons to a physician, or from a physician to students of disease, is, how and when to acknowledge ignorance and suspend judgment."

Professor Gairdner thinks, then, that the great advantage of the living teacher is, that he can do something more than inculcate facts, or even principles—he can inspire *faith* into the minds of his pupils. He would show them in the teacher's own personal conduct and actions, in the class-rooms and at the bedside, the method of the science. Absolute certainty may be said not to exist in medicine; all the conclusions which we form must be of necessity provisional. And it is by inspiring in his pupils this power of belief dependent not on actual certainties, but on probabilities, that the lecturer does good. It is difficult for the young and untrained mind to avoid rushing to the extreme indicated by the crystallisation of opinion into dogma—a something to be held fast and clung to as for ever and invariably true. Against this the living teacher not only warns his pupils, but they have the advantage of seeing the modifying process constantly at work in the teacher's mind, so that they insensibly become accustomed to it and follow it. They are trained to a *suspense of judgment*—a frame of mind ready to adopt all actual knowledge, without caring whether it goes for or against any particular view or theory so long as it is true, but ready to make our actual imperfect knowledge (the best, however, attainable by us) the basis of action in everyday professional life. Such are Professor Gairdner's views as to the value of the living teacher: they have certainly the merit of novelty, but we think we could say something more as to the value of the system. Purely practical teaching must be limited as to what is to be seen, and it is not possible for any student, or indeed for any practitioner, to see for himself all kinds and forms of disease likely to be met with. Systematic lectures will help the student greatly to grasp at once the totality of the phenomena when he is called upon to deal with a disease heretofore new to him. In teaching, again, the living voice always goes for something as against book-lore; the student drinks in knowledge by two paths, instead of by one only. He hears and sees. According to all belief, knowledge acquired in this way is much more tenaciously held than that which appeals to one sense only. Finally, what shall we say of the influence of the true teacher, of the contagion of sympathy which goes out from him, of the fiery enthusiasm to which he can give origin, form, and expression? These and many other like attributes are his, and they cannot be generated by a dead book, however eloquent. By-and-by, however, we shall see what Professor Gairdner has to say on the complement of didactic instruction in medicine—clinical teaching in the true sense of the word.

THE BURIAL QUESTION.

A LETTER lately appeared in the *Times* on the subject of the burial question, which, although intended as a contribution towards settling a vexed question between Churchmen and Nonconformists, possesses also an interest for those who have to study the public health rather than the public conscience. The first proposition of the writer of the letter is as follows:—"Let the burial service of the Church of England be so arranged that the whole of it may be read in the church"; and we cannot but think that, on sanitary grounds, the innovation would be a great improvement. Anyone who has had to stand, bare-headed and damp-footed, probably also with depressed feelings, while the ceaseless rain pattered upon the coffin and the leaves of the clergyman's prayer-book, and soaked the garments of the mourners, will gladly hail a proposal that tends to greatly shorten or put an end to this part of the ceremony which attends the burial of our dead. Recklessness of our own health tends in no way to inculcate a reverence for the human body; and a severe illness is a heavy and very unnecessary tribute for the living to offer to the dead, though it is one that is not rarely paid. The Roman Catholic clergy have lately taken energetic steps to abolish the custom of "wakeing" the dead bodies of the departed members of their Church, by limiting the attendance to the immediate friends of the deceased, and forbidding the use of intoxicating liquids in the funeral chamber; and although this praiseworthy action may have sprung principally from the desire to abolish the revolting scenes which have been occasionally observed when drunkenness has blunted all natural and proper feeling, still we hail the "veto" also on sanitary grounds. The assemblage of a crowd in a chamber tainted with communicable disease is fraught with danger not only to individuals, but to the community at large, as each sympathiser may himself become, and has in fact become, the centre of a fresh infection among the outside world, when he has left the house of mourning. Unfortunately, the laws which regulate funerals cannot be altered in the majority of instances by the same sort of authority which enables the Roman Catholic priesthood to interfere with "wakes." People generally refuse to listen to the proposal of any new regulation on these matters, content to rely upon the unwritten law of "custom." The very number of days during which a corpse should be retained in the house of death is regulated with reference merely to the traditions of former generations. It matters nothing of what disease the patient may have died—be it infectious or not, the body must be kept above ground the customary number of days, in accordance with the supposed dictates of good taste and feeling. We are most of us so selfish or so cowardly in these matters that we refuse to shorten the indulgence of our special grief out of consideration for others; or else we are afraid of being suspected of wanting the intensity of feeling which "society" demands from us. Hence probably arises much of the waste of time and money which attends English funerals. Economy of either is held to denote indifference, or even heartlessness. When, however, health is endangered by a superstitious adherence to old customs, it is only right that medical men should raise a protest. The long walking funerals in country places—the very mockery of woe in many

cases—are only redeemed from absurdity by the sympathy one has for the really honest feeling which, by some confusion of ideas, insists on an appearance of grief in the desire to show a decent respect for a fellow-townsman or villager; but it is too bad that custom should insist upon the procession taking place in all weathers and at all seasons of the year. The State itself might show a better example to the community in this matter. We would not abate one jot or tittle of anything that can show that the State has the soldier in honour and consideration, but might not the military funeral be in some measure reformed? It does not appear to increase the consideration which society affords to the common soldier when alive. His uniform excludes him, according to the decisions of the "genteel," from the best seats of many places of amusement, which are open to all civilians; and it hardly makes up for this that when he dies he should form a cheap kind of passing entertainment and interest to the vulgar, who have shunned sharing his enjoyments while living. Might not the military ceremonies be at least shortened in bad weather? The army mourners have no choice about their attendance, and a delicate man must go into hospital to avoid a parade, which he is pretty certain will send him there should he attend it. Of course it is a question of time and education before much improvement can be expected in the "etiquette of death," but the upper classes have learned in part their lesson.

The long rows of private carriages without occupants which swell the funeral train of those who have moved in "society" form at least an acknowledgment that those who can afford to despise vulgar opinion are ready to substitute their servants and their cattle to keep up the semblance of the tributary grief which custom still demands. Let us hope that by-and-by it will be understood that grief should be sacred from intrusion, however well-intentioned, and then perhaps, in the interests of the mourners themselves, the regulated slow march may be forgotten, and the depressing ceremony, now compulsory in all weathers, by the open grave may be somehow dispensed with. Most of these changes were, it will be remembered, urged with great force and eloquence by Mr. Seymour Haden in his letters to the editor of the *Times* on "Earth to Earth" in 1875, but it seems well to again draw attention to them now, when the burial question is once more being made a subject of discussion.

THE WEEK.

TOPICS OF THE DAY.

In the last session of the "Deutsche Gesellschaft für öffentliche Gesundheitspflege," Dr. Falk described a new method of testing the purity of drinking-water by electrical experiment. From researches carried on in the laboratory of the School of Artillery in Berlin, it appears that the conductive properties of water for the electric current vary rapidly according to its degree of purity, the resistance decreasing with the purity of the water. It is possible, it is said, in this manner to detect with great ease the presence of small quantities of organic matter in water.

An order has recently been issued at Aldershot for all medical officers in charge of brigades to send to the general officers commanding, every Saturday morning, a brief statement of the sanitary condition of the brigade, specifying any defects in rations, fuel, etc., and reporting the occurrence of any infectious disease, together with a recommendation of such sanitary precautions as may be considered necessary. Medical officers in charge of women and children are to send a similar weekly report to each major-general of brigade concerned, as to the general sanitary condition of married soldiers' families, and also specially reporting the occurrence of any infectious disease, and the sanitary precautions recommended to be adopted.

One of the penalties of living in a really free country, the population of which includes a large number of "philanthropic" persons, with not a little spare time on their hands, and not much disinclination for parochial and platform prominence and applause, is the persistent method in which imaginary grievances are taken up and followed out. A public meeting, convened by the National Association for the Total Suppression of Vivisection, was held last week at Kilburn, Mr. Arthur F. Astley in the chair. The Rev. B. Kingsford, M.A., moved the first resolution, which was as follows:—"That, in view of the demonstrated inadequacy of the Act passed in the session of 1876, the practical impossibility of effectively restraining the cruelties practised on living animals as long as vivisection is tolerated, and the immoral nature of the principle on which that practice is based, no efforts should be spared to procure its total abolition." The Rev. Alexander Muir seconded the motion. Dr. Morton, of Kilburn, then entered a protest against the policy and objects of the Society, and moved the following amendment:—"That this meeting, relying on the report of the Royal Commission, and being satisfied with the present law, deprecates further agitation on this question." It is needless to say that the original resolution was carried by a large majority. Mr. George Savage moved the second resolution:—"That this meeting desires to record its gratitude to Mr. Holt for the important service he has already rendered by pressing this subject on the attention of the Legislature, and pledges itself to use all available means in support of the Bill he has promised to introduce with the same object into the next session of Parliament." This resolution was also duly seconded and carried.

At the recent Sheffield Quarter Sessions, Lord Wharncliffe, who presided, gave some startling statistics as to the South Yorkshire Lunatic Asylum at Wadsley, from which it appeared that the number of admissions this year exceeded those of any previous year since the opening. The number of cases actually admitted was 381, showing an increase over the previous year of 74, the increase in 1876 having been only 60. The total number of patients under care during last year was 1170. At the present time there are only thirty-five beds unoccupied, and the new wings which are in course of erection are to accommodate 600 additional patients, but these are not expected to be ready for occupation before the autumn. In the meantime several houses on the estate, lately occupied by attendants, are being prepared for the reception of patients. The annual reports of the Visiting Justices of the County Asylums, presented this week at the Quarter Sessions, show, in some instances, a remarkable increase of pauper lunacy. In Dorsetshire, Mr. Floyer, M.P., as chairman of the Visitors, reported that the increase of pauper patients from the unions in the county had, in the course of the past year, been the largest that had probably occurred since the establishment of the County Lunatic Asylum. The number of this class is now 377, as against 348 at the close of 1876. In Somerset the patients have increased since April last from 627 to 644. In this county arrangements are being made for the building of an additional asylum. In Wiltshire the Visitors are building a new wing on the female side of the Asylum at a cost of nearly £4000.

The Sheffield Corporation are contemplating important improvements in their town, and are about to promote a Bill in Parliament authorising them to borrow £600,000 for the purpose. They propose to purchase 80,000 yards of land, 15,000 of which will be required for widening streets. It is estimated that the total cost which the improvements

will entail will be about £124,000. The Act is also to enable the Corporation to carry out an agreement entered into between them and the late vicar, now the Bishop of Sodor and Man, whereby Church-street and Campo-lane can be widened by taking strips off the north and south sides of the churchyard. To this part of the Bill the Churchyard Protection Society raised the greatest opposition, but to the other clauses little objection has been made. The opponents of the churchyard scheme have demanded a poll of the borough to decide what is the state of public feeling on this point, and this is to be taken at the end of the present month.

The Medical Officer of Health for Ipswich, Mr. G. S. Elliston, reports that small-pox has not broken out in that town as has been stated. A few days ago an imported case from Harwich was removed from Tyler-street and isolated in the fever hospital, which is situated outside the town. There are also ten cases of small-pox under treatment in the hospital, these cases having been removed from ships in Harwich harbour, the greater portion of the harbour being within the jurisdiction of the Urban and Port Sanitary Authority of the borough of Ipswich. Small-pox still continues very prevalent in Harwich; the Local Government Board has taken prompt measures to investigate the cause of the outbreak. Dr. Bloxall, one of their inspectors, was sent down, and reported that overcrowding prevailed, and that the epidemic would spread unless immediate steps were taken to secure isolation. The local authorities stated that they had not hitherto been able to secure this object; and Dr. Bloxall insisted that if houses could not be made available, huts must be run up. Dr. Bloxall has now approved the site of a new hospital, and authority has been obtained to borrow £1000 for the purchase of the ground, the plans to be subsequently submitted. No intimation of the resignation of the medical officer of health has reached the Local Government Board, and now that his policy has been approved in London, it is hoped that Mr. Evans will reconsider his determination.

Miss Ryland, who has already presented Birmingham with two public parks, one at Cannon-hill, and the other at Small-heath, representing together over a hundred acres of wooded land, has expressed her desire to contribute £4000 towards the laying out of the last-named park, in addition to £10,000 which she has already expended upon the embellishment of the former. Her offer has been accepted by the Birmingham Town Council. It is stated that the value of Miss Ryland's benefactions to the town now amounts to about £100,000.

A telegram has been received in this country from Consul Zohrab, advising the immediate recall of the English surgeons at Erzeroum. They are, he says, subjected to so many privations and perils from the pestilential condition of the town that he considers they ought not to be allowed to stay. Dr. Charles Fetherstonhaugh, who has had the direction of the English hospital there since Dr. Casson left for the headquarters of Mukhtar Pasha, and has done most valuable service since its establishment in July last, has also telegraphed to say he is so unwell as to have been obliged to discontinue work, and depute the charge of the hospital to Dr. Pinkerton, who has more recently been sent out by Lord Blantyre. An interpreter attached to the mission is suffering from typhoid, to which disease Dr. Guppy fell a victim in November last.

The Town Council of Faversham have adopted a bold and decided course in reference to the appointment of a public analyst for the district. At a recent meeting, a letter from the Local Government Board was considered, which called their attention to the fact that no such functionary had, up to the present time, been selected. Mr. Richard Wyles, a grocer, moved, and Mr. Fagg, also a grocer, seconded a proposition that an analyst be not appointed; and, although Mr. Johnson, a solicitor, pointed out that it was an undignified course for a public body to evade Acts of Parliament, the resolution was eventually carried by seven votes to two. The authorities will have the pleasure of attracting for awhile some little public attention; they will probably find that steps of a compulsory and "illiberal" character will be taken in the matter by the London Board.

A new hospital for the treatment of infectious diseases has just been completed at Belvidere, near Glasgow, into which, during periods of epidemic, non-pauper patients are to be admitted. It is built on the pavilion principle, and the details of its construction appear to be very satisfactory. Much care has been bestowed on the arrangements for ventilation, heating, and disposal of sewage. The proportions adopted for the wards are—length fifty-six feet and a half, breadth twenty-two feet, and height sixteen feet and a half; for the acute wards this gives, for the number of patients who would occupy them in case of small-pox, 2050 cubic feet to each bed; but if occupied for fever, one-fourth more patients might be accommodated with an air-space of about 1500 feet to each bed. The hospital has been formally handed over to the town authorities, and will be ready at any time when it may unfortunately be required.

DEATH OF DR. STOKES.

We have with great regret to announce the death of Dr. Stokes. The profession will not, indeed, be surprised by this sad event, as they have known for some weeks that Dr. Stokes was very seriously ill; but they will not the less regret to learn that the career of one of our most eminent and honoured physicians is actually closed. Elsewhere in our columns will be found a short obituary of William Stokes, whose work for the advancement of the science and art of medicine was known and esteemed on the Continent of Europe and in America as well as in the British dominions.

THE PATHOLOGICAL SOCIETY.

The Annual Meeting of the Pathological Society was held on the evening of Friday, January 4, when the Report of the Council was read, and the officers and Council were elected for the current year. In their Annual Report the Council congratulated the Society on the successful year that had just been completed, during which the average attendance at the meetings had been larger than it had ever been before. The total number of members is now 601, of whom thirty-two have been enrolled during the last twelve months. The volume of *Transactions* is of more than ordinary value, containing, as it does, a full account of the exhibition of specimens of visceral syphilis; of Sir William Gull and Dr. Sutton's researches on arterial disease; and of the important original contributions to pathology by Dr. George Johnson, Mr. Godlee, Drs. Braidwood and Vacher, Dr. Creighton, Dr. Gowers, and Dr. Klein, which were brought forward during last session. The Council have resolved to continue to set apart evenings during the present winter for the exhibition of special classes of specimens; and, as has been already announced, diseases of the lymphatic system, including lymphadenoma and leukæmia, will form the subject of exhibition at an early meeting. Two scientific committees of the Society are at present actively engaged. A committee, with representatives from all the larger hospitals in London, is investigating pyæmia, septicæmia, and allied diseases; and the Local Government Board has presented the Society with a grant of £300 to help the research. A second committee is investigating the condition of the vessels in

Bright's disease; and a very valuable report is expected from it. The financial condition of the Society is very satisfactory. More than £500 was spent upon the volume of *Transactions* alone, the illustrations being unusually costly; but Sir W. Gull and Dr. Sutton contributed the sum of £154 to defray the expenses of the illustrations to their paper. On the motion of Mr. Wood and Mr. Howse, the Report was adopted, and ordered to be published. The following gentlemen were then elected for the current year:—*President:* Charles Murchison, M.D., LL.D., F.R.S. *Vice-Presidents:* Edward Headlam Greenhow, M.D., F.R.S.; *George Harley, M.D., F.R.S.; Walter Moxon, M.D.; *Hermann Weber, M.D.; Thomas Bryant; George W. Callender, F.R.S.; *Thomas William Nunn; and Thomas Smith. *Treasurer:* John Whitaker Hulke, F.R.S. *Honorary Secretaries:* R. Douglas Powell, M.D.; and *W. Morrant Baker. *Council:* William Cayley, M.D.; *Sidney Coupland, M.D.; James Frederick Goodhart, M.D.; *William Richard Gowers, M.D.; T. Henry Green, M.D.; William Smith Greenfield, M.D.; Charles Henry Ralfe, M.D.; John Charles Thorowgood, M.D.; Charles Theodore Williams, M.D.; *John Williams, M.D.; William Adams; Edward Bellamy; Henry Trentham Butlin; Rickman John Goodlee; *Henry Greenway Howse; *Jeremiah McCarthy; *Wm. Mac Cormac; Henry Morris; Arthur Treherne Norton; and *William W. Wagstaffe. (The gentlemen whose names are marked with an asterisk were not on the Council, or did not hold the same office during the past year.) On the occasion of returning thanks to the retiring officers, a special and very hearty vote was accorded to Mr. Wagstaffe, who resigns the post of Surgical Secretary, after holding it with great advantage to the Society for several years.

HARVEIAN SOCIETY'S CONVERSAZIONE.

The annual meeting of this Society was held on Thursday evening, January 3. The usual Council meeting was held before the *conversazione*. The finances of the Society are in a thriving condition; so much so that the Society is now in a position to afford grants for scientific work. In the much-regretted absence of the ex-President, Mr. Carr Jackson, who retired during the session in consequence of impaired health, but who, we are glad to hear, is likely soon to be at work again, the chair was taken by Mr. W. F. Teevan. The secretaries, Mr. Henry Sewill and Dr. Fothergill, had done their best, so that the meeting was of an unusually attractive character. Telephones communicating between different rooms of the building were exhibited in action all the evening, and were surrounded by a crowd the whole of the time; and other objects of great interest were exhibited by Dr. Ferrier, Dr. Mahomed, and Mr. H. Power. Paintings and other objects of art were lent for the occasion by Mr. Seymour Haden, Dr. Farquharson, Dr. Cheadle, Dr. Braxton Hicks, Dr. Evershed, and others. A new feature was added in the form of some first-rate instrumental music. The attendance was much larger than was ever known before; and among the visitors were the President of the Royal College of Physicians, Dr. J. C. Bucknill, Mr. Curling, Dr. Crichton Browne, Dr. Langdon Down, Dr. Lockhart Robertson, Dr. Broadbent, and other prominent members of the profession. Should the succeeding annual *conversazioni* of this flourishing Society be as successful as the present one has been, it will be necessary to hold them in larger rooms than are at present at the Society's command. The following is a list of the newly elected officers of the Society:—*President:* W. M. Graily Hewitt, M.D., F.R.C.P. *Vice-Presidents:* W. B. Owen, Esq.; Hughlings-Jackson, M.D.; John Easton, M.D.; E. Symes Thompson, M.D. *Treasurer:* Henry Power, Esq. *Hon. Secretaries:* Henry Sewill, Esq.; J. Milner Fothergill, M.D. *Council:* George Eastes, M.B.; Robert Farquharson, M.D.; Alfred Meadows, M.D.; Percy Boulton, M.D.; Stamford Felix, Esq.; F. J. Gant, Esq.; George Field, Esq.; T. Carr Jackson, Esq.; W. B. Cheadle, M.D.; Granville Bantock, M.D.; N. H. Stevens, Esq.; Alfred Wiltshire, M.D.

THE EDINBURGH COLLEGE BUILDINGS.

The *Builder* reports that a commencement has been made with the clearing of the site to be occupied by the New Medical College, Edinburgh. The houses occupying this site were built about a century ago, and that portion of them constituting Park-place consisted of what were then first-class city residences. One of these, of very graceful design, was the town residence of the Campbells of Succoth, and was at one time occupied by Sir Islay Campbell, Lord President of the Court of Session. This house Mr. Anderson, the architect of the College buildings, proposes to re-erect and incorporate with the general design in such a manner as not to interfere with the æsthetic effect of the Anatomy Court, of which it will form a feature. Another of these houses belonged to the Taits of Harviston, and in it the present Archbishop of Canterbury was born, his mother having been a daughter of the Lord President Campbell, previously mentioned. The interiors of these houses contain admirable specimens of mantelpieces, doors, etc., similar in style to those so much affected by the modern Queen Anne School. These Mr. Anderson proposes to utilise as far as practicable in the new class-rooms. To carry out the portions of Mr. Anderson's design absolutely required will entail a cost of about £188,000. Towards this sum the public have contributed about £90,000, and the Government have promised to contribute £80,000 conditionally upon the public subscribing the balance.

VOLUNTEER AMBULANCE DEPARTMENT.

The drills of the Volunteer Ambulance Department, the only one of its kind authorised by the War Office, are appointed to take place at the Albany-street Barracks Riding School every Friday evening at half-past seven until further orders. Though uniform is not compulsory, it is requested that members will wear it when attending these drills, and they are also requested to carry with them their certificates of membership. The death of Captain Swiney, who was recently killed in India in a skirmish with the Jowakis, shows the necessity for training both officers and soldiers in bandaging wounds and arresting hæmorrhage. He was wounded by a sword-cut in the forearm, and lost so much blood that, on being brought back to the fort, and placed under treatment, he died from exhaustion. And, as the Indian papers have remarked, had any of his companions possessed the slightest knowledge of one of the simplest operations in surgery, Captain Swiney would probably have been alive now. A handkerchief with a stone in it twisted round the upper arm and compressing the artery would no doubt have sufficed to save this officer's life.

PUBLIC HEALTH.

The annual death-rate from all causes in London, which had been in the two previous weeks equal to 26·0 and 25·9 per 1000, rose to 27·6 for the week ending January 5, 1878. The deaths from scarlet fever were 31; the deaths from measles 104, exceeding the average by 60, the excess being especially marked in East and South London. The deaths from small-pox, which had been 31 and 29 in the two previous weeks, further declined to 26, of which 16 occurred in the Metropolitan Asylum Hospitals, and 10 in private houses. The number of small-pox patients in the Metropolitan Asylum Hospitals has steadily increased since October last, and during last week rose to 374, the highest number since

August last. The deaths referred to fever, which had been 41 and 36 in the two preceding weeks, fell to 28, being 10 below the corrected average: 1 was a fatal case of typhus, 23 of enteric or typhoid, and 4 of simple fever.

The deaths from diseases of the respiratory organs rose to 535, exceeding the corrected weekly average by 76: 356 resulted from bronchitis, and 123 from pneumonia. The fatal cases of whooping-cough numbered 89.

The weekly returns will contain, as in 1876 and 1877, information relating to twenty-three of the largest cities and towns of the United Kingdom, the aggregate population of which is estimated at 8,373,963 persons; and will relate also to the population of the London Outer Ring, which is estimated at 872,711 persons. The returns will, therefore, relate to an estimated population of 9,246,644 persons living within the United Kingdom. And, further, weekly vital statistics will be given for twenty-nine large cities situated in the four quarters of the world, and having a population of about twelve and a half millions of persons.

THE SICK AND WOUNDED IN THE RUSSSO-TURKISH WAR.

(*Continued from page* 17.)

The following are selections and extracts from official reports kindly sent to us by the Stafford House Committee:—

From Mr. W. L. Stoney, Assistant-Commissioner to the Stafford House Committee, dated Constantinople, Dec. 19, 1877.

A train of Russian prisoners arrived here the other day, taken at Elena. Amongst them were several wounded, and all looked seedy enough. I asked the Minister of War if there would be any objection to our giving soup to the wounded. "On the contrary," was the reply, "we shall feel obliged if you will treat them with the same courtesy and hospitality which you show to our wounded." Accordingly, I had soup served as usual. The behaviour of the Turks towards their prisoners was excellent; the faintest buzz of curiosity was checked, and the Turkish soldiers helped the wounded Russians from the waggons, and carried them off with every care and attention.

Dr. Ryan's Report, dated from Erzeroum Stafford House Hospital, December 1, 1877.

Since writing to you we have got fairly to work in our new hospital, and everything now is in full swing. We took over from the Turks the hospital just as it was, taking on all the servants connected, and agreeing to pay them in Caïme one-half of the salary they ought to receive from the Government. By doing so we get more work out of them, and we have them, so to speak, more under our control, for in case of disobedience we can punish them by stopping their salary. In addition to the actual servants who are necessary in carrying on the work of the hospital, we have taken on a house-surgeon, whose business it is to make the visit in the morning, and who has a room in the hospital itself, so that in cases of hæmorrhage we have always a competent person there to arrest it, until one of us can come up; also an apothecary and two dressers. I think it probable that we shall take on another dresser, as we find our work rather heavy. Our hospital was formerly a large khan, and contains at present 300 beds. It consists chiefly of two large rooms, containing respectively ninety-eight and sixty-two beds, and several smaller rooms off the largest room. This is one hundred feet in length, having a width of sixty-five and a height of about thirty. It is ventilated and lighted by means of three large glass skylights, which are let into the roof, and which can be opened. Three times a day I have this done, so that the heated and foul air can escape. The weather is too cold at present to have them continually open. In addition to these skylights, ventilation is carried on by means of two large stoves placed at the two ends of the room, and which are always lighted, thereby causing a good current of air. Off this room on all sides are smaller rooms, each containing about eight beds. These are the worst wards we have, as they are rather small and stuffy. We are doing our best to remedy them. We have, I believe, fourteen in all of them. In addition we have a pharmacy, an amputation-room, a doctors' room and a storeroom. The entrance to the large room is a fine broad passage about twenty feet in width, and as you enter the room has quite a picturesque appearance, with its many coloured beds, as most of the quilts are of various hues. The second ward, containing sixty-two beds, is like the largest in every respect except that it has no rooms off it. It is eighty-one feet long by forty-five wide, and is, I think, the best ventilated and most healthy room we have in the hospital. We have also, in connexion with the hospital, a kitchen and several closets. I hope by next mail to send you a drawing and plan of the hospital, as possibly it may be interesting to you. We have at present 299 wounded in the hospital. During the last week we have had six deaths, and have sent out thirty. Most of the cases are lightly wounded, but we are gradually filling our beds with more serious ones, and probably in another week we shall have nothing but grave cases. We have performed two amputations, both at the shoulder-joint. One was performed to-day by Dr. Woods, the other was performed by myself. I regret to say we have found among the wounded several cases of typhoid and typhus fever, all of which we sent out to the Medical Central Hospital, as we took our hospital on the condition of having only surgical cases. I am happy to say we have been so fortunate as to obtain the services of Dr. Pinkerton, one of Lord Blantyre's men, who was with Dr. Fetherstonhaugh, and as he (the latter) has a hospital containing 150 beds, he kindly allowed Dr. Pinkerton to assist us. We have been working our hospital with stores handed over to us by Mr. Zohrab, her Majesty's Consul here, who has done everything for us since we arrived, having obtained for us the hospital from the authorities. No words of mine can express sufficient thanks to him for his trouble and exertion. He manages everything here with the authorities. Without him we should never have got the hospital; or, if we had, it would have been after very considerable delay. He devotes a great deal of his valuable time to the two English hospitals here, and we are most fortunate in having such a man. I have ordered one hundred beds, which are now ready, as many of our wounded were lying only on mattresses; and have also ordered thirty soft mattresses and some stores. We give the soldiers tobacco once a week, as they feel the want of it greatly. I hope Mrs. Newman, of Haskieni, will send me some money for that purpose, as she kindly promised to. If she should send it to you, will you kindly telegraph it through the Imperial Ottoman Bank. We have now enough stores to last us some time, and should Erzeroum not fall (which I sincerely hope it will not) during the next fortnight, it will be free, at all events, until next spring. Mr. Zohrab is receiving quantities of stores from Lord Blantyre (but what they consist of I do not know), as also from Mrs. Layard, but they have not yet arrived. I am happy to say that Williams arrived with stores this afternoon, everything having come on all right; he was delayed on the road in consequence of bad weather. Captains Morisot and Harvey (volunteers) have been making themselves very useful in the hospital, in giving beef-tea, bandaging, etc. We have had a heavy fall of snow, and in consequence the hospitals here have been filled with sick. I believe there are at present about 4000 sick and wounded here; and report was current—or, rather, I should say is current—that the Russians are sending 6000 wounded from Kars here; but Mukhtar Pacha says to-day that he knows nothing about it. We have been very well treated by the Turkish authorities since we came, they doing all in their power to further us in any way. We are all of us living together in the old English Consulate, which is a good large house, and suits us very well. Our wounded are very well fed, but to some we give beef-tea, etc. Since we took the hospital most of the cases have made perceptible progress, which is very satisfactory. I have had to pay for my telegrams, and that is the reason they have been so scanty; but I hope to get a paper from the Commander-in-Chief by which I can telegraph for nothing.

Dr. Minassian's Report, dated Philippopolis, Dec. 15, 1877.

Our hospital arrangements are now quite completed. I have placed both the laundry and kitchen in working order, and I now feel for the first time that I can take care of the sick and wounded as they should be cared for in a hospital,

and that my services are not thrown away. I cannot tell you how unpleasant it is for a medical man to visit the patients day after day, and not be able to order everything they need. Every now and then we would be told that we have ordered too many rations of milk, or too many chops, or too many "hoshafs" (a sort of prune jam), which last the Turk is so fond of, to have with his pilaf, so that even the few extras prescribed in the diet list of the hospitals could not be had for everyone we would like to order. If one had hoshaf, all would ask for it, and we had either to incur the ill-will of the patients, or stand the chance of having somebody come and tell us the next day that Scarliery Bey (the chief medical officer) sends his compliments and begs us not to use so many oud (milks) and hoshafs. The fact was, however, the men would not get them if we did order them; but the Turkish officers did not even like to see them on paper. I am so tired of this hoshaf affair particularly, that I now give it to all those whose cases will permit of it, to the great satisfaction of all. The number in hospital has not yet undergone great change, owing to the fact that the men are all cared for in the "Stafford House" (which most of the Turks call "Stratford House"). Some hundreds were sent to Constantinople this week, but only six taken away from our hospital, and those only at my request. There were three cases of diarrhœa admitted, and one died this morning, being a case of diarrhœa of long standing, thus leaving seventy-four in hospital. Dr. Calfoglan has commenced visiting a second hospital, which of course needs a great deal of metamorphosis before I can say much about it. It contains seventy-five patients, some still having their beds on the floor. It will take me some days to get bedsteads made, etc.

Extract of Dr. Barker's Report, Roumelian Railway Ambulance, December 8, 1877.

Left Adrianople for Tatar Bazardjik on 3rd inst., with all the waggons. On arriving there we found a train of 271 wounded, who had been placed in waggons, on their arrival from Sophia, by the kindness of the station-master, there being no place of shelter or baraque for them; and only a small hospital (a private house) of fifty beds to be found in Bazardjik itself; so that the men on their arrival from Sophia—a three days' journey at least in bullock arabas—have to undergo a further fatigue of two days in the railway. I am informed that the Red Crescent spoke of erecting a baraque at the station some time since, but that is all. None of the societies are represented at Bazardjik, but there are two military Turkish doctors, I believe. We placed the beds in the waggons, which makes them more comfortable and decidedly warmer. At the Stafford House Kitchen, Tirnova, they all received soup, bread, and tobacco. On arriving the following morning at Adrianople, the wounded were all transferred to the baraque, where they were all dressed; they were then replaced in their waggons, and the same evening we resumed our journey, and arrived next morning at three o'clock at Tchorlou; here again the men received soup, bread, and tobacco. We arrived at Stamboul the same evening at nine o'clock. Since writing this report I have seen Mr. Pratt, who has authorised me to institnte a soup-kitchen at Tatar Bazardjik station, and it is to be placed under the charge of myself, forming part of my ambulance. Gaspar Monté, from Philippopolis, is to have the management of it. The men can now obtain food before commencing their journey, and on their arrival from Sophia if brought to the station.

Extract of Dr. Barker's Report of Roumelian Railway Ambulance, dated December 15, 1877.

Hearing there were wounded to leave Philippopolis on the 10th inst., we had our van attached to the post at Bazardjik and went down. The same evening we left with 255 wounded for Adrianople. At Tirnova they were all served with soup, bread, and tobacco, and, resuming the journey, we arrived at Adrianople at 7 a.m. on the 11th inst. On the 14th inst. we left Bazardjik with 256 men, by the post; these also were served with soup at Tirnova, and at Adrianople on arrival were placed in the station baraque. These last were met by Mr. Pratt on his road to Sophia, who sent back with them the pharmacian for Sophia, to provide soup for them on the road at Tchiman, and to give Monté notice at Bazardjik. Since my last report I made a contract with a man to build a hut at Bazardjik railway-station for the soup-kitchen; and before I left it was finished and in working order, Monté having given soup to the men once.

Copy of Report of Dr. McIvor, dated from Adrianople, December 8, 1877.

Patients in hospital, December 1, 260; discharged during week, 3; died, 9—total, 12; in hospital, December 8, 248. The following operations were performed during the week, the patients being under the influence of chloroform:—Two patients, resections of humerus; one Chopart's operation of foot on account of gangrene caused by frost-bite; one bullet removed from thigh after an interval of four months (bullet removed on admission); three amputations of fingers and one of thumb; one partial resection of ulna; one partial resection of lower jaw; one partial resection of clavicle; one amputation of five toes on account of gangrene caused by frost-bite. On December 1, sixteen patients were admitted suffering from diarrhœa and dysentery of the most aggravated character, which they had contracted at Plevna and Shipka. On admission, six of them were *in articulo mortis*. The best treatment was of no avail, as they were almost unable to take either medicines or food. Three died on second day, two on third, and one on fourth day; the remainder, who were in a most precarious condition, are now gradually improving.

Mr. Pratt's Report, Tatar Bazardjik, December 20, 1877.

I arrived at Adrianople on Wednesday, December 5. Dr. McIvor and the surgeons with him were working well. There had been several deaths from exhaustion, apparently owing to exposure during transport and want of necessary food. I brought up a large quantity of stores, including blankets, and, with a few trivial exceptions, these surgeons are well supplied. Dr. Barker still appears to render great service to the wounded during their railway transport. Dr. Calfoglan has entered the Committee's service, and assists Dr. Minassian at the Philippopolis hospital. Hearing from Dr. Barker the condition in which he received the wounded arriving from Sophia at Tatar Bazardjik, I immediately had built a small wooden barrack as a soup-kitchen, and five days afterwards the next convoy of wounded received soup before starting on their railway journey. On repassing to-day I saw that 450 sick and wounded from Sophia (who had arrived under the care of one of the Red Crescent surgeons) received soup, tobacco, firing, and other requisites. A similar ration will be given to-morrow morning, before embarking on Dr. Barker's transport. Drs. Busby, Wattie, and Boyd are working well at Sophia, having three Turkish houses, with about fifty wounded in each, under their charge. They had, however, several difficulties to combat with regard to administration. However, 150 beds, with all requisites, are now ready, and, owing to the kindness of Kirkor Bey, the *médecin-en-chef*, a large hospital pavilion has been placed at their service. I herewith inclose Dr. Busby's report. Before arriving at Sophia I met a convoy of bullock arabas with 180 wounded proceeding to Tatar Bazardjik. On seeing their condition I immediately sent back J. Görlitz, a Stafford House pharmacian, who was with me, and was of great assistance in insuring their proper housing at night, and purchased soup and bread whenever it was possible to do so. Hearing from Captain Burnaby (one of your Committee) at Sophia that three English surgeons in the Turkish service were in great need of medicines and other necessaries, I took up to the front the next morning two cases and one bale of selected stores. Undoubtedly here the great deficiency is that of properly organised transport. The sick and wounded men are carried in bullock arabas over bad roads in snow and rain, with no further covering than their thin greatcoats, and often with an insufficient ration of bread; owing to the exigencies of the case many men are embarked who are physically unfit to bear the fatigue of so long a journey—some absolutely dying on the road, and others arriving at their destination in a sinking condition. I commenced arrangements for the amelioration of this transport, but at the special request of Dr. Sarell, of the Red Crescent Society, I have ceded this work to him. He sent me yesterday an official answer to the effect that he has two surgeons with dressers, and hospital servants supplied with money, clothing, and necessary requisites, already employed for this service. I shall supplement his work if necessary. I find I could save a great amount of suffering with blankets, socks, and woollen under-

clothing. There are at the present moment 5200 wounded in Sophia. This district is at present well supplied with European surgeons, there being at the front at Kamarli three English surgeons in the Turkish service, two Red Crescent surgeons in the transport service between Sophia and Tatar Bazardjik (and four nurses), and eleven German surgeons in Turkish service. The Egyptian and Turkish Government hospitals are doing good service, the former with two surgeons and three dressers. I shall inspect the Philippopolis and Adrianople hospitals and Dr. Attwood's ambulance, and report their condition to you before returning to Constantinople.

Dr. Busby's Report, dated Sophia, December 15, 1877.

Drs. Wattie, Boyd, and myself began work on December 1, in a house with eighty-seven wounded. On the following day another house, containing fifty-five more, was handed over to us; and on the fifth we received a third house, full of patients, making the total number of wounded under our care 159. The houses are overcrowded, the patients lying on the floor, the bedding being miserably insufficient and dirty. This is at present unavoidable, owing to the large number of wounded constantly coming in, and the disturbed state of the town, making it impossible to obtain immediately what is necessary; but I hope the next report will show a considerable improvement. The Turkish regular hospitals, however, are good and well found, and are managed by a competent surgical staff. Amongst the more important cases we have as follows:—Thirty-five wounds of thigh; four bullet-wounds of knee-joint (one death), seventeen of leg (one death, three amputations), five of ankle-joint, seven of foot (one frost-bite, loss of toes both feet); ten wounds of arm (two amputations), six of forearm and nineteen of hand, seven of back and loins, ten of head (one death); four non-penetrating wounds of chest, and one wound of chest with penetration of lung (death). The remainder are lighter cases—flesh-wounds and wounds of fingers (of which there have been four amputations).

Dr. Attwood's Report, dated Shipka, November 1 *to December* 11, 1877.

Since November 1 no wounded have been treated in the ambulance. In spite of occasional heavy artillery fire, there have been very few casualties upon the Turkish side. The few wounded have been treated by the Turkish surgeons, with the exception of a case of severe injury to the leg (shell wound), in which amputation was performed by Mr. Mackellar, who was at the time on a visit to Shipka. The health of the camp has been exceptionally good. The prevailing diseases—dysentery, diarrhœa, and intermittent fever—have largely diminished. Forty-seven cases of these disorders—five of the first, twenty-eight of the second, fourteen of the last—have been treated in the ambulance. On November 4, Dr. Sandwith, in accordance with instructions from Constantinople, left for the hospital at Adrianople. Eighteen men, victims of ill-treatment at the hands of the Bulgarians during the retreat of the Russians from Eski-Zaghra, have presented themselves at the ambulance for examination and treatment. Some of these were sent by Mr. Blunt, to whom reports upon the nature of their injuries have been furnished. On December 11 the ambulance left Shipka, its longer continuance there being deemed undesirable, owing to the unlikelihood of further fighting.

Very Large Salivary Calculus.—Dr. Freudenberg relates the case of a gentleman who consulted him on account of a tumour under the tongue, which gave him only moderate uneasiness, and did not cause any increase of the normal saliva. It dated back six months, and had been since then continually on the increase. On inspection a salivary concretion was found to be projecting to the extent of a centimetre, and by a little manipulation the calculus was dislodged by mere pressure, springing out at last as if from an elastic ring. In length the concretion measured 3·5 centimetres, the diameter of its base measuring 1·4 centimetre. It consisted of phosphate and carbonate of lime, and an albuminous substance, the phosphate constituting an unusually large proportion. The calculus occupied the duct of the right sublingual gland.—*Berlin. Klin. Woch.*, November 26.

FROM ABROAD.

PROF. BILLROTH ON SURGICAL TREATMENT OF BRONCHOCELE.

At a meeting of the Vienna branch of the Niederösterreich Medical Society (*Allg. Wien. Med. Zeit.*, November 27), Hofrath Prof. Billroth detailed his experience in the operative treatment of bronchocele. The treatment by the local and general use of iodine, he observed, is sometimes effectual, but only when the individual is young and it is resorted to sufficiently early. It is now about ten years since the practice of injecting the tincture of iodine into parenchymatous bronchocele was introduced by Schwalbe, Lücke, and others, and it was soon found that the apprehended danger of the practice was groundless. In some individuals, however, violent reaction may occur, but in others not the slightest. Prof. Billroth injects first from one-third to one-half of a Pravaz syringeful of undiluted tincture of iodine, and, if this is well borne, in five or six days he makes a second injection of one-half or a whole syringeful, repeating this twice a week. If the patient becomes thin the treatment should be immediately stopped, as the emaciation may go on to an important degree. It should also be stopped if hæmoptysis appears. In general, the injections are well borne, and exert remarkable influence. They may be tried when suffocative symptoms have appeared, if the patient is kept under constant inspection; and even in cases about to be operated upon their employment has been followed by recovery. It is essential that the iodine be injected well into the substance of the bronchocele, which may be done rapidly, the pain at the most continuing for five or ten minutes, and requiring cold applications, while in many cases it is entirely absent.

For cystic bronchocele Prof. Billroth has operated fifty-two times. On two occasions he simply tapped it with a middle-sized trocar, and in both cases intense inflammation arose, rendering incision necessary in one, and extirpation in the other. He has abandoned the practice, but regards puncture for the purpose of diagnosis as harmless. Tincture of iodine, after the fluid has been allowed to discharge itself without squeezing the tumour, has been injected in thirty-four cases, with twenty-nine recoveries, half an ounce of that of the British Pharmacopœia (which is nearly twice as strong as that of the Austrian) having been thrown in. The patient is then sent to bed, and a pretty firm calico bandage smeared with collodion bound round the neck. This, in general, falls off on the third day, and at first great swelling and accumulation of gas occur, but when these diminish during the first week there is no need of interference. The absoption sometimes takes place very slowly, occupying often a whole year. The walls of the cyst do not adhere together consequently upon reaction, as has been represented both with regard to bronchocele and hydrocele, but the lining membrane ceases to secrete in consequence of the deposition of iodine. Incision with drainage was successfully performed in two cases; and in twelve Chelius's operation of incision and connexion of the walls of the cyst and the skin by sutures was resorted to, nine of the cases being cured and three patients dying. The painful procedure of cauterising by chloride of zinc was once resorted to. In one case in which pure alcohol was injected, fearful acetic fermentation was set up, and the patient soon died in a septic condition. In two cases a diminution of the tumour was produced by puncturing with a medium-sized trocar; but in a third, suppurative inflammation was set up, which rendered incision necessary. Of thirty-seven cases in which extirpation was performed, twenty-four recovered; but in some of these other measures had been previously resorted to, which had induced suppuration. The arteries were immediately tied so as to often reduce the hæmorrhage to a minimum. Allusion was made to Rose's observation of the diminution of the thickness of the cartilages by pressure, so that the trachea may become as thin as paper, and therefore easily compressible, which often leads to unexpected death after successful operations for bronchocele. Unfortunately it is in the worst cases that this operation fails to preserve life, as asphyxia often recurs, which may require tracheotomy, etc. In four or five cases in which this was resorted to early, the patients nevertheless all died. It is in this operation as after opening large

abscesses in the neck, or after tracheotomy in croup—the patient, after going on well for some time, finally dies in a hitherto unexplained manner with the symptoms of asphyxia.

The general result of Prof. Billroth's operative procedures in bronchocele is, that of ninety-four patients eighteen died, or about 19 per cent., which, he observes, cannot be regarded as a bad statistical proportion, if the dangers to which the subjects of the disease are exposed be considered.

Senile Diarrhœa.

Lecturing at the Hopital Necker upon a case of obstinate senile diarrhœa that could be traced to no obvious cause, M. Potain observed (*Gaz. des Hop.*, No. 138) that sometimes errors in regimen may in these cases be accused, such as the taking inappropriate substances, water in too large quantity or too cold. Gastric catarrh also, by its reflex action and by the vicious secretions, gives rise to the diarrhœa; but it is of especial importance in cases of this kind to seek for general diseases. Of all these, tuberculisation is the most important; and what perhaps is not sufficiently borne in mind is, that diarrhœa is often one of the primary manifestations of the tendency to tuberculisation. This, too, is one of the most serious forms, because it indicates a disposition to the generalisation of the disease, and, moreover, the patient neither eating nor assimilating properly, the accidents pursue a much more rapid course than in other cases. Arthritism has also frequently been put forward in this etiology, and not without reason. It is the same with marsh-poisoning, which is oftener than is supposed the primary cause of this form of diarrhœa. M. Jules Simon, especially, has related some very curious cases of this kind, the origin of which was proved by the success which attended the administration of quinine, the diarrhœa being the sole tangible symptom. M. Potain has also met with several analogous cases which have been successfully treated by quinine.

So, too, all causes which debilitate the economy are a cause of diarrhœa, and one of the most powerful of these is old age—so much so that the diarrhœa of the aged has been separately described, with its anatomical changes, such as thickening and other alterations of the mucous membrane. In such cases there is little disturbance of the digestion, and no pain in the abdomen, and that even when deep ulceration of the intestines has been found after death. The patients become pale and bloated (*bouffis*); their skin becomes thin; they waste away, and fall into a state of complete apathy—the diarrhœa much resembling, therefore, in this form, that of pellagra. There is nothing special here in the etiology, and all that can be said is, that old age constitutes an extreme predisposition to entero-colitis. In the patient under notice, no other reason than his age can be assigned; yet not his age calculated on the number of years, for these are only sixty-two, but the age he presents in his condition of anticipated senility. It has, indeed, been said long since, with reason, that we are of the age of our arteries; and this man has aged arteries, for they are atheromatous, and, moreover, he exhibits all the attributes of senility. In such cases the prognosis is always a most serious one, and, according to M. Durand-Fardel, the disease is incurable when it has lasted for some weeks. This opinion is certainly exaggerated, but it is a fact that a cure is extremely difficult, because in aged persons we can produce no action on the skin and kidneys which will balance the intestinal function. In this patient, although in his case there was no history of prior marsh-poisoning, quinine has been given with great advantage. It would seem, therefore, that besides its anti-periodic power, the sulphate of quinine, by the property which it possesses of inducing contraction of the capillaries, may diminish the vascularity of the intestines, and modify its secretions.

The Ophthalmoscope in Tubercular Meningitis.

Dr. Bouchut, in an introductory lecture (*Gaz. des Hop.*, December 11), observes that during the fifteen years since 1862 he has collected nearly 2000 cases, most of them verified by autopsies, which show that the meninges, the brain, and the cord produce in the fundus of the eye appearances the knowledge of which confers a precision in the diagnosis of cerebro-spinal diseases not otherwise attainable. On the present occasion he confines attention to tubercular meningitis, his observations being founded on 472 cases which have come under his notice. In exploring these affections as much aid is derived from the sense of sight, as from hearing in the employment of auscultation in diseases of the heart and lungs. The signs so observed are of very great importance, oftentimes sufficing to remove all doubts that may attach to the diagnosis. Thus, in many cases of miliary tuberculosis, which commence with symptoms resembling those of typhoid fever, the neuro-retinitis or tubercular choroiditis, revealed by the ophthalmoscope, made clear a diagnosis which otherwise must have been delayed. In these 472 cases, these intraocular lesions have been exhibited no less than 463 times. They are often observable from the commencement of the disease, but more often at the second stage, being most marked at the period when coma and convulsions set in. During the hours which precede death they become gradually effaced, so that the approaching termination may sometimes be recognised in the eye. Five minutes after death they have almost disappeared, the fundus of the eye being of a leaden-grey colour.

The lesions are sometimes observable at the very commencement of the meningitis, when the child is only dull, with sickness and headache and a little fever—symptoms which may cause meningitis to be suspected; but, unaided by the ophthalmoscope, could never admit of certainty of opinion. As the disease advances, the signs become modified and increased from day to day. They are often alike in the two eyes; but sometimes are more considerable in one than in the other, corresponding to the hemisphere in which the lesions are most considerable. Sometimes they are first observed on the external side of the papilla, whence they become rapidly generalised; but in most cases they occupy the entire papilla. In ordinary tubercular meningitis the lesions have their proper characters, which are not met with in partial encephalitis and in tumours of the encephalon accompanied by paralysis of the sixth pair. In the latter, the exudation of the neuro-retinitis is more dense, white, and obstructive to the circulation; so that the vessels are hidden, and numerous minute hæmorrhages are produced. In meningitis the papillary exudation is less and only opaline, and is accompanied by a varicose enlargement of the veins, inducing fewer hæmorrhages. At the same time that this acute neuro-retinitis is forming there is also observed a tumefaction of the optic nerve, which becomes reddened, but preserves its limits pretty distinctly. The tumefaction, however, increases, and the nerve becomes veiled by a semi-transparent greyish *teint*, which extends beyond its contour, and slightly conceals it. Somewhat later, the entire nerve becomes veiled, the greyish tinge which rendered the papilla diffused extending to the retina in its vicinity. The nerve is more and more hidden, becoming sometimes invisible under the greyish-red veil which covers it, its presence only being indicated by its point of emergence, and by the irradiation of the arteries and veins. This is the most common form of the *acute neuro-retinitis of meningitis*; and although similar appearances may be found in other pathological conditions, yet, by combining its appearance with the other symptoms presented by the disease in the child, its significancy becomes of great importance, and the diagnosis a certainty.

At the same time that this neuro-retinitis is becoming developed, more or less considerable changes are produced in the arteries and veins at the fundus of the eye. The arteries, compressed during their course by the tumefaction of the optic nerve, become less and less apparent, and sometimes even invisible; while the veins become, on the contrary, filled with thromboses, and sometimes rupturing, so that blood becomes extravasated beneath their outer coats, forming *true primary false aneurisms of the veins*. From time to time tubercular choroiditis becomes added to the neuro-retinitis, but in a less proportion than might be expected. Thus, among the 472, such combination occurred only in thirty-nine. This acute choroiditis is very interesting to observe from day to day, in consequence of the changes it undergoes, and the enlargement of the miliary granulations. These are whitish, as fine as grains of sand, with the power of increasing to the size of an ordinary lentil. They are more or less brilliant at their centre, either sharp or diffused at their circumference, devoid of apparent vessels, but often placed under a vessel of the retina. They keep on increasing, so as sometimes to double their size. If the disease is prolonged, new ones appear which were not visible at its commencement.

After describing the anatomical characters of the affection,

as shown by 296 autopsies which he has performed, Dr. Bouchut alludes to the mechanism by which these lesions may be supposed to be produced. In certain cases of cerebral tumour, accompanied by neuro-choroiditis, Von Graefe supposed this to be induced by the repletion and stasis of the cavernous sinus, which, by obstructing the circulation of the eye, led to tumefaction and œdema of the papilla, and the distension and rupture of the retinal veins. This M. Bouchut regards as the correct view, believing also that obstruction is caused not only by this condition of the cavernous sinus, but also by similar conditions of the other sinuses, as well as by any intracranial effusions that may be present. So that the existence of the acute neuro-retinitis of meningitis is due to *a true mechanical cause*, which prevents the complete return of the venous blood of the eye into the cranium, and leads to the production of these circulation and nutrition lesions in the fundus of the eye. Schwalbe, on his discovery of the communications of the subarachnoid spaces with the sheath of the optic nerve, has offered another explanation, viz., that the serous infiltration of the sheath induces strangulation of the papilla and hyperæmia of the veins. But although in meningitis this serous infiltration of the sheath of the optic nerve is met with, yet the same fact is observed in a great number of other non-cerebral diseases. Thus M. Bouchut found it existing to as great an extent as in meningitis in a series of thirty children dying of pneumonia, diphtheria, phthisis, etc., without having exhibited any cerebral symptoms. It is possible that it may act as a concurrent cause in meningitis, but it cannot be substituted for the mechanical explanation offered above.

REVIEWS.

Cassell's History of India. Illustrated. London, Paris, and New York: Cassell, Petter, and Galpin.

We noticed this work with commendation when the first part was brought out, and have much pleasure in notifying its completion. The twenty-four parts have been issued with punctual regularity and with equality of excellence. The work brings the history of India down to the present time, including the famous and magnificent spectacle at Delhi on the occasion of the proclamation of the Queen as Empress of India, on January 1, 1877, and the history of the Indian famine of the same year: it is well and profusely illustrated, and the letterpress is by Mr. James Grant. It provides a good popular history of our great Indian Empire, and may be especially recommended as a capital new year's present for young folk.

The same enterprising firm have also begun to publish, in monthly parts, price 7d. each, two other illustrated works. One, entitled "The Sea, its Stirring Story of Adventure, Peril, and Heroism," will especially attract and charm boys: the other, "Science for All," is intended for persons of every class, rank, and age, who wish "to learn something about the daily sights and sounds that they see and hear around them." In this it is proposed to take familiar objects—the leaves from the hedgerows or from under the trees, a bit of chalk from the cliff, of limestone from the quarry, or of coal from the fire—and explain in simple language, without technicalities, what each teaches us. "Each paper will be complete so far as it goes, and each will contain the explanation of some principle in the science of which it treats, the object discussed being, as it were, the peg on which the remarks are hung." The papers in the first part are—"The Man in the Moon," by Richard A. Procter; "A Piece of Limestone," by H. Alleyne Nicholson, M.D., Sc.D., etc., Professor of Natural History in the University of St. Andrews; "Hunger," by Robert Wilson, F.R.P.S., late Lecturer on Animal Physiology in the School of Arts, Edinburgh; "A Fallen Leaf," by Robert Brown, F.L.S., author of a Manual of Botany, etc.; and "Ice, Water, and Steam," by J. E. H. Gordon, B.A., Gonville and Caius College, Cambridge, Assistant General Secretary of the British Association for the Advancement of Science. The names of such writers form a guarantee that the information given will faithfully and accurately represent, so far as the papers go, the science of the day; while the reputation of the publishers gives assurance that future numbers of the work will be as good as the first is. Both these serials are admirably got up, as are all the serials of the firm, as to paper, printing, and illustrations.

By-laws and Regulations with reference to House Drainage, adopted by the Uppingham Sanitary Authority, and allowed by the Local Government Board; with Explanations and Suggestions. By Rogers Field, M.Inst.C.E. London: E. and F. N. Spon, 46, Charing-cross.

The repeated outbreaks of epidemic disease which occurred at Uppingham, impressed upon the Uppingham Rural Sanitary Authority the necessity of vigorous measures for remedying defects of sanitary conditions, which evidently existed to an alarming degree in that town; and the assistance and advice of Mr. Rogers Field were obtained to bring about a more satisfactory state of affairs. In the pamphlet under notice he has published the by-laws and suggestions with reference to house drainage which have now been adopted by the Sanitary Authority, and a consideration of them will not be without use to medical officers of health, and others interested in sanitary improvements. The two chief objects of a perfect system of house drainage Mr. Rogers Field defines to be—(1) the immediate and complete removal from the house of all foul and effete matter directly it is produced; and (2) the prevention of any back current of foul air into the house through the pipes or drains which are used for removing the foul matter; and with these objects in view Mr. Field has formulated his by-laws. The efficiency of the improvements recently carried out at Uppingham will be best proved by the future sanitary condition of that town, which will be watched with some curiosity by those interested in the subject.

Diaries, Pocket-books, etc.

We have received from Messrs. Letts, London-bridge, a Metallic Diary, for the breast-pocket; a Medical Diary, with visiting-list and spaces for memoranda; a Pocket Diary, of smaller size; a cloth-bound Desk Diary, with larger and ample spaces for notes; their full-size Rough Diary, bound; and one or two others. All are well made, and are so well known as not to require further description or recommendation. Letts's diaries are old and tried friends.

Messrs. Silverlock, of 92, Blackfriars-road, have also favoured us with a copy of their "Perennial Medical Practitioner's Day-Book and Visiting List combined." It is on a plan suggested by Dr. G. P. Rugg, and will be found practically useful. It is well made, and of a convenient size.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Friday, January 4.

Charles Murchison, M.D., LL.D., F.R.S., President, in the Chair.

Annual Report of the Council.

The Surgical Secretary read the Annual Report of the Council, and Mr. Wood moved, and Mr. Howse seconded, its adoption. An account of the Report will be found in another column.

Bromide of Potassium Eruption.

Dr. Crocker brought forward a patient presenting an eruption due to the administration of bromide of potassium. An infant, aged eight months, was sent to the skin department of University College Hospital on December 22 for diagnosis. The father died of consumption some months before its birth; the mother was healthy; and the child was well up to the time of vaccination. It was vaccinated in August last, and about the twelfth day a rash appeared all over the body, which, according to the mother's description, consisted of small red spots the size of a millet-seed, raised above the surface, with whitish, watery heads. This died away in a few days, but fresh crops appeared from time to time for about three weeks. After this, the skin remained clear until the present eruption. The child was not, however, quite well, and after vomiting on November 12, had convulsions, which continued at intervals until the 19th, and for which one grain of bromide of potassium three times a day was prescribed, beginning on the 12th, and continuing

until the 24th, when the dose was increased to two grains three times a day, which was taken up to December 13. From November 19 to 24, a quarter of a grain of iodide of potassium was given with each dose of bromide. The eruption appeared at the beginning of December on the site of the vaccination, and the medical man attending it described it as, at first sight, like a vaccine vesicle of about the tenth day. When brought to the hospital, the child presented the following appearances:—On the site of the vaccination there was an irregular patch, the size of a crown-piece, covered with a thick, raised, sienna-coloured scab, irregularly sulcated and split up; on the border were two small pustules, but no surrounding inflammation. On the face there was a patch the size of a shilling on each cheek, but they had been rubbed and were discharging. On the buttock and loins were several patches, and some of them showed a central scab on an oval base the size of a horse-bean. This base was raised about one-sixteenth of an inch above the surrounding skin, was pale red, and appeared to be made up of new tissue. At the end of December a fresh crop appeared on the arms and face, and then it could be seen (as in a similar case exhibited last year to the Society by Dr. Lees, and published in the current volume of *Transactions*) to commence as a red papule, which soon became an acuminate pustule on a raised, soft, red base, and appeared to be due to an inflammation of the follicles. These pustules were aggregated into patches of variable size, from half an inch to two inches in diameter, increasing by the addition of pustules to the circumference; but, as Dr. Lees had observed, as long as the pus remained, the heads of the individual pustules could be discerned. Solitary papules and pustules were also to be seen on the arm and face, and in these the acneiform character of the eruption was apparent; but the abundant cell-formation gave a more pustular condition than is seen in ordinary acne. Subsequently thick crusts (as described above) were formed; but between these two stages was another, when the fleshy-looking tubercles alluded to were present. There were, therefore, three stages in the eruption—(1) a pustule, or aggregation of pustules, on a soft, raised, and reddened base; (2) pale-red fleshy-looking tubercles, either round or oval, in size varying from a pea to a bean; (3) thick dark crusts, tuberculated and split up by deep sulci. The face, arms, loins, and buttocks, but especially the first two, were the parts chiefly affected in this case, which differed thus from that of Dr. Lees, in which the limbs and back were but slightly affected. The fact that the eruption first appeared on the site of the vaccination, and the small dose of the bromide, were points worthy of note.

Dr. Barlow said he had seen cases exactly similar to the present, in which the bromide alone had been given. It was an interesting point that the eruption commenced in an old vaccination mark. He had observed the same in a case of his own, where the eruption first made its appearance on the site of an unhealed blister. This bromine eruption appeared when very small doses of bromide of potassium were given. He thought there was unquestionably a connexion between the common acneiform eruption of bromism and the present form, inasmuch as all degrees of variety could be traced between them. Idiosyncrasy played an important part in the development of this extreme form.

The President asked whether the present form of eruption was considered equally common in the adult. He had not himself seen anything approaching to this in the adult. Quite lately he had seen a young lady who had taken a drachm of bromide of potassium daily for eight years; but she did not suffer from any eruption. So rare were cases like the present that he questioned whether they were not due to some other cause.

Dr. Hare said that he had never met with the eruption. If it were a variety of the acne produced by bromine, it might be expected to appear at puberty, and yet it did not.

Dr. Frederick Taylor said that it must not be supposed, from the remarks that had been made, that bromine eruptions were common in children. They certainly were rare.

Dr. Crocker replied that he had never before seen an eruption like the present, either in the adult or in the child. Its form was perhaps due to the greater tendency to pus-formation in the child. With respect to bromine eruptions generally, he had ascertained that even the ordinary acne was exceptional among patients taking the drug at the Epileptic Hospital.

Hyperostosis and Osteitis Deformans.

Mr. Howse brought forward a man suffering from general hyperostosis. He was tall and well built, but his bones were extensively diseased. The left knee was swollen, with distinct fluctuation and crackling; and hard, osseous-like deposits could be felt upon the condyles. The corresponding tibia and fibula were thickened inferiorly near the seat of an accident to be afterwards mentioned. The right tibia and fibula were enlarged, but less so than the left. The right fore-arm was uniformly enlarged, from equal increase in size of the two bones; the superficial veins were prominent, and the temperature was apparently raised; pronation and supination and movement at the wrist remained free. Both clavicles were decidedly enlarged. All the ribs were very massive. It was doubtful whether the head was enlarged. The patient had been treated with iodide of potassium and cinchona, apparently with the effect of diminishing the size of the bones, but this returned when the iodine was stopped. The history of the case was important. Sir James Paget had seen it and declared that it was not a case of osteitis deformans, and would not come to be. It appeared to Sir James to be a case of general osteitis from some constitutional cause, probably syphilis. The patient's mother had died of cancer of the breast. Up to the age of twenty he had enjoyed good health and carried heavy weights. From twenty to thirty-two he was a soldier, and spent some part of his time abroad. He was then two years in a corn warehouse, and three years in gas-works, where he was employed on work which would strain his right arm and his left clavicle. Sixteen years ago he had received a kick on the left shin, and was for six weeks in a military hospital with abscess; the bone became enlarged, and had never fallen in size since. Twelve or fourteen years ago he had warty growths under the foreskin. He had had also sore-throat, of a simple kind except on one occasion, when the throat was touched with nitrate of silver. He never had an eruption on the skin. Ten years ago he had yellow fever. Once he fractured his humerus, and he had had several other injuries. Mr. Howse said that Sir James Paget considered that this case might be one of general enlargement of the bones. But the history was vague; and it occurred to Mr. Howse that it might be the commencement of osteitis deformans. Most of the cases recorded by Sir James Paget had been over forty years of age. The present case began young, and it might possibly retrograde at a later date, and assume the characters of osteitis deformans. There was no evidence of sarcomatous growth. The change about the knee-joint was in a great measure due to synovial effusion and thickening about the structures of the joint. Iodide of potassium had done good, probably by the absorption of fluid. It was doubtful whether the bone itself actually diminished in size. But when the right elbow became stiff and fixed, on the patient leaving the hospital, it had been restored to mobility by iodide again. This fact was so far in favour of the disease being syphilitic, and against osteitis deformans.

Dr. Goodhart showed specimens of hyperostosis, with symmetrical sarcoma of both iliac bones and of the spine. A woman of sixty was admitted into Guy's Hospital on September 9; she had been twice married and had a family. For about three months she had complained of pain in the back, and more recently of difficulty of micturition; and she was now paraplegic. She died in a very short time. Post-mortem the skull was found to be much thickened; the internal table was rough, and the diploë was nearly obliterated; the bone substance was soft, and two cancerous patches were found internally. The spine presented in several places new growth welding the vertebræ together. On either ilium there was an outgrowth surrounded by soft medullary tissue. The other viscera were healthy. It was found that the paraplegia had been due to ingrowth of the masses into the spinal canal, and pressure on the nerves. Dr. Goodhart said that the case was interesting in connexion with osteitis deformans, inasmuch as the skull was thickened. Six of the eight cases of osteitis deformans described by Sir James Paget had died of cancer, and although Sir James considered the change in the bones to be of the nature of a chronic inflammation, and not to be certainly associated with malignant disease, yet there seemed to Dr. Goodhart to be sufficient evidence of such association. He had already suggested that the change in osteitis deformans was of the nature of a generalised tumour; and the case just brought

forward seemed to support this view, the growth of bone being limited, while the cancer was extensive. Multiple sarcomata, general fibrous tumours, and lymphadenoma were all analogous instances of general tumour.

Dr. Goodhart showed another specimen in connexion with this subject. A man aged fifty-five, who had had gonorrhœa when young, was admitted into Guy's Hospital with pain in the side and left hip. Pleurisy supervened with pyrexia, and the patient died. Post-mortem, the bones of the cranium were found to be thickened. Periosteal cancer involved the ribs, spine, clavicles, and other bones, and there was cancer of both supra-reual bodies. The growth was similar in all the tumours, being a spindle-celled sarcoma.

Mr. Howse showed another specimen of osteitis deformans of the leg, which he had removed by operation from a lady aged sixty-five. The patient had enjoyed good health until two years ago, when pain began in the right leg. She had a spare but healthy-looking appearance. The pain in the right leg was a dull aching, and extended from the knee to the ankle. No increase in size was observed till later, when the head of the tibia presented a semi-fluctuating enlargement. This was punctured without success. Mr. Howse then saw the patient, and found the swelling described on the upper and inner part of the tibia, with very faint pulsation. He diagnosed a vascular sarcoma. The enlargement was incised under chloroform, and found to consist of a ragged mass of bone and soft growth. The limb was accordingly removed. The patient recovered, but lung-symptoms supervened, and death followed in seven months from the time of operation—probably from thoracic tumour. No post-mortem examination was obtained. The other bones of the body were examined externally, and found to be neither curved nor enlarged. The limb exhibited was certainly curved, and a large tumour occupied its upper extremity, consisting of spindle-cells. The surrounding bone-tissue was also peculiar, resembling that found around a sequestrum, being destitute of Haversian canals, and containing fat, and small, highly-refracting cells, but no marrow-cells, in its spaces. Mr. Howse said that this case tended to bear out the conclusions of Dr. Goodhart. It appeared to be a case of tumour exploding at one spot. He had lately seen a case of large tumour, occupying part of the forearm, and adherent to the periosteum and deep tissues. He removed it, but not completely, and at the same time administered iodide of mercury internally. The result was that the whole growth disappeared, and the part healed. Yet the tissue consisted of spindle-cells. It might be the same in the specimen now exhibited: commencing as an osteitis, the elements might have grown into large spindle-cells; and in Sir James Paget's cases the malignant growth was most frequently sarcoma, and not true carcinoma. The simple osteitis might develope into spindle-celled tumour.

Mr. Myers said, in connexion with Mr. Howse's first case, that civil surgeons seemed constantly to assume that if a man had been a soldier he must have had syphilis, and that all diseases from which he suffered must be syphilitic. The fact was that the army was well protected from syphilis, and that army surgeons saw little of the constitutional disease.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.

Friday, December 21.

Dr. Stevenson, President, in the chair.

In the report given last week of this meeting of the Society, it should have been stated that the Local Government Board, in acknowledging the receipt of the resolutions passed by the Society, recommending that it should be made compulsory to report the occurrence of cases of infectious disease to the Local Sanitary Authority, promised that the recommendation should receive consideration.

The letter received from the Metropolitan Board of Works was in reply to a suggestion made by the Society, that the Bill to be introduced in the next session of Parliament, for the amendment of the Metropolitan Building Acts, should contain a clause giving power to vestries and district boards to make by-laws for regulating matters connected with drainage, water-supply, etc., in the same way as can be done by the local authorities of places outside the metropolis under the provisions of the Public Health Act, 1875. The reply referred to the limited scope of the Bill as already prepared, and expressed the unwillingness of the Board to extend its operations as suggested by the Society.

With regard to the communication from the Birmingham and Midland Association of Medical Officers of Health, the Council recommended, and the Society agreed to, the following modification of their first resolution:—"That the Society of Medical Officers of Health desires respectfully to draw the attention of Her Majesty's Committee of Council on Education to the frequency with which scarlet fever and some other forms of infectious disease are spread through the agency of public elementary schools, and to urge upon the Council the desirability of making some provision for allowance, not only for the closure of such schools when an epidemic prevails in their neighbourhood, as is done at present, but also for the non-attendance of particular children living in houses in which infectious disease exists (as by the allowance of the Government grant to the teachers in respect of such children as if they were in attendance), so that the pecuniary interests of the masters and managers may be brought into less conflict with those of the public health than is the case now." With regard to the second and third resolutions, the Council recommended that the resolutions already passed by the Society concerning these matters be forwarded to the Birmingham and Midland Association.

With reference to the action taken by the Metropolitan Board of Works in declaring the business of a cowkeeper to be an offensive business under the Slaughter-Houses, etc., Act, 1874, the Council were of opinion that it is undesirable that the business of a cowkeeper should be treated separately from that of a dairyman, and suggested that the Society recommend the Local Government Board to deal with the whole subject of milk-supply, by introducing in the next session of Parliament a Bill giving power to the Local Sanitary Authorities to deal with cow-sheds and dairies by means of by-laws. The suggestion was adopted by the Society.

Hospital Saturday Fund.—The offices of this Fund have been removed from Leicester-square, and are now at No. 10, South-place, Finsbury-place, E.C.

Naval Medical Supplemental Fund.—At the quarterly meeting of the Directors of the Naval Medical Compassionate Fund, held on the 8th inst., Dr. J. W. Johnston, Inspector-General, in the chair, the sum of £72 was distributed among the various claimants.

The Health of San Francisco.—We have received a copy of the report of the Health Officer of the City and County of San Francisco for the fiscal year ending June 30 last. The deaths during the year are reported to have been 6170, an increase of 1379 on the preceding year, accounted for by the prevalence of epidemics of small-pox and diphtheria. From these two diseases alone there were 1358 deaths—446 from small-pox, and 912 from diphtheria. The population of the city is estimated at 300,000; and the death-rate at 20·56 per 1000, against 17·6 in the preceding year. In alluding to the large proportion of death from preventable causes, the report recommends to the attention of the authorities the defective condition of the sewers and house-drains of the city; but it more directly traces the outbreak of small-pox to the existence in the midst of the city of a population of 30,000 Chinese, who set all sanitary laws at defiance. They conceal their cases of this disease, and remove the bodies of those who have died of it to obscure places, so that it is impossible to disinfect their houses, for by no ingenuity can it be discovered whence the dead bodies have been removed. Dr. Meares, the health officer, observes:—"That this laboratory of infection, situated in the very heart of our city, distilling its deadly poison by day and by night, and sending it forth to contaminate the streets and houses of a populous, wealthy, and intelligent community, is permitted to exist, is a disgrace to the civilisation of the age. Alien to our laws, alien to our religion, alien to our civilisation, neither citizens nor desiring to become so, they are a social, moral, and political curse to the community." The Health Officer's denunciation probably owes not a little of its vigour to the extreme unpopularity of the "*heathen Chinee*" in the land of liberty at present.

NEW INVENTIONS AND IMPROVEMENTS.

SAINTE-MARIE VICHY WATER; ELIZABETH VICHY WATER.

These diætetic and mildly medicinal waters, supplied by William Armstrong, 86, Great Tower-street, closely resemble the already well-known Vichy waters, and are obtained from the same water-bearing basin, or strata. They are pleasant to the palate, are antacid, contain a very small quantity of iron, and when taken in considerable quantity will prove slightly laxative. The two are very much alike in composition, and are an agreeable and useful addition to the list of our table waters.

ROYAL HUNGARIAN BITTER-WATER; GIESSHÜBLER SPARKLING WATER.

The first of these two waters is slightly alkaline, but contains an unusually large percentage of the magnesium and sodium sulphates. It belongs to the same class of medicinal waters as the Hunyadi János water does, and, like it, may be very safely and advantageously taken as a purgative. Its chemical properties make it an aperient of decided power, and as such we have no doubt it will be found very useful. The ordinary dose is a wineglassful, taken before breakfast; and, as with most similar waters, it acts better and more efficaciously when sufficient hot water is added to make it tepid. It is supplied by the Carlsbad Mineral Water Company, 267, Oxford-street. The same Company import, from Giesshubl-Puchstein, the Giesshübler Natural Mineral Water, which is a pleasant-tasting, alkaline, sparkling table-water.

THE "A-1" COD-LIVER OIL.

Messrs. Southall Brothers and Barclay, Birmingham, have sent us a sample of a beautiful cod-liver oil, which they have named "A-1." It is perfectly clear and bright, of a very pale lemon colour, and has marvellously little smell or taste. We should think the most fastidious patient could easily take it, and retain it; and certainly in the instances in which we have given it, we have been assured that no disagreeable taste is left after swallowing it.

"SANITAS."

This fluid has been brought out as "the only true antiseptic and disinfectant combined." Whether it really has all the powers and properties that are claimed for it, we are not prepared to say, but it certainly does possess qualities that make it well worthy of a full and fair trial. It is clear and colourless, has an agreeable balsamic odour, mixes freely with water, and is not poisonous. It is prepared by the action of hot air on turpentine in the presence of water; and owes its properties essentially to its containing peroxide of hydrogen and camphoric acid. Many of our readers are doubtless aware that Mr. Kingzett has shown that these compounds are produced in some of the volatile oils by the slow absorption of oxygen. He holds, moreover, that he has proved that the sanitary properties of pine and fir-trees, and of the eucalyptus globulus, are owing to the formation by natural oxidation and to the slow evolution of the compounds above named; and, in connexion with M. Maximilian Zingler, he has invented an ingenious process by which a fluid holding them in solution can be produced artificially; and to this fluid they have given the somewhat pretentious name "Sanitas." Dr. Day, of Geelong, and Dr. Richardson and others in this country, have long held that peroxide of hydrogen, having specially great oxidising power, is a powerful disinfectant; and many experiments have been made by Mr. Kingzett showing that peroxide of hydrogen and camphoric acid possess very considerable antiseptic properties; and that "Sanitas" has, in fact, the same valuable qualities.

Two kinds of it are produced—one for toilet purposes, which is almost quite odourless, and, when freely mixed with water, makes a very agreeable mouth-wash, etc.; and the other, "aromatic," for all kinds of antiseptic and disinfecting purposes, in the house, in hospitals, for farm purposes, and preservative purposes. It may be safely tried, and, so far as is at present known, appears to deserve to take high rank as an antiseptic and disinfectant. It is brought out by The Sanitas Company, 57, Moorgate-street.

OBITUARY.

WILLIAM STOKES, M.D., D.C.L., F.R.S., etc.

One of the greatest of our physicians is no more. A little before midnight on Monday, January 7, the spirit of William Stokes passed away. Those who had watched with deep regret the gradual failure of his powers of life during many months cannot feel surprise at the fatal issue of a protracted illness: but to all the death of William Stokes will cause deep regret. His illness perhaps dated from an accident he met with some five summers ago, when he was thrown from an outside car at Bray, and fell heavily on his back. Be that as it may, the symptoms of a disseminated sclerosis of the spinal cord developed themselves by degrees, and early in December the final blow came—an apoplectiform seizure, indicating the extension of disease to the cerebral centres.

William Stokes was born in Dublin in 1804. He was the second son of Dr. Whitley Stokes, who was a Fellow of Trinity College, Dublin, and who afterwards occupied the important posts, in the University of Dublin, of Lecturer on Natural History (1816-30) and Regius Professor of Physic (1830-45). He died on April 13, 1845, when his even more illustrious son succeeded him as Regius Professor.

Young Stokes was educated at home and never entered college, which is the more remarkable as (besides his father) both his grandfather and granduncle were Fellows of Trinity College, Dublin. In 1821 Stokes went to Edinburgh, where he studied medicine, and in 1825 graduated along with Sir Dominic J. Corrigan, Bart. While a student in Edinburgh he attracted the notice of Dr. Alison, and formed the intimate friendship with him to which he so touchingly alluded in his address to the British Medical Association at Leamington in 1865. Shortly after taking his Edinburgh degree Stokes returned to Dublin and became a Licentiate of the King and Queen's College of Physicians in Ireland on December 3, 1825. He at once commenced practice, and on January 7, 1826 (exactly fifty-two years before his death), succeeded his father as Physician to the Meath Hospital and County Dublin Infirmary. He now became the colleague of the illustrious Graves, whom he aided in every way in establishing and perfecting that system of clinical teaching which drew forth the warmest encomiums from Trousseau, and secured for the Meath Hospital and the Irish School of Medicine a world-wide reputation.

The new science of auscultation was soon made a subject of special study in the Hospital wards; and it was not long before the Physicians of the Hospital—Graves and Stokes—gave to the profession the results of their inquiries into stethoscopy. A paper in the fourth volume of the *Dublin Hospital Reports*, and two published lectures on the Stethoscope, were the outcome of these investigations, which foreshadowed Stokes's fame as an observer of disease, a lecturer, and an author. In 1832 it fell to his lot to see and report on the first case of Asiatic cholera which occurred in Ireland. Between the years 1833 and 1835 Dr. Stokes contributed a series of articles to the "Cyclopædia of Practical Medicine," and the first series of the *Dublin Journal of Medical Science* was enriched by many monographs from his facile pen. Of this last-named journal, which was founded by Sir Robert Kane, Stokes acted as co-editor with Dr. Graves from 1832 to 1842.

With the name of Stokes three classical works will ever be associated—namely, his "Treatise on the Diagnosis and Treatment of Diseases of the Chest," published in 1837, and subsequently translated into German; his "Diseases of the Heart and Aorta" (1854); and his "Lectures on Fever" (1874). Nor did his literary labours end here. He edited Graves's "Studies in Physiology and Medicine," wrote a charming life of George Petrie, the distinguished Irish antiquarian; and he delivered many public addresses, all characterised by beauty of diction and argumentative power.

In 1843 Dr. Stokes, along with Marsh, Graves, and Cusack, strove to abate some of the oppressive measures of Sir James Graham's Medical Charities Bill. He was examined before a Committee of the House of Commons on the question, and he succeeded in effecting some amendments in the Act. In 1848, along with the late Dr. Cusack, he took a still more emphatic part in endeavouring to defeat the Dispensary Act, which, by its "five shillings a day" payment, inflicted such a degradation on the profession and such a cruel wrong on the medical men who had charge of the famine-fever districts

throughout the country. Perhaps it is safe to say that no passage in Dr. Stokes's high and noble life reflects more enduring honour on his name, or won him a more cordial and lasting professional esteem, than his manly exertions and well-directed sympathy on that occasion.

With the subject of preventive medicine the name of Dr. Stokes is closely identified. He was one of the earliest, ablest, and most disinterested advocates of the doctrines of State medicine. It was to him that the founding of a diploma in this branch of medical science, in connexion with Trinity College, Dublin, was chiefly due. He was also an earnest advocate for the establishment of a connexion between the State and the medical profession. On the formation of the General Medical Council in 1858 he was nominated by the Crown as the representative for Ireland on the Council. He continued to discharge the duties of this office until May, 1877, when he resigned it in consequence of failing health. It would exceed the space at our disposal were we even to mention the many honours and distinctions which were showered upon Stokes. He possessed honorary degrees of four great British universities, was a Fellow of the Royal Society, and shared with two other distinguished Irishmen the rare honour of receiving from the Emperor of Germany the Prussian order "Pour le mérite." In 1849 he became President of the King and Queen's College of Physicians; in 1867, President of the British Medical Association; and in 1874, President of the Royal Irish Academy.

In 1838 he was one of the foremost founders of the renowned Pathological Society of Dublin, of which he remained Honorary Secretary until his death. In April, 1875, he resigned the Physicianship of the Meath Hospital; and later on he retired from that large and lucrative practice which, during so many years of his active life, was the fitting public recognition of his abilities as a physician and his virtues as a man.

"In nothing," observes a biographer whom we have already had occasion to quote, "did Stokes more shine than as a teacher of medicine by the hospital bedside. His pupils—and they are to be reckoned by hundreds—never ceased to recite how thorough was his investigation of a case, how accurate his diagnosis, and how often prophetic was his prognosis." The same writer continues—"During all his life he was a man of lasting and affectionate personal friendships, and was surrounded by a large circle who were as fond as they were proud of him. His memory will long be dear to them, and his place will be sadly missed amongst them; and now that he is taken, many other tongues besides theirs will join in saying, and feeling sincerely, that William Stokes has left behind him no nobler specimen of our Celtic race—nature, intellect, and culture."

MEDICAL NEWS.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 3, 1878:—

Clarke, Thomas Furge, Richmond, Surrey.
Dingley, Allen, Argyle-square, King's-cross.
Ellison, Frederick William, Leytonstone.
Richardson, Richard Tippetts, Kingston-on-Thames.
Thomas, Richard Weddall, York.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Baber, Henry Aitkens, Guy's Hospital.
Collins, Geo. Duppa, King's College Hospital.

NAVAL, MILITARY, &c., APPOINTMENTS.

ADMIRALTY.—George Valentine Macdonogh, M.D., and Alexander Collins, M.D., have been placed on the Retired List from November 30, 1877. Dr. Macdonogh has been allowed to assume the rank and title of Deputy Inspector-General on the Retired List from the same date.

BIRTHS.

BRISBANE.—On January 3, at 21, Park-road, Regent's-park, N.W., the wife of J. Brisbane, M.D., of a daughter.

COTTON.—On January 3, at Anglesey, the wife of John Cotton, M.D. Fleet Surgeon, H.M.S. *Sultan*, of a daughter.

FARR.—On December 31, at Effra House, Effra-road, Brixton, the wife of Archer Farr, L.R.C.P. Edin., of a daughter.

MACAN.—On January 5, at 29, Lower Baggot-street, Dublin, the wife of Arthur Vernon Macan, M.B., F.K. & Q.C.P. Ire., of a son.

MAUNSELL.—On January 6, at the Royal Arsenal, Woolwich, the wife of Surgeon-Major T. Maunsell, L.K. & Q.C.P. Ire., A.M.D., of a son.

ROBERTS.—On January 1, at Avenue House, Peckham-rye, the wife of J. C. Roberts, L.R.C.P. Edin., of a son.

TEEVAN.—On January 7, at 1, Minden-villas, Anerley, S.E., the wife of Alfred Teevan, M.R.C.S. Eng., of a son.

TREVES.—On January 4, at Kingston Villa, Sydenham-park, the wife of Frederick Treves, M.R.C.S., of Wirksworth, Derbyshire, of a daughter.

TURTLE.—On December 26, at Kirkmead, Woodford, the wife of Frederick Turtle, M.D., of a son.

MARRIAGES.

BLAKE—RANDALL.—On January 8, at St. Stephen's, Clapham, Frederick William Blake, younger son of V. W. Blake, F.R.C.S.E., of The Fivelands, Moseley, near Birmingham, to Mary Young, only daughter of Alfred Randall, Esq., of 5, Albert-square, Clapham.

HARRIS—MORGAN.—On January 2, at Emmanuel Church, Clifton, Vincent Dormer Harris, M.D. Lond., M.R.C.P., to Agatha, eldest daughter of George King Morgan, Esq., of Charith Lodge, Clifton.

MAYER—DURANT.—On January 8, at the parish church, Shifnal, William Lewin Mayer, M.D., F.R.C.S., of Oakengates, fourth son of J. E. Mayer, M.D., F.R.C.S., F.C.S., Madras Army, to Lavina, second surviving daughter of the late Rev. Francis Ossian Durant, M.A., of Shifnal.

THOMAS—DAVEY.—On January 1, at St. John's, Clifton, Lewis William Thomas, elder son of Lewis Thomas, of 65, Highbury New-park, London, to Edith Constance, eighth daughter of James G. Davey, M.D., of Bristol.

YARROW—GALLATLY.—On January 9, at the Lutheran Church, Neuchâtel, George Eugene Yarrow, M.D., to Mary Maud Gallatly, both of London.

DEATHS.

DAVIES, WILLIAM ABEL, M.R.C.S.L., L.S.A. Eng., at Castle House, Llanidloes, on December 19, aged 45.

HAWKER, CHARLES, M.D., on January 1, at 26, White Horse-lane, Stepney, in his 60th year.

HOOPER, ALFRED, F.R.C.S. Edin., M.R.C.S. Eng., Staff Surgeon, of 24, The Chase, Clapham-common, on January 3, aged 44.

KERR, DAVID, M.D., late Surgeon and Lecturer on Clinical Surgery, Royal Infirmary, Aberdeen, at 66, Northumberland-street, Edinburgh, on January 3, aged 73.

LEGROS, JAMES, M.R.C.S. Eng., of Wavertree, Liverpool, formerly of Hythe, Kent, on December 19, aged 71.

MATURIN, CHARLES GABRIEL, M.D., son of John Maturin, Esq., Strabane, Co. Tyrone, accidentally drowned in Ceylon on December 8, 1877.

OLIVER, ANDREW, second son of George Oliver, M.D.

WILSON, FRANCES SARAH PARR, widow of Horace Hayman Wilson, Esq., late Boden Professor of Sanskrit at Oxford, and once a surgeon in the Hon. East India Company's Service, at her residence, 26, Weymouth-street, W., aged 69.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Applications, with testimonials, to Mr. C. Rowlandson, Hon. Sec., The College, Durham, on or before January 26.

SUNDERLAND AND BISHOPWEARMOUTH INFIRMARY.—Senior House-Surgeon. Candidates must be doubly qualified and registered. Applications and testimonials to the Secretary of the Medical Board, not later than January 24.

UNION AND PAROCHIAL MEDICAL SERVICE.

. The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Chorlton Union.—Mr. George Rice has resigned the Workhouse; salary £300 per annum.

Glendale Union.—Mr. Joseph Brown has resigned the Third District; area 46,209; population 3269; salary £24 per annum.

APPOINTMENTS.

Abingdon.—Mr. William F. Donkin as Analyst for the Borough.

Clitheroe Union.—Richard Patchett, L.R.C.S. Edin., to the Chipping District.

Doncaster Union.—William Sykes, M.R.C.S., L.R.C.P. Edin., to the Mexbrough District.

St. George's Union.—Henry W. Webster, M.R.C.S. Eng., L.R.C.P. Edin., to the Infirmary.

Warwick Union.—Joseph S. Baly, M.R.C.S., L.S.A., to the Workhouse.

PRELIMINARY EXAMINATION OF MIDWIVES IN FRANCE.—The examination for admission to the Clinic for Midwives of the Paris Faculty of Medicine consists in writing from dictation an ordinary page, and in which not more than five faults in orthography are tolerated; the four elementary rules of arithmetic; the metric system; and the geography of France. For the scholastic year 1877-78 there were 85 candidates presented themselves, and of these only 48 passed. Fourteen of these committed no fault in orthography, 6 one fault, 9 two faults, 8 three faults, 5 four faults, and 6 five faults.—*Gaz. Hebd.*, January 4.

THE HOSPICE OF ST. GOTHARD.—According to a report of the Government of Ticino, the Hospice from October 1, 1876, to September 30, 1877, gave shelter to

15,052 travellers, to whom were distributed gratuitously 52,783 rations, as well as a certain amount of clothing. Besides this there were 143 sick persons treated for longer or shorter periods. The total expenses amounted to 13,860 fr., and the receipts to 13,507 fr., leaving a deficit of 353 fr., but, as usual, the cantonal governments or private individuals will come to the aid of this useful institution, which receives all indigent persons, without distinction of nationality. —*Union Méd.*, January 3.

THE FEVER AT STAVELEY.—Dr. A. Mackintosh reported last week that the fever outbreak at Staveley had not spread much since the last report, although several deaths had resulted from it during that time. He had only discovered two fresh families in addition to those previously reported, in which the disease had appeared. The total deaths from the disease recorded in the district since November 1 was sixteen, four of which occurred in the parish of Eckington, one in Killamarsh, and twelve in the parish of Staveley. The progress of the fever would, he had no doubt, be checked by the cold weather, and also by the closing of the schools. The Local Government Board, in reference to the present outbreak of fever, have very properly remonstrated with the Chesterfield Rural Sanitary Authority; they have called attention to the correspondence between them relative to a fever outbreak in 1876, notwithstanding which no hospital for the isolation of infectious cases had been provided by the Rural Sanitary Authority, on whom a serious responsibility rested, for, in the opinion of the Board, if the Sanitary Authority had been able to isolate the earlier cases in the present outbreak, the extension of the disease would have been prevented to a great extent. This reproof has resulted in the matter being referred to a committee, with a view to ascertain whether suitable accommodation can be obtained in the parish for infectious patients.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Army Surgeon.—You will find a portrait and a memoir of the late Sir James McGrigor, Bart., the Director-General of the Medical Department of the Army, in Pettigrew's "Medical Portrait Gallery," vol. iv.

Mr. Simpson.—You will find a full account in the *Medical Times*, vol. xvii. The late Dr. Jordan Roch Lynch was a valued and esteemed contributor. Mr. George Alfred Walker, we are glad to say, survives.

A Provincial Teacher.—Mr. W. W. Wagstaffe, of St. Thomas's Hospital, the recently elected member of the Board of Examiners of the College of Surgeons, was admitted a Member of the College on April 29, 1864, and a Fellow by examination on June 11, 1868.

Dr. Campbell, Bengal.—The *Medical Times and Gazette* will be sent to you from commencement of present volume. The cheque has been paid by your agents. An account of such an interesting case will be most acceptable.

A Fellow.—The following hospitals are represented on the Board of Examiners of the College of Surgeons, viz.:—St. Bartholomew's, by the chairman, Mr. W. S. Savory, F.R.S., and Mr. Henry Power; St. George's, by Messrs. Timothy Holmes and T. Pickering Pick; King's College, by Mr. John Wood, F.R.S; the Middlesex, by Mr. J. Whitaker Hulke, F.R.S.; University College, by Mr. Christopher Heath; Guy's, by Mr. Arthur E. Durham; and St. Thomas's, by Mr. W. W. Wagstaffe. These gentlemen are all Fellows of the College by examination; and Messrs. Wood, Heath, and Hulke are Jacksonian Prize Essayists.

Rustic.—The tradition is, that when the plague raged in Keswick, about the year 1665 and a few years afterwards, as no market was held in the town for fear of infection, the people of the dales carried their webs and yarn to a large stone, which is very conspicuous on one of the lower elevations of Armboth Fell, and there periodically met and did business with the traders. The stone still goes by the name of the "Web Stone."

Good Templar.—The declaration just issued by the Berks and Bucks Licensed Victuallers' Association is to the following effect:—"We, the licensed victuallers of the Berks and Bucks Protection Association, feeling the importance and responsibility of our position, and it being represented to us that our co-operation in the cause of true temperance is earnestly desired, and feeling that we may be a great help or a great hindrance, do hereby heartily declare that in all lawful ways, and by all reasonable means, we will seek to promote temperance, sobriety, and moderation." It is stated that this step has been taken by the Association in consequence of a letter from a Windsor clergyman to their secretary.

Aspirant.—We have heard that Mr. F. A. Abel, C.B., the Chemist to the War Department, is to be awarded the medal of the Royal Society for his physico-chemical researches on gun-cotton and other explosive agents.

TEMPERANCE IN THE INDIAN ARMY.

In the month of October last, the 54th Foot had 349 total abstainers amongst the rank and file, the 40th Foot had 310, the 59th 309, and the 92nd Highlanders return 257. The total number reported for the army in India at the same time was 8576 non-commissioned officers and men.

THE ECONOMY OF SOFT WATER.

The borough analyst reported to the Liverpool Water Company, on Monday, that by an increased supply of Rivington water to the Kensington district a larger proportion of soft water was given to the latter district, and this effected a decrease in the waste of soap, which amounted, on a very low estimate, to at least £3000 per annum for every 100,000 inhabitants.

HIPPOPHAGY IN THE METROPOLIS.

It is stated that M. Decroix, whose efforts to promote the use of horse-flesh as a cheap and wholesome article of food are well known in Paris, and which have been so far successful that there are now about sixty establishments open in the most populous districts in that city—intends to extend his crusade to England, by contributing to found shops for the sale of horse-flesh in the English capital.

A CONTRAST.

At Liverpool, last week, three inquests were held on the bodies of persons who had died from excessive drinking, and in each case a verdict to that effect was returned. At Sedgley the superintendent of the police reported to the magistrates that during Christmas week not a single person had been locked up for drunkenness, neither had any person been seen drunk by the police. Considering the large population of the latter town, the magistrates had reason to be gratified at the sobriety of the inhabitants.

IRISH "WAKES."

We have on various occasions called attention to the dangers to health by spreading infectious diseases, and in many instances even fatalities have been caused by the holding of "wakes." It is, therefore, with satisfaction we notice that at length the Roman Catholic bishops of Ireland have determined to discountenance the practice. At a meeting of the bishops at Maynooth College, which took place a short time ago, it was resolved that no one in future is to attend at "wakes" except the immediate relatives of the deceased. No intoxicating liquors are to be used on such occasions.

RECURRENT VACCINATION PROSECUTIONS.

During a discussion on an appeal made to the Brighton Board of Guardians not long since by an anti-vaccinationist, entreating the Board to cease taking repeated proceedings against those who neglected to comply with the provisions of the Act, a member of the Board observed that in Brighton vaccination had done great good, as whilst formerly cases of small-pox used to *frequently* occur at the workhouse, there had not been *a single case there for months*; and with that fact before their eyes he did not see how the Board could, or dared, to disobey their orders. The letter was ordered to be simply acknowledged.

LUNATIC ASYLUMS, SURREY.

The quarterly report of the Brookwood Lunatic Asylum, just presented to the Surrey magistrates, states that the Commissioners in Lunacy had recommended the substitution of a well for the present water-supply from the Basingstoke Canal; but upon the motion of the Hon. F. Scott, who protested against the introduction of an expensive deep-well system, it was decided that the Committee make further inquiry, and report upon the existing supply before taking other proceedings. The report presented at the same time, of the additional Asylum Committee, stated that an estate of 148 acres, known as Partnall's Farm, Coulsdon, had been selected by them as the site for the proposed new Asylum, at a cost of £23,500.

A PRICE-LIST OF WINE ADULTERANTS.

A Berlin newspaper copies, *inter alia*, from the price-list of a large chemical manufactury in Mayence, the following details of colouring-matter for wine:—The finest, most durable, and highly concentrated deep-red wine colour can be had for 2½ marks, or 2s. 3d. per half-kilogramme. Green colouring matter, also of fine quality, durable, and highly concentrated, for Moselle wines, can be had for 2 marks the half-kilogramme. Sugar colouring-matter, of a high yellow tint, and very fine quality, is sold at prices which are ruled by the market price. Herbs for imparting to wine a Muscatel, Riesling, Traminer, Bordeaux, Ruster, Tokay, or Moselle bouquet, all warranted to be strong-smelling, superfine, and lasting, are offered at 9 marks the half-kilogramme. The finest French bouquet spirit is sold at 4 marks the litre. Cognac oil or oil of grapes appears to be a costly article, as from 100 to 300 marks are charged for the half-kilogramme, according to the quality; but for the superfine and highly rectified oil the price rises to 350 marks the half-kilogramme. Wine glycerine is a much cheaper substance, costing only 1 mark the half-kilogramme. This manufacturer concludes his list with the remark that, "The good quality of the articles I sell is well known."

PROMOTION.

Dr. David Lloyd Morgan, C.B., who has just succeeded Sir William Smart as Inspector-General of Hospitals and Fleets, has seen considerable foreign service. He entered the navy as an Assistant-Surgeon in 1846, and served in the *Penelope* on the West Coast of Africa. As Assistant-Surgeon to the *Trafalgar* he served in the Black Sea during the war with Russia, and for his services in the naval engagement with the forts of Sebastopol he was specially promoted to the rank of Surgeon. Subsequently he was in medical charge of the 1st Battalion of Royal Marines in the China Expedition of 1857-59, and was present in the operations in the Canton River, the taking of Canton, and the attack on the forts at the mouth of the Peiho River. As Surgeon of the *Euryalus* he served with Sir Augustus Kuper in the naval operations against Japan, at Kagosima and Simonasaki, and in 1866 was promoted Staff Surgeon. He was in medical charge of the *Royal Alfred* when she served as flag-ship to Sir Rodney Mundy, and in 1870 was advanced to the rank of Deputy Inspector, being placed in charge of Bermuda Hospital from 1870-72. Since May, 1876, he has been Senior Medical Officer to the corps of Royal Marines. Dr. Morgan was appointed C.B. in 1871, and has been awarded Sir Gilbert Blane's gold medal, Crimean medal and clasp, Turkish medal, and China medal with clasp.

Mortality and Disease—India.

The rate of mortality in Bombay for the week ending the 8th ult. rose to 41·07 of the population per annum. There were 147 deaths from remittent fever. The Jhin-jhini, or pricking disease, which caused some alarm amongst the natives in parts of Madras and Orissa last year, is reported to have made its appearance in the southern part of Sylhet. In consequence of the outbreak of cholera in certain districts in the Central Provinces, three assistant-surgeons have been ordered from the Presidency to proceed at once to the affected districts on special duty. A severe attack of small-pox has broken out at Delhi; as many as 1600 children have died from the disease since July last.

COMMUNICATIONS have been received from—

Mr. W. Spencer Watson, London; Mr. W. E. Poole, London; Dr. Bruce, London; Dr. Grailly Hewitt, London; Mr. John Chatto, London; Mr. George Gabbon, London; Dr. Thos. Barlow, London; Mr. B. R. Wheatley, London; Mr. T. M. Stone, London; Dr. Druitt, London; Dr. Meymott Tidy, London; Dr. G. Whittle, Liverpool; Mr. A. W. Mackenzie, London; The Secretary of the Royal Society for the Prevention of Cruelty to Animals, London; The Secretary of the Harveian Society, London; Dr. Byrom Bramwell, Newcastle-on-Tyne; Dr. Moxon, London; Mr. J. Knowsley Thornton, London; Mr. J. W. W. Bacot, Seaton; Mr. Bechra, London; Dr. H. Swete, Worcester; Dr. J. K. Spender, Bath; Dr. J. W. Moore, Dublin; The Secretary of the Naval Medical Supplemental Fund; The Secretary of the Liverpool Medical Institution; The Registrar of Apothecaries' Hall, London.

BOOKS AND PAMPHLETS RECEIVED—

W. Braithwaite, M.D., and James Braithwaite, M.D. Lond., The Retrospect of Medicine, July to December, 1877—Dr. Johannes Orth, A Compend of Diagnosis in Pathological Anatomy—Otto Spiegelberg, Lehrbuch der Geburtshülfe für Aerzte und Studirende, two vols.—Silverlock's Perennial Medical Practitioners' Day-Book and Visting List combined—Statistical Report on the Health of the Navy for the Year 1876.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Obstetrical Journal of Great Britain and Ireland—Gazeta Medica da Bahia—Queensland Government Gazette—Design and Work—Analyst—Students' Journal and Hospital Gazette—Union Médicale et Scientifique du Nord-Est—Western Review of Science and Industry—Birmingham Medical Review—Dublin Medical Journal.

APPOINTMENTS FOR THE WEEK.

January 12. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

14. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Mr. Wordsworth will bring forward six persons having Congenital Displacement of the Crystalline Lens. Dr. Foulis (of Glasgow) will read a paper "On Excision of the Larynx," and exhibit a patient on whom the operation has been performed."

15. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Pathological Society, 8½ p.m. Mr. Wagstaffe—Dermoid Cysts along Branchial Fissures. Dr. Dowse—Case of Paralysis Agitans. Dr. Garlick—Diaphragmatic Hernia. Dr. Ralfe—1. Phosphatic Diabetes; 2. Gangrene of Lung with Lead Poisoning. Dr. Greenfield—1. Aneurism of Cerebral Arteries; 2. Aneurism of Brachial Artery from Embolism. Dr. Burney Yeo—Rupture of the Aortic Valves. Mr. Bryant—1. Prostatic Tumours removed during Lithotomy; 2. Impacted Fracture of Shaft of Femur. Mr. Nunn—Sequel to Case of Recurrent Sarcoma. And other Specimens.

16. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

17. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

Harveian Society, 8 p.m. Casual Communications. Dr. Ashburton Thompson, "On the Pulse-Rate considered in relation to Post-partum Hæmorrhage."

18. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, Jan. 5, 1878.

BIRTHS.

Births of Boys, 1460; Girls, 1418; Total, 2878.
Average of 10 corresponding years 1868-77, 2529·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	926	966	1892
Average of the ten years 1868-77	819·3	823·0	1642·3
Average corrected to increased population ...	...	...	1757
Deaths of people aged 80 and upwards ...	...	...	75

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	...	6	9	...	14	...	6	1	4
North	751729	14	19	7	...	23	...	5	...	3
Central ...	334369	...	3	2	1	1	...	2	...	...
East	639111	7	29	7	1	20	1	4	1	1
South	967692	5	47	6	3	31	...	6	2	1
Total	3254260	26	104	31	5	89	1	23	4	9

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·947 in.
Mean temperature	43·9°
Highest point of thermometer	51·5°
Lowest point of thermometer	32·0°
Mean dew-point temperature	41·4°
General direction of wind	S.W.
Whole amount of rain in the week	0·48 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 5, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Jan. 5.	Deaths Registered during the week ending Jan. 5.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2878	1892	51·5	32·0	43 9	6·61	0·48	1·22
Brighton	103923	44·1	65	54	51·0	32·9	44·2	6·78	0·83	2·11
Portsmouth ...	129461	28·9	72	49	...	...	...	...	...	...
Norwich	84620	11·3	70	37	49·5	33·0	41·7	5·39	0·74	1·88
Plymouth	73599	52·8	49	41	53·5	36·0	46·4	8·00	0·44	1·12
Bristol	206419	46·4	140	104	52·0	32·7	44·2	6·78	0·61	1·55
Wolverhampton ...	74240	21·9	69	23	50·0	30·3	41·8	5·45	0·63	1·60
Birmingham ...	383117	45·6	350	215	...	...	...	...	...	...
Leicester	121473	38·0	105	30	50·8	33·0	43·1	6·17	0·67	1·70
Nottingham ...	165267	16·6	158	69	51·7	30·6	42·3	5·73	0·52	1·32
Liverpool	532681	102·2	398	333	52·1	37·7	44·5	6·95	1·33	3·38
Manchester ...	360514	84·0	260	182	...	...	...	...	...	...
Salford	170251	32·9	133	51	49·6	31·5	41·7	5·39	1·17	2·97
Oldham	107366	23·0	74	53	...	...	...	...	...	...
Bradford	185088	25·6	122	76	51·6	35·1	44·0	6·67	1·14	2·90
Leeds	304948	14·1	248	135	52·0	36·0	43·8	6·56	1·22	3·10
Sheffield	289537	14·7	264	123	50·0	34·0	43·3	6·28	0·89	2·26
Hull	143139	39·4	140	62	49·0	31·0	40·6	4·78	0·58	1·47
Sunderland ...	112459	34·0	97	47	50·0	35·0	42·7	5·95	0·96	2·44
Newcastle-on-Tyne	144570	26·9	93	61	...	...	...	...	...	...
Edinburgh	222371	53·1	128	123	51·0	33·5	42·2	5·67	0·37	0·94
Glasgow	566940	94·0	512	315	50·0	36·5	42·9	6·06	0·30	0·76
Dublin	314666	31·3	191	190	51·7	31·0	44·6	7·01	0·66	1·68
Total of 23 Towns in United Kingdm	8373953	37·9	6606	4265	53·5	30·3	43·2	6·22	0·75	1·90

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·95 in. The lowest reading was 29·27 in. on Sunday evening, and the highest 30·22 in. on Wednesday evening.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

ON

DISTURBANCES OF SIGHT IN HYSTERIA.

A LECTURE DELIVERED AT THE SALPÊTRIÈRE BY

PROFESSOR CHARCOT.

In a recent lecture M. Charcot called attention to certain disturbances of sight which are not unfrequently met with in hysterical patients.

Some years ago M. Briquet described various morbid visual phenomena met with in patients the subjects of hysterical hemianæsthesia. "With the eye on the hemianæsthesic side," says M. Briquet, "the patient sees badly: the outlines of objects are badly defined; white objects appear grey; reading becomes difficult, or impossible, the print appearing only as a dark grey tint on a background of lighter grey. When the anæsthesia is complete, the affection of sight goes on to complete amaurosis."(a)

Dr. Galezowski was the first to show that this kind of amblyopia is almost always accompanied by diminution or loss of the power of appreciating colours. It is remarkable that this perversion of the sense of sight, so far as colours are concerned, follows certain laws which have been investigated by M. Landolt in M. Charcot's wards at the Salpétrière. In the normal state all parts of the field of vision are not equally sensitive to different colours; for some colours the field is wider than for others, and the differences follow much the same law in different subjects. Thus, in the great majority of cases, it is for blue that the field is widest; next comes yellow, then orange, red, green; whilst violet is only perceived by the most central parts of the retina. In hysterical amblyopia these characters are found to be exaggerated in various degrees. The different circles which correspond to the limits of vision for each colour are concentrically retracted more or less; and numberless varieties of change may be met with in well-marked cases. Thus, the field for violet, the most "central" colour, may become narrowed to complete extinction, the other colours remaining clear. The next colour to disappear will be green, red and orange will follow in their turns, whilst yellow and blue are only lost in a high degree of amblyopia. As might have been expected, however, there are some exceptions to the general rule. Thus, certain patients continue to see red when their perception for yellow, and even for blue, is entirely lost. Nevertheless, among the cases hitherto observed, it is the rule that green and violet—and especially the latter—are lost before red or any of the other colours. When the perception for all the colours is given, that for form only being preserved, objects appear of a grey tint, much as in a painting in Indian-ink. In the highest degree of amblyopia the perception of form may be lost as well as that of colour; there is real amaurosis. Such cases are, however, rare.(b)

Although these alterations in the field of vision for colours are especially seen in the eye corresponding to the anæsthetic side, yet it is common to find that in the opposite eye the field is somewhat contracted, though in a very much less degree. Thus, patients who are only able to distinguish the most peripheral colours—yellow and blue—with the eye of the affected side, have only lost perception in the other eye for the most central—violet, or perhaps green. We may conceive theoretically that numerous combinations such as these might be met with; and many such have, in fact, been observed. It is scarcely necessary to say that these phenomena are of a purely functional character, and that they are not accompanied by any alteration visible by the ophthalmoscope: there is not even any difference in the comparative vascularity of the two eyes.

The visual phenomena are characterised, moreover, by the same liability to variation that is seen in other local manifestations of hysteria. Like these, they may appear or disappear suddenly, or remain permanently persistent—perhaps as the only symptom. An already existing dyschromatopsy may give place all at once to complete achromatopsy for a short time before the occurrence of a convulsive attack; and it may disappear after the attack almost as suddenly as it came on. Occasionally complete double amaurosis may be found immediately after an attack. At the same time the anæsthesia, which had previously been confined to one half of the body, will have extended to the whole body. It may also happen that muscular amaurosis or complete blindness comes on suddenly or gradually, apart from the occurrence of a fit. Complete double amaurosis is, however, rarely met with. Briquet has only seen it three times, M. Charcot hardly more frequently. On the other hand, dyschromatopsy, achromatopsy, and even complete amaurosis, of one eye are comparatively common.

A very interesting combination of symptoms, which M. Charcot has several times met with, is the following:—The patient is slightly analgesic in the trunk and limbs of one side; the corresponding side of the face is markedly or even completely anæsthetic. There is complete double achromatopsy, or at the most the patient sees the more peripheral colours—yellow and blue—fitfully with the eye of the opposite side.

The presence of achromatopsy on the side where the sensation is otherwise normal, as well as on the anæsthetic side, affords a clue to the explanation of amaurosis in certain hysterical patients, where all ordinary hysterical symptoms are absent or but slightly marked. It must be mentioned that, remarkable as they are, these peculiar modifications of vision are not met with only in hysteria, as M. Charcot pointed out some time ago.(c) He showed that they are met with in all their varieties in the monocular amblyopia associated with hemianæsthesia of general and special sensation in cases of cerebral lesions of the posterior part of the internal capsules in the region which he has called "the cross-roads of the sensory tract" (*carrefour sensitif*). In these cases there is the same diminution in the acuteness of sight; the same general and concentric narrowing of the field of vision for colours in both eyes, but much more marked in the eye opposite the lesion; the same absence of ophthalmoscopic signs. This form of amblyopia, then, belongs to cerebral hemianæsthesia in general, and not to hysterical hemianæsthesia in particular. It is easy to understand the interest—not only practical, but theoretical—which attaches to this relation between the organic and the functional conditions. From the situation of organic lesions capable of giving rise to general and special hemianæsthesia, we seem able quite easily to name the position of those lesions (inappreciable by our present modes of investigation)—those *dynamic* lesions, as they are still sometimes called—upon which depends the corresponding hemianæsthesia of hysteria. They are probably situated upon the fibres crossing the above-named region, or upon the prolongations at the surface of the brain, or perhaps both parts may be involved at once.

M. Charcot next called attention to another kind of visual disturbance first noticed by him a long time ago, and which, though by no means a rare symptom, has never hitherto been described. It is well known that very marked and very various hallucinations form one of the most ordinary accompaniments of hysterical delirium. M. Charcot finds that they may also be met with in the interval of attacks, following attacks, or perhaps at the time when a fit is about to come on. It is not uncommon to see hysterical patients sitting quietly at work, suddenly get up from their seat with a cry as though surprised at the sight of some frightful object which they wish to avoid touching. If asked why they have acted thus, they say that they thought they saw animals, rats, cats, or perhaps some fantastic shape, running over the floor, or on the neighbouring wall. At other times it is the sight of grinning faces which has caused their fright. The imaginary animals are generally black or grey in tint, sometimes, though rarely, of a bright red colour. In any given patient they always appear on the same side—the side which is hemianæsthetic, and consequently on the side where the modifications of colour-vision are most marked. The animals generally move rapidly one after the other, and as a rule they disappear as soon as the patient turns the eyes to the side on which the apparition is seen. It may, however, last much longer, especially if the patient is at a period of "nervous high tide," in the *état-de-mal*, or has recently had a fit. M. Charcot showed a number of patients who are liable to this particular form of visual trouble in a very marked degree.

(a) "Traité Clinique et Thérapeutique d'Hystérie," page 293.
(b) Charcot, "Leçons sur les Localisations Cérébrales," page 118.
(c) "Localisations Cérébrales," page 119.

Such, then, are the principal modifications of vision which are commonly met with in hystero-epilepsy, and even in ordinary hysteria. Many other visual symptoms occur in certain cases, such as defects of accommodation, certain forms of diplopia, etc., but these are rare.

LECTURES
ON THE PROGNOSIS AND TREATMENT OF CERTAIN VARIETIES OF CONSUMPTION.

DELIVERED AT THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

By JAMES EDWARD POLLOCK, M.D., F.R.C.P.,
Senior Physician to the Hospital.

LECTURE I.

GENTLEMEN,—On other occasions we have been occupied with the pathology and intimate nature of phthisis, and with the changes of nomenclature which modern views have necessitated. I want to engage your attention now on some of the actual clinical forms and varieties of disease, and to point out those agents which modify its course, so that we may be able to prognosticate its future with some degree of precision. The facts which will occupy us will be, so to speak, *living* facts, as distinguished from *dead* pathology; and I have the greater reason for omitting the latter as my colleague Dr. Green has lately illustrated this part of the subject for you with great minuteness.

I shall endeavour to place before you pictures of several forms of phthisis, and explain to you as I best can the reasons why they are in this form, and the natural history of their progress and termination. We shall have in the living specimens before you, and examine practically their condition, and these patients you may after the lecture examine for yourselves.

You have only to walk round these wards in order to satisfy yourselves that some of our cases are plump and rosy; some haggard and emaciated. Some are free from fever, expectorate slightly, and have little distress of any kind; others are worn down by hectic and profuse secretion. Some are hæmorrhagic cases; and others with extensive lung lesion lose no blood. Some are in the stage of cavity, or the consummation and extreme limit of lung-destruction, and yet look well and are fairly nourished; while others with less local mischief are dying of lung irritation.

Soon after Laennec introduced the accurate mode of discriminating lung disease by auscultation, the stethoscopists went about defining a man's danger by a ready but fallacious method, and many a patient was condemned as in the last stage of consumption when he had only a cavity in his lung. On searching all the books of this School I could never find a single indication as to the probable danger or safety, or ultimate progress, of any form of phthisis. And yet persons die in all the stages of consumption, and outlive them all! *How is this?* you will ask. And I now propose to try and answer the question, and to give you wider views and broader than any mere auscultator would offer. In fact, our question is not to be answered by the stethoscope, any more than the state of the kidney is to be decided on by nitric acid and a test-tube. Precision in physical diagnosis is a great and essential part of our knowledge, but the stethoscope cannot answer our question. You must take the physical signs and the history of the case together in order to arrive at a just conclusion; and even then precision is not attainable, for you must allow for the accidents or occasional incidents of phthisis, which may step in and overthrow all your calculations. When you see a case where the physical signs tell you there is disease in the lung, you want to know what is to be the issue; what the form which subsequent symptoms are likely to assume; and, if possible, *why* the issue and form are in a certain direction. This is the rational mode of viewing disease, and, as it is that which the public most commonly put to us, and on which most largely depend our reputation and success in practice, you will do well to avail yourselves of all possible knowledge on the subject.

There are, then, certain agents which modify the form and progress of phthisis, and render it, in fact, a disease of many varieties. Remembering that we shall always consider our case as *a whole*—that is, that we shall judge it by its history and antecedents, its actual effects on the system, and its physical results in the lung,—I shall first point out to you what these modifying agents are, and then show you the different forms of disease in living persons, and analyse the cases as we proceed.

Prognosis in consumption is founded on three kinds of facts—1. The pathological form of disease to which the case belongs; 2. The actual condition of the patient; 3. Influences affecting all cases of phthisis. It is, therefore, a forecast derived from the present phenomena, the past history, and a knowledge of the agents which modify phthisis in its course and issue. Such a forecast should always be present to you, but need not always be offered to the patient or his friends, and I shall have occasion to point out to you the periods of disease when doubts as to the result must and should prevail, and when no opinion can either be formed with precision, nor, of course, advanced with certainty. There is a golden period of silence when we can but say "Wait!" The acutest symptoms may become chronic, and the urgency of to-day may be followed, as phthisis is in general followed, by a period of subsidence and pause when nature attempts repair. Neither in the period of repair are we to forget the probability of fresh centres of infection leading to extended disease, nor of the accidents, so to speak, as hæmorrhage, congestions, and pneumothorax, which are possible to all our cases. In phthisis I should say that he is wisest who, with a sage knowledge of his patient's actual state and possible dangers, regards the future with less apprehension than hope, and remembers how rare are the more acute and how common the prolonged forms of the disease.

Take first the pathological forms of phthisis, and see how the form affects the progress. The rule seems in practice to be this: those alterations, exudations, or blocks in the alveoli of the lung which are most prone to rapid degeneration, and therefore to destruction of lung tissue, are found in the more acute forms of phthisis, and their existence implies rapidity. (I am not now considering acute miliary tuberculosis.) That which blocks the alveoli of the lung in *croupous pneumonia*, will, as you are aware, undergo such rapid fatty degeneration or liquefaction, that a lung which was quite solid will clear up in an incredibly short time, and leave the alveolar walls and the elastic lung-tissue quite unimpaired. We are accustomed to expect this in the ordinary acute pneumonia, and the danger of the patient is not always in proportion to the extent of lung rendered solid, but has a true relation to the product which blocks. For supposing it did not resolve? Why, an unresolved pneumonia of this kind generally means phthisis. Contrast it with a *catarrhal pneumonia* which blocks a portion only of lung—say one apex. Now, we know what often takes place. Epithelial sheddings and exudation matter fill the alveolus; next the walls become thickened, and cells develope in their interior—cells which degenerate; and then the exudation matter is found in the inter-alveolar connective tissue, strangling the nutrient vessels of the lung; and you have a very different state of things indeed from that in croupous pneumonia, for when the degeneration period comes (and none of these products live long), we have the blocked alveoli, the walls and the inter-alveolar tissue softened, ulcerated, destroyed—and the case becomes *phthisis*.

Again, *strumous* forms of deposit in the lung seem to have two modes of degeneration and rapid destruction, either involving a break-up of a nodular mass in the lung which often clears out like an acute strumous abscess in the neck, and leaves a hole or cavity in the lung; or it may undergo a slower caseation, or eventually even a *cretefaction*, the earthy portions alone remaining, and it may continue embedded there till a post-mortem reveals it, all unsuspected, perhaps in extreme old age. In the old pensioners at Chelsea, and in old people everywhere, these post-mortem memorials of lung attacks in early life are observed. Here we have evidence of great slowness, and even cure of local disease.

Next take what are called *fibroid* alterations in the lung; and every case of chronic phthisis has more or less of such. The leading feature here is a thickening of the connective tissue between the alveoli and between the lobules, an increased growth and extending development of a tissue which has peculiar characters, on which depend much indeed of the progress and result of all cases of chronic lung disease. What are these? You have a tissue slow to degenerate, slow to inflame. In dissections of old phthisical subjects, where every other tissue of the lung has ulcerated away, and you

find a mere bag divided into several cavities, with trabeculæ or tough bands crossing them, and binding them together by direct union with the thickened pleura, this fibrous tissue forms in fact all that remains to call a lung. For in these interlacing bands are found the obliterated nutrient vessels, the bronchioles, and the pulmonary artery branches. The cavities are lined by fibroid tissue which is continuous with the sub-pleural, and the ribs themselves are tied down to the lung or its remains by it. This fibroid tissue is eminently contractile, in early days of disease contracting the lung itself, helping to wall round and circumscribe cavities, and thus preventing extension of the degenerative ulcerative processes, and also opposing hæmorrhages, and preventing pneumothorax. If it were not for it, few cases of phthisis could escape those two appalling accidents—broken vessels and ruptured pleura. To understand fully its influence in chronic diseases of the lung, contrast the elastic healthy lung, with its double circulation, its incessant movement and free play in the pleural cavities, with the lung of chronic phthisis, bound down by pleural adhesions to the ribs, contracted by fibrous bands crossing its structure, many of its bloodvessels from both systemic and pulmonary sources strangled, its elasticity almost gone, and its structure hardened and pigmented. These latter changes are mainly due to fibroid alterations, which have checked and bounded the ulcerative processes at the expense of the elasticity of the lung. See, then, its value: it is an agent of slowness, of resistance to the devitalising processes of consumption, and wherever it is found you may infer prolongation. With it I class the *rheumatic* and *syphilitic* changes in the lung, because (especially rheumatism, of which we know more) they cause thickenings of the lung, accompanied by more or less fibroid formation, and are slow to take on active degenerative changes. If you ask me by what external character during life you can recognise these fibroid alterations, I point to *contractility* as the feature which prevails in all the varieties of this class. The chest-walls are contracted; the whole of one side will be flattened; a portion of the parietes falls in over a cavity, or over a series of destroyed alveoli; the heart is drawn up on the left side, is drawn across to the right side; the diaphragm is updrawn, and the liver on the right, etc. These are all evidences of fibroid alterations, due to its mechanical and vital property of contractility. Again, the hypergrowth of the ends of the fingers (as seen in this cast) is only a hypergrowth of fibroid tissue: and wherever you see this hand you may argue fibroid alterations in the chest, mainly in the lung; but also when the fibro-serous pleura or pericardium have undergone like changes.

A New Living Double Monster.—In the *Wiener Med. Wochenschrift* for December 8, Prof. Heschl furnishes the description of an examination he has made at Vienna of a living girl, seventeen years of age, who exhibits an example of a still rarer form of monstrosity than the Siamese Twins or the Two-headed Nightingale, inasmuch as in her case the formation, in place of the upper part of the body being double as in their cases, consists in a doubling of it only below the second lumbar vertebræ, the upper portion resembling that of a pleasing delicate girl of from ten to twelve years of age. The case is a specimen of Förster's *Dipygus tetrapus*.

Transfusion in Uterine Hæmorrhage.—Dr. Rossi relates the case of a woman thirty-two years of age, to whom he was called on account of profuse hæmorrhage coming on the eighteenth day after delivery. In several prior labours she had uterine hæmorrhage; but in the present one all had gone on well until now, although she was in a very weakly condition. The os uteri was found to be too close to admit the finger, and hypodermic injection of ergotine and plugging were resorted to. The hæmorrhage ceased temporarily, but her state of collapse became so fearful that the only doubt as to the propriety of employing transfusion was whether she was not too far gone to resort to it. However, it was resolved upon, and about 150 grammes of lamb's defibrinated blood were injected. Great reaction ensued, and after this had subsided, on a vaginal examination, a portion of placenta, the size of a crown-piece, was extracted with some difficulty. The patient eventually did well.—*Annali Universali di Medicina*, December.

ORIGINAL COMMUNICATIONS.

THE ROMAN FEVER.

By JOHN SULLIVAN, M.D., M.R.C.S.

(*Continued from page* 33.)

The following diagnosis between malarial, subcontinued, and typhoid or enteric fever, is founded upon a study of the essays of the principal Italian writers on the Roman fever, more especially on that of Professor Baccelli, upon conferences held frequently with many Italian physicians of eminence, and, finally, upon observations made, and notes carefully taken, during my frequent visits to the principal hospitals in Rome.

Subcontinued fever begins as an intermittent, a simple or double tertian, or it may begin in a subcontinued form—that is, with slight or obscure intervals between the paroxysms.

Typhoid fever begins as a continued and remittent. There is common pyrexia without paroxysms or intermittence, with a remission in the morning and an exacerbation in the evening. The temperature keeps on increasing progressively, and does not reach 40° C. before the third, fourth, or fifth day.

In *subcontinued* the temperature reaches 40° C. at the onset. This makes a very important distinction between the two fevers.

As the condition of apyrexia or frank intermittence becomes less and less pronounced, this malarial fever becomes pseudo-continued or subcontinued, and, by those unacquainted with the use of the thermometer, might be set down as a remittent fever, but it is truly and absolutely an intermittent, masked and obscured, one paroxysm scarcely subsiding before another sets in. Headache is rare; pains in the head and face are neuralgic and shifting; the sclerotic coat has a yellowish tinge, and the pupils are generally contracted.

In *typhoid*, the pain in the head, especially the forehead, is generally constant, the eyes are fixed and glassy, expression of face appalling, cheek-bones red, tongue tremulous, mucous membranes parched, maculæ on the gums, sordes on teeth, fauces pale and anæmic.

In *subcontinued*, countenance natural, no stupor, no sordes; aphthæ may appear towards the end; no tremor of tongue, gums bluish, no deafness, breath nauseous. Delirium may supervene previous to a paroxysm of fever, and then may disappear, to give way to some grave symptom, but is never constant.

In *typhoid*, the breath is fetid. Delirium never sets in at the beginning, but when it does appear it is constant.

In *subcontinued*, cough is rare, except in the pneumonic complication, when there exists a neuro-paralytic congestion of the respiratory system; the sputa are dark and hæmorrhagic.

In *typhoid*, true pneumonia is often determined to the posterior part of the lung, very different from the pneumonic form of subcontinued Roman fever. In this latter the chest affection is changeable and shifting, and this constitutes an important distinction between the pneumonia of typhoid and the pneumonic form of malarial subcontinued.

The anxiety during respiration is greater than in typhoid, and this depends on the paroxysms of fever, on alternations of temperature calculated to aggravate the lung affection, quite the reverse of what occurs in true pneumonia.

There is great uneasiness and jactitation of body. Whereas in *typhoid* there is stupor, and a condition different from that of agitation. There is oppression of the respiratory muscles, due to the comparative immobility of the diaphragm from the tension of the hypochondria and the excessive tympanites of the abdomen. There is pain on pressure, gurgling sound in left iliac fossa, characteristic diarrhœa, and peculiar skin eruptions.

Whenever the pulmonary circulation is obstructed by any organic or functional condition of the heart or lungs, even independant of the effect consequent upon the absorption of malaria, the liver becomes enlarged; and when influenced by the miasmatic poison, the biliary ducts from catarrh are clogged, and jaundice sets in—a condition which we always observe in a greater or lesser extent in *subcontinued* fever.

This engorgement of the liver may be induced, as Professor Baccelli observes, by the slowness of breathing and

diminished muscular action of the diaphragm, which does not assist in the emptying of the hepatic veins into the vena cava, and thus all the intermediate circulatory apparatus is filled and gorged with blood.

This congestion of the liver may also arise from mechanical causes, or from neuro-paralysis and reflex action, and that general condition of the organism peculiar to marsh fever, in which the liver is not primarily but secondarily affected.

The condition of the spleen, passing from hyperæmia to congestion, from this to hypertrophy, and to its ultimate degeneration through the influence of marsh miasma, deserves great consideration. When the paludal action is slow but continued, although there may be no febrile action, the spleen gradually enlarges, until it attains an enormous size. If the malarial cause be violent, but not continued, the system becomes subject to a series of periodic febrile paroxysms of short duration. The spleen conspicuously increases in volume with each access of fever. This having ceased, the capsule of the spleen contracts, and the organ returns to its original compact size and form. On every new access and decline of fever, the spleen enlarges or diminishes in volume; so that its condition, passing from hyperæmia to congestion, and from this to complete disintegration, becomes an index or criterion of the injury sustained by the system through the action of malaria in its various grades of intensity. When the poison is intense and persistent, the spleen no longer swells; it becomes hard, small, and ultimately soft, when its texture breaks up.

Such is the condition of the spleen in marsh cachexia, striking instances of which may be seen any day in the well-conducted Hospital of Santa Espiritu in Rome, in patients principally from the Campagna; and this may be detected during life as well as after death. In typhoid, the spleen, when affected, remains enlarged during the course of the disease. In subcontinued it may alter in size and become atrophied and softened; in this pernicious form we often detect—but never in typhoid or enteric fever—the black pigment in the secretions, the convolutions of the brain, and in other organs of the body.

The subcontinued malarial fever is intermittent and transitory; typhoid is progressive and constant. The former runs no determined course; the latter always does. Typhoid has its exacerbation on the third day, not on the first, as we see in subcontinued. The symptoms of the first week do not resemble those of the second, neither do these resemble those of the third. This we never observe in subcontinued, in which many of the phenomena peculiar to typhoid may appear; but they are transitory, more apparent than real. Hence we often find a patient in a state of outward stupor or collapse, when all on a sudden he will start up, or move his feet and arms with violent muscular action; while to the medical attendant the skin will feel cold, the patient complains of feeling great heat.

It has been calculated that 85 per cent. of typhoid cases occurring in Rome are imported from Naples, or from some other town in Italy, to be developed in Rome, with or without any malarial complication; and Dr. Pantaleoni tells me that cases of subcontinued malarial fever in Rome occur at the end of summer and beginning of autumn; whereas cases of typhoid are seen towards the end of winter and beginning of spring.

It has occurred to my mind, especially after an attentive perusal of the valuable work of the great Italian writer Torti, on Pernicious Fevers, that the names given to many diseases of malarial origin—as the bilious remittent fever, the Roman subcontinued, typhoid, etc.—tend to create confusion, and often to induce false notions respecting the nature of those diseases. I am, therefore, inclined to believe that our notions respecting the varied forms of marsh fever might be greatly simplified by always bearing in mind that the essential character and nature of malarial fever is intermittence. Marsh miasma produces nerve-irritation, followed by nerve-paralysis; and this influence is manifested by a paroxysm of fever, consisting of three distinct stages. Then follows intermittence, or a complete cessation from febrile disturbance, until the paroxysm be repeated by a fresh accumulation of the poison from without, or in a latent state within the system. But when, from the intensity of the cause, from a constant exposure to its effects, or the dangerous nature of the complication, the first access of fever is not completed before another sets in ("*subintral*," as Torti expresses it), the fever becomes *subintrante*, subcontinued or pseudo-continued, until, at last, no trace of frank intermittence can be distinguished. But the type is truly an intermittent, though the fever is subcontinued or apparently continued, and during convalescence it will revert to its original intermittent type.

Now, judging of this so-called Roman fever by the test of intermittence, we shall be enabled to describe it as a "pernicious pseudo-typhoid fever." By pernicious is meant an intermittent fever accompanied by some prominent characteristic symptom, dangerous to life, obscuring or obstructing its original intermittence. The bilious remittent of the Indies, or on the coast of Africa, is a liver complication of marsh fever, rendering it pernicious; now, if we apply the same test, we may describe it as a "subcontinued bilious malarial fever," the affection of the liver endangering life, and obscuring the intermittence essential to its nature, not allowing one access to pass away before another sets in. True intermittence cannot be remittent; non-malarial fevers may take the form of remittent, but any apparent remission in a malarial fever must proceed from some impediment to the development of intermittence, through the intensity of the poison, or from some complication rendering it pernicious.

As intermittence cannot be constant, neither can the phenomena of an intermittent be constant. Now, typhoid fever is continued without remissions; so are its phenomena or symptoms constant, not transient, as in intermittent malarial fever.

As, therefore, this misnamed Roman fever is malarial, not typhoid, and seldom occurs except among the poorer classes from the Campagna, travellers have no occasion to dread it; they need only adopt the most ordinary precautions to guard against the effects derived from soil which by its nature disposes to intermittent fever, especially during the hot seasons of the year.

To a disinterested observer, who witnesses the sanitary improvements daily carried out on a large scale, who carefully examines the monthly statistics of mortality, which in the most sickly months of the year 1877 did not exceed twenty-three per 1000, the city of Rome will appear not only one of the most interesting, but also, during the cool seasons of the year, one of the most healthy cities in Europe.

Rome.

A CASE OF OBSTRUCTION TO THE LACHRYMAL PASSAGES, WITH OZÆNA, DUE TO SYPHILITIC RHINITIS.

By W. SPENCER WATSON, F.R.C.S.,
Surgeon to the Central London and Royal South London Ophthalmic Hospitals, etc.

The following case may be taken as a typical one. Similar cases occur not unfrequently in hospital practice, but it too often happens that the patient becomes tired of the necessarily prolonged course of treatment, and is lost sight of before the cure is complete. Failure to remove the obstruction in most instances results from the too great reliance placed by surgeons on merely mechanical treatment; and when syphilis or scrofula are present, the omission of constitutional remedies is fatal to any possibility of a successful result. Local treatment must nevertheless be most vigorously enforced, though not in the upper part of the obstructed passages in the first instance. Antiseptic douches are the remedies of primary importance, and should be used before any attempt is made to dilate the supposed obstructions in the lachrymal sac or nasal duct. A Higgenson's syringe fitted with an indiarubber nasal nozzle(a) makes the best form of douche apparatus. It can only be said to have been effectually employed when the stream injected through one nostril passes entirely out of the opposite nostril; and this can easily be done if the patient is instructed and trained to use it while breathing through the mouth only.

Mr. C., forty-five years of age, came to Mr. Spencer Watson in February, 1876, with watering of the right eye, associated with a feeling of obstruction in the right nostril. He had at that time a pallid, anæmic aspect, and a languid and feeble gait; his gums were sore and inclined to bleed. Four years

(a) This apparatus can be obtained of Messrs. Krohne and Sesemann, Duke-street, Manchester-square.

before, he had suffered from an attack of inflammation of the eyes in the course of secondary syphilis, the primary symptoms having occurred two months before. About nine weeks before presenting himself, he noticed the watering of his right eye, and the escape of a yellowish-red discharge from the right nostril, which he felt to be obstructed. He had also at times a severe pain (described by him as neuralgic), which affected the head as from an ordinary cold. Traces of iritis were visible in both eyes. On passing a nasal speculum, an ulcer of the septum was seen running obliquely downwards and forwards, the adjacent parts of the mucous membrane being thickened, so that the edges of the ulcer were somewhat steep and abrupt. The surface of this sore was covered with a dirty grey lymph-like serum, which seemed inclined to dry into a scab. A yellowish matter exuded from the nostril, and had a somewhat fetid odour, but not such as is generally associated with dead or carious bone.

On February 18, Mr. C. began taking five-grain doses of iodide of potassium in decoction of sarsaparilla, at the same time using a douche with permanganate of potash and common salt, and applying dilute nitrate of mercury ointment to the inside of the affected nostril.

On February 25 he began taking five-grain doses of common calomel pill every alternate night in addition to the iodide.

Under this treatment his general health improved, the obstruction in the nostril diminished, the ulcer became more healthy-looking, and the discharge less copious and less offensive; but, notwithstanding these signs of general amelioration, the lachrymal sac became much swollen about March 4, and the increased fulness and hardness in this region prevented its being emptied by pressure. Up to this time the patient had always been able to press the accumulated mucus downwards into the nose, and so to cause the disappearance of the swelling.

Mr. Watson now laid open the lower canaliculus of the right eye, and passed a probe, but not into the sac itself.

On March 5 he succeeded in passing a probe into the sac, and on the 8th quite into the nasal duct.

From this date the progress continued steadily and slowly. The ulcers in the nostril gradually healed, and on June 10 he had discontinued the mercury for some weeks, having commenced the syrup of the iodide of iron. At this time there was little or no discharge, and no overflow of tears from the lachrymal sac. Probes had been passed from time to time, until a full-sized Watson's probe was passed easily. The douche was still used night and morning, and although there was occasional fetor, it had very much diminished.

October, 1877.—During the latter part of 1876 he continued to have probes passed occasionally, and up to this date they are used about once in six or eight weeks. He has no epiphora, and wishes the probe to be passed rather as a precaution, and to prevent the possibility of a return of the stricture. He continued the iodide of iron for some months, and then resorted to cod-liver oil. His health became rapidly re-established, and is now excellent.

A somewhat similar case to the above was under Mr. Watson's care at the Central London Ophthalmic Hospital. In this case both nostrils were affected, and the septum had become perforated by ulceration before the commencement of treatment. Under a course of iodide of potassium with mild mercurials the condition of the nostrils rapidly improved, and the treatment by mechanical dilatation of the nasal ducts (both of which in this case were affected) was proceeded with. The patient was perfectly relieved, though before the use of remedial measures the obstruction in the lachrymal passages had led to large abscesses and fistulæ in both lachrymal sacs.

Remarks.—From these and other similar cases I am inclined to think that the constitutional treatment of lachrymal obstructions is quite as important as the mechanical measures, and that the condition of the whole tract of mucous membrane from the conjunctiva to the nostrils is at fault in the worst forms of mucocele; that the obstruction, in fact, depends rather upon a uniform narrowing of the whole extent of the series of channels, than upon a stricture limited to one or two points. Nevertheless, there can be no doubt that in the later stages there are certain points in the lachrymal sac which are more likely to become permanently closed, and hence we often find a tight stricture either at the opening of the canaliculi into the sac, or at about the lower third of the sac itself. When, however, there is a strongly marked syphilitic or scrofulous swelling of the mucous tract, it will be very difficult to overcome the epiphora, or to heal up the fistulæ of an abscess, without very careful attention to constitutional treatment. When the constitutional condition has improved, mechanical treatment will often be necessary, and will have a much better chance of succeeding than if attempted without this preparation.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

LONDON HOSPITAL.

NOTES ON MR. HUTCHINSON'S CLINIC.

(Reported by Dr. Waterhouse.)

1. *Extensive Ulceration of Soft Palate, Fauces, and Throat.*—The discharge is not purulent, but rather a pultaceous sloughy mass, more like a pellicle. This ulcer has the ordinary phagedænic character of a syphilitic growth which ulcerates. Syphilitic ulceration is often phagedænic, and, when so, may be rapid and spreading; it is, however, amenable to treatment, and quickly heals without tendency to relapse. Now, strumous ulceration is slow—slow to heal, intractable, and liable to relapse. The remains of a chancre on the glans penis is seen here as an excavation (which could only mean phagedæna), and a chain of hard glands is felt in either groin. Glands somewhat similar to the touch are felt behind the sterno-mastoid on one side; but this is not at all diagnostic, for these glands will swell in ordinary sore throat. There were no nodes on the tibiæ or other bones, nor was pain felt on striking the shins with moderate force; no nocturnal pains or alopecia. Patient says that he had gonorrhœa when twenty; he is now fifty-three. Treatment in this case will be pot. iod. gr. v., with sal-volatile gr. x., t.d.s. If the throat does not improve with this it will be cauterised with the acid nitrate of mercury.

2. *Hard Chancre of Lower Lip.*—Patient says that he burnt his lip three weeks ago with a cigar; the burn healed, but the lip, at the seat of injury, has been lately getting worse. The sore is now almost diagnostic; every day will make it more so. A week ago we might have doubted, but now the circumscribed swelling and hard ring (with commencing ulceration and scab of blood and pus) indicate its true nature. It is syphilitic—it is, in fact, a chancre on the lip. Has he a rash? Patient said not; but on uncovering the chest and back a sufficiently pronounced rash is seen. Now, as a syphilitic rash does not itch, patients will often be unaware of a rash till their attention is directed to it by the doctor. One would say at first glance this is a syphilitic rash; it would be by itself strong presumptive evidence of syphilis. It is all over (symmetrical) papular as yet, dusky and shining. But a rash, being a secondary symptom, is seldom seen till five weeks after the chancre. It was subsequently ascertained that there were grounds for believing the lip to have been exposed to local contagion at about this time—*i.e.*, two weeks before the alleged burn.

3. A robust young man of twenty-three came into hospital for *Swelling of the Scrotum* and a *Rash* on its surface and on the adjacent part of the thighs. The swelling was diagnosed as œdema. Now, this œdema of the scrotum is comparable to œdema of vulva in the female from venereal sores. In the present case scars of old chancres are seen about the corona and on the contiguous part of the prepuce; they are all small, round, depressed scars, and some are indurated. Characteristic "bullet" glands are felt in both groins, of almost stony hardness, with no involvement of the skin. The spots on the scrotal surface and thighs are mostly papules resembling mucous tubercles, and others have broken down into small roundish superficial ulcers, with a thin, ill-smelling discharge. From its localisation we should call this rash an intertrigo; but, considering the nature of the case, we call them condylomata which occur usually on mucous surfaces, or parts of the skin where the secretion, as here, is abundant. A fading rash is seen all over the body, which patient seemed unaware of; circular scars are seen on the legs, accumulated especially about the knees. There is no sore throat, alopecia, or iritis. Patient was exposed to

contagion nine months ago. The chancres appeared in a few days, and were healed with specific treatment in three weeks. Patient says he has been quite well since then till seven days ago, when the present condition came on.

Can we infect from such sores as these? Certainly, if we draw blood; if pus alone, we may get only pus-contagion. The blood certainly contains the virus, but not so the pus. Yet there might be some virus in the pus, and, on the other hand, possibly some of his blood might escape it. But the probability is that nearly every blood corpuscle and all his tissues are infected and would inoculate. The scrotum here is just in the condition in which elephantiasis scroti may begin: the œdema becoming chronic.

Syphilitic Eruptions.—Case of a youth with syphilitic rupia all over. In some spots we see the "limpet-shells." Some are older scars; all are circular. We do not get "limpet-shells" well marked in all the spots. The rash is of a dusky coppery hue. Now, this depends upon the complexion. A fair man will not have such a coppery syphilitic rash as a dark-skinned man will, for it is the pigment in the blood that makes this dusky colour. We may observe also that there will be a greater tendency to pigmentation around the remains of old scars in the lower limbs than elsewhere, due to the anatomical site and the difficulty of venous return. Hence, also, we see the preference of ulcers for these parts rather than other regions of the body. In the present case large excavated ulcers with sloughy bases were seen over the tibial crests. Now, it depends on the constitution what sort of syphilitic rash a person will have—whether it shall be a psoriasis, a lichen, a rupia, etc. The syphilitic poison seems to disagree more with some constitutions than with others, causing in some a slight roseolar, in others a severe ulcerative rash.

Syphilitic Teeth are not invariably found in the subjects of inherited syphilis, for if there has been no stomatitis in infancy the teeth will not be thus characteristically deformed. A woman was shown with suspicious teeth; the upper central incisors were very slightly and nearly symmetrically notched, and very slightly shaved off at the sides so as to approach the screwdriver rather than the chisel shape. Although so slight, these signs are very definite, and form strong presumptive evidence of specific taint, even though there be no other indication of it. A tooth may be considered as made up of three denticles; take away the middle one (illustrated by three figures), and the two outer ones will then fall inwards, accounting for the narrowing of the cutting edge as compared with the base, and also for the notch.

A girl was then shown with characteristic *Mercurial Teeth.* The incisors were all stumpy, seamed across, and discoloured (yellow). The seamed appearance is very peculiar, and is as if a band had been tightened on the teeth when in a soft state, leaving a transverse seam. The canines in both jaws are thinned away, leaving quite sharp little points. But this pointed surface is still more noticeable in the first molars, which are the test-teeth here, just as we look to the upper central incisors as the test-teeth in the syphilitic malformation. All the first molars here are decayed, but differ from what is seen in caries, which so commonly early attacks the four first molars, in that the four cusps of each tooth are seen sticking up as little sharp points. In this malformation the bicuspids are generally wholly unaffected. In the present case one bicuspid was slightly carious.

A boy was also shown whose upper central incisors were serrated, but the fact that they were *large* and spreading out towards the cutting edge—so different from the true syphilitic (screwdriver) type—would indicate struma rather than syphilis. The boy had also a markedly strumous aspect.

Syphilitic Nodes, occurring in inherited disease, differ from the nodes of acquired disease, in being seldom painful, often symmetrical, often on the arms as well as on the legs, but seldom on the clavicle or skull. They do not seem to be easily affected by anti-syphilitic treatment (iodide of potassium), like those of acquired syphilis; but they are apt to disappear spontaneously, quite irrespective of treatment, just as the cornea clears in keratitis. These nodes may be very large, and simulate tumours of bone. One case was quoted of a young child, in whom there was a mass as large as a fist growing from the femur, which quite disappeared without treatment (?). In illustration of these nodes as secondaries, a boy, the subject of inherited syphilis, was then shown. Swellings were seen over the tibial crests which were not, and never had been, painful; a similar swelling was felt at the end of left humerus; there had also been a similar one on the other side, but the right elbow had been excised for extensive syphilitic joint-disease. Nodes of this description, occurring in the young, are to be considered more in the light of a secondary than a tertiary symptom. They are very often symmetrical, and they exhibit the tendency to spontaneous disappearance which is rarely or never shown by true tertiaries. It is the same with interstitial keratitis, which is almost invariably symmetrical, though it occurs so late in life. Now, this keratitis is very rare in acquired syphilis, but occurs, if it do chance to happen, in the early period, and not amongst the tertiaries. The latter are rarely symmetrical, and these are best understood if we regard them simply as the rekindling of disease in previously damaged tissues. A man who has passed through the fever of syphilis has his tissues damaged ever after, and is liable, on the receipt of injuries, to develope tertiary symptoms. The fleeting pains that a man in the secondary stage will feel in his tibiæ and elsewhere are sufficient proof of a change going on—a cell-derangement, a periostitis, which gives the *locus in quo* of this rekindling of the disease in a later stage as a true tertiary symptom. As to symmetry, there is no reason why tertiary symptoms should *not* be symmetrical; but what we say is, that secondary symptoms *always are* so.

Gout and Rheumatism.—If a man has had a sudden swelling of the great toe, with great pain, œdema, and glossiness of skin, disappearing in ten or fourteen days, you may be sure that man has had an attack of gout. The reason why it attacks the great toe (joint) is because this is the most abused joint in the body. Even when it begins to be painful, one goes on using it. The swellings of joints in gout are soft. Probably the deposit which is found here (lithate of soda) is thrown down during the inflammation. Garrod thinks it is deposited first, then excites inflammation. However this may be, if you cut into such a joint afterwards, you find the abnormal condition. Cartilage may be ulcerated away; this is rheumatic. Now, gouty people are generally rheumatic—*i.e.*, they inherit the rheumatic (arthritic) tendency (for rheumatism is very hereditary). But the reverse does not hold—*i.e.*, rheumatic people are not necessarily gouty; the gout is something superadded to the rheumatic diathesis. It is dyspeptic; it means mal-assimilation; it has to do with stomach, liver, and kidneys. When a gouty subject has an arthritic (*i.e.*, a rheumatic) tendency, his gout will manifest itself in the joints; if otherwise, his joints may escape, and he may suffer only from dyspepsia, neuralgia, etc. On the other hand, give a rheumatic subject diseased kidneys, and he will very likely have gout. We see, then, that gout is in relation to the kidneys, or more generally speaking, is in relation to increase of waste matter (nitrogenous and saline in the blood). Hence gout does not necessarily mean diseased kidneys. It may first be the result of altered living, or of growing old and taking consequently little exercise. Rheumatism and gout are so intimately connected, that if the subject of gout has not had rheumatism, probably his relations have. In both there must be a predisposition before some exciting cause (such as a blow on the knee in gouty synovitis, or exposure to cold in rheumatic fever) causes a manifestation of it, just as a blow on the leg will cause a node in a syphilitic subject. Rheumatism is more a nervous disease than a hæmic one. The lactic acid theory is very conjectural; it is more likely due to some spinal condition causing a multiple arthritis. The rheumatic diathesis, then, means a condition of nervous system which is highly susceptible to weather and external circumstances. It is therefore climatic. Gout, on the other hand, is dietetic, and is to be treated accordingly. Gout is frequently attended by disease of the vessels, and there is always a liability to their rupture. Hence red patches on the conjunctiva from ecchymoses, and epistaxis, are not uncommon in gout. A certain kind of retinitis, called hæmorrhagic, and characterised by numerous effusions all over the retina, each one being flame-shaped, is quite pathognomonic of gout.

Rheumatoid Arthritis occurring in an elderly man who had fallen in an apoplectic fit and struck his shoulder. This was four months ago. There is now localised pain on pressure over the coracoid, and pain on abducting the arm, but movement in any other direction is not painful. A sound like bony crepitus is heard on movement. Now, the crepitation in rheumatoid arthritis so closely resembles bony crepitus, that if the injury had been more recent it would be difficult to

exclude the suspicion of fracture. But considering the lapse of time since the fall, and also the existence of some crepitation in the other shoulder on manipulation, we conclude that this is a case of chronic or rheumatoid arthritis. And one should bear in mind the great liability of elderly people to this disease, which often exists quite unknown to the patient. A common symptom is the limitation of movement in some one direction, as in the case in question. Now, we must distinguish two kinds of chronic rheumatic arthritis. In one form many joints are attacked—it is, in fact, a polyarthritis, and is met with not unfrequently in young people. The other form is called senile, because it occurs in elderly people, and differs from the first kind further in attacking generally only one joint instead of many. Both kinds are deforming, but the senile variety merits the term "arthritis deformans," owing to the new growth that takes place in the joint. There is eburnation, the cartilage dwindling down and leaving the bone bare, smooth, and like ivory; the synovial fringes get thickened, and this, together with loose cartilages in the joint, is quite sufficient to account for the crepitus. At the junction of cartilage and the periosteum "osteophytes" are apt to grow, thus forming the projecting "lips" so often observed on the condyles of the femur in old persons. There is no such eburnation and outgrowth in the multiple variety. This form is a persistent general rheumatism, and is perhps even more crippling than the true "arthritis deformans."

Relations of Rheumatic, Gonorrhœal, and Syphilitic Iritis.—Patient with well-marked iritis; admitted a gonorrhœa; had also been exposed to cold, to which he attributed his iritis. Neither he nor his relatives had had rheumatic fever or rheumatic pains. Now, when we speak of rheumatic iritis we do not refer to rheumatic fever—that kind of rheumatism has no tendency to involve the iris,—but we mean that kind of rheumatism which attacks subjects of the arthritic diathesis, viz., chronic joint-affections, sciatica, lumbago, etc. But it is probable that most of the cases of so-called rheumatic iritis are really due to gonorrhœa. Why gonorrhœa should tend to make the iris or joints inflame we cannot tell, but that it does so is a clinical fact. A case was quoted in which patient had six attacks of gonorrhœa, and after each attack he suffered from iritis. Now, iritis occurring as the result of syphilis is a secondary symptom, and does not recur; but gonorrhœal iritis does tend to recur.

The treatment of iritis is very important, for the sight may be entirely lost. Our object in treatment is to get the iris to contract, for if it do not contract, effusion and deposits will gather behind and impair the lens. A strong solution of atropia must be used, dropping it in every ten minutes for two hours, and mercury to be administered internally.

Analysis of the Milk of an Esquimaux Woman.—Among the Esquimaux who are at present at the Paris Jardin d'Acclimatation is a young mother who is suckling two infants. Dr. Couderean undertook the analysis of her milk in order to compare it with that of Europeans. He found that while it contains a smaller proportion of salts, it is richer in sugar and especially in fat. This richness in the hydrocarbons accords with the habitual regimen of the Esquimaux, who resist cold by the consumption of an enormous amount of fatty bodies.—*Union Méd.*, January 12.

Digitalis as a Diuretic.—M. Hérard, during a discussion at the Société de Thérapeutique, stated that he administered digitalis after maceration, this being by far the best mode. He macerates twenty-five centigrammes of coarsely powdered leaves in 200 grammes of *cold* water for twelve hours, and carefully strains. This is given in five or six doses, at a distance from meals, is usually very well tolerated, producing no nausea or gastralgia, and can be continued for five or six days, or longer. This twenty-five grammes should rarely be exceeded, as experience has taught him, having formerly employed much larger quantities. Given in this way the effects are often marvellous, a powerful diuresis ensuing, during which from six to ten litres of urine may be passed in the twenty-four hours, the patients being resuscitated, as it were, into a comparatively good condition. M. Bucquoy said that he preferred M. Hérard's old dose of seventy-five centigrammes, suspending the medicine at the end of four days; but M. Moutard-Martin has, like M. Hérard, diminished the doses he formerly prescribed.—*Journal de Thérap.*, January 1.

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Medical Times and Gazette.

SATURDAY, JANUARY 19, 1878.

THE ADMISSION OF WOMEN TO THE UNIVERSITY OF LONDON.

The meeting of Convocation of the University of London, on Tuesday last, which met to consider the new Supplemental Charter for the admission of women to degrees in all the Faculties, was, perhaps, the largest that has ever assembled at Burlington-gardens. No fewer than 374 graduates voted, and it was evident that no labour had been spared by either party to bring their supporters forward. There cannot be much doubt that an extraordinary effort had been made by the Arts graduates, who mainly sympathise with the women; and the Medical party, who fought at once for their University and their profession, found themselves sadly in the minority. The Charter was "approved" by the House by 242 votes to 132; and Convocation thus expressed its willingness that women should be admitted to all the degrees of the University as men.

The new Supplemental Charter grants enlarged powers to the Chancellor, Vice-Chancellor, and Fellows (that is, the Senate), so as to enable them to examine women, and, after examination, to grant to women any degree or certificate of proficiency which they have power to grant to men. A proviso, however, is attached at the end of the Charter—that no female graduate of the University shall be a member of Convocation, unless and until Convocation shall have passed a resolution for their admission.

The interesting and warm debate that followed the proposal to approve the Charter will be found reported at length on another page. Mr. Bompas, Mr. Hensman, Mr. Osler, Mr. Fitch, Mr. Farrer Herschell, and Dr. Pye-Smith were the principal advocates of the Charter; while Dr. Tilbury Fox, Mr. Tyler, Dr. Quain, Sir William Jenner, Mr. Lister, Dr. Wilson Fox, Dr. Bucknill, and Dr. Moxon strongly opposed it. It was evident, almost from the first, that the general feeling of the House was in favour of the

Charter; and it very soon appeared that the majority of the graduates were ignorant of the relations of Senate and Convocation, either forgot or ignored their previous resolutions respecting privileges, and believed that Convocation had gained a victory in wringing the Charter from the Senate. Mr. Farrer Herschell's speech confirmed this feeling. One by one he cleared away, as side-issues, the various other questions that had grown up around the question of the admission of women, and persuaded Convocation to neglect them for the present. In vain had Dr. Tilbury Fox argued that Convocation had never before resolved to admit women to the same degrees as men, but only to "degrees in the University"; that there was no evidence of the nature of the education best suited for women; and that the Chancellor and the Senate had acted ungenerously towards Convocation throughout the whole agitation, and were unworthy of its support. In vain did Mr. Tyler laugh at "women-bachelors" and "educational hermaphrodites." In vain did Dr. Quain point out how women themselves would suffer when brought into competition with men; and how the University would suffer when the revolutionary movement should have proved a failure in all the Faculties, and ruinous from very scandal in the Medical Faculty. Sir William Jenner appealed to the hearts of the members, for the sake of their daughters and their sisters, not to send women up to dissect and be examined on surgical pathology along with men; and the other speakers whom we have named used powerful arguments. But all in vain. Dr. Pye-Smith, in a very able speech, supported Mr. Herschell's appeal that the main question should be settled, once and for all; and that the chance of the "other reforms" should not be imperilled by delay through defeat of the present. The result was a majority in favour of the Charter of 110.

Thus the University of London has resolved to ask the Crown for powers to grant degrees to women as it now grants them to men. Mr. Herschell drew the attention of the House very distinctly to this point—that the Charter is permissive, and not compulsory. The regulations for the examinations have still to be framed; and it is to be hoped that the Senate, in deference to the feelings of a large number of the graduates, will so modify the present arrangements, in the application of them to women-candidates, that competition between the sexes shall as far as possible be avoided, and that propriety shall be preserved. We doubt, however, how far the latter object can be attained, for if women are to receive the ordinary degree of Bachelor of Medicine or of Surgery, they must be examined on all the subjects—anatomical, physiological, and pathological—the same as men. We confess we fear that many of the distinguished men now examiners in these subjects would be ashamed to meet and examine certain of the lady-candidates that might present themselves. Let the Senate therefore make, as far as possible, provision in these directions, but always in such a way as in no point to deteriorate the value of its degrees. In Dr. Pye-Smith's resolution, carried after the adoption of the Charter, Convocation pledges itself to proceed immediately with the consideration of the "other reforms." When Convocation shall have secured larger representation on the Senate, and a voice in every radical change in the University, it may be able to express its opinion on the application of the new Charter, so that, as Mr. Herschell suggested, the powers conferred on the University may be put in force in a way satisfactory to themselves. Last week we opposed the Charter because the evidence concerning the wants and circumstances of female education appeared to us to be insufficient. We trust now that the Senate will for a time be satisfied with having acquired its "powers," and will not proceed to use them before it shall have full information upon the whole subject. Meanwhile the graduates should secure as soon as possible the other reforms which the University so urgently requires.

THE TEACHING OF PRACTICAL MEDICINE: CLINICAL INSTRUCTION.

In turning again to Professor Gairdner's *brochure* on what might be called the principles and practice of clinical teaching, we advert to the opening address to the Class of Clinical Medicine in the Infirmary attached to the University of Glasgow. This is even more interesting than the former one, and though we by no means agree with it in its entirety, it is so characteristic and instructive that we make bold to deal with it at some length.

In the beginning, Dr. Gairdner alludes to the nature of clinical instruction, that it is essentially bedside work, and alludes to the practice of old physicians of giving instruction to their pupils and apprentices in other places than hospitals or even dispensaries, and regrets the disuse of the practice. Unfortunately, we in England have often to regret that the system is still in vogue, and that it not unfrequently causes much mischief. It is not given to everyone to be a teacher, and slipshod work of this kind in teaching is apt to be irremediable. With a teacher like Dr. Gairdner few would regret spending an afternoon in a back-slum; but how many are like him? So, again, when Dr. Gairdner comes to speak of the practice to be seen in out-patient rooms as likely to be injurious, we quite agree with him in one sense. No greater waste of time could be imagined than that spent by a young student in a physician's out-patient room at many London hospitals. Few things are better for him than such an attendance under the care of a good surgeon. In the first place, for effective teaching the cases must somehow be selected, so that only a few are seen during the period of the student's visit; and the power of selection is practically without limit. With the surgeon the student can begin to see something, but in the physician's department he can see little or nothing; but if he comes to the same department at the end of his curriculum, he will speedily learn to appreciate the difference between practice in the wards of a hospital, and that which in all probability will be his fate in life. We repeat, good out-patient practice is invaluable as a means of training, but, like everything else good, it requires care and method.

Speaking of true bedside instruction, Dr. Gairdner, rightly as we think, lays down the rule that in it *method* is all-important; that the student should see the process as well as the result in a matter of diagnosis. This is, in other words, that the student should be taught to work through a case for himself, to see by what steps the conclusion is arrived at, and that this is almost invariably by a process of exclusion. There is no want so much felt by the young practitioner as this kind of training. He has heard of nothing but terrible diseases, too often illustrated by pathological specimens; he has perhaps only gone to see extraordinary cases in the wards; and when he gets into ordinum every-day life he too often feels utterly at sea.

What Professor Gairdner desires to attain is this—to make the actual examination of cases the basis of his method of instruction. His lectures are added on to the investigation of these cases, but they are the outcome of them. They are not lectures on, say, an abstract subject delivered at the bedside—the subject is there before the students.

There is another important point connected with the principles of clinical teaching discussed by Professor Gairdner to which we would allude: that is, the relations of physician and student to the patient. "Bedside teaching," says Dr. Gairdner, "is not what it professes to be—viz., clinical in the highest sense—unless, besides being a discipline for you

in regard to the facts of disease and the methods of observing them, it is also made an equally careful training in respect of the moral relation between physician and patient. I will confess to you at once that there is some risk of this aspect of the matter being forgotten at times, and I am by no means one of those who maintain the absolute compatibility, under all circumstances, of the interest of the patient with that of the clinically instructed pupil. There is a risk, as I have already said, that clinical instruction may be conducted in a cold-blooded and heartless manner, to the detriment of the patient. . . . . What is necessary is an honest, but not overstrained, human sympathy with suffering humanity; that you should clearly realise to yourself the position; that to forget for one moment the real interests of the patient as they appear to a kindly, sympathetic physician is not only an injury done to the sick man, but also a violation of the law of true clinical instruction. For what I have got to teach you, and what you have got to learn, at the bedside, is nothing less than the whole art of the physician; and this includes, most assuredly, as one of its most important elements, the art of securing the confidence and goodwill of the patient."

It would be difficult to over-estimate the value of such remarks to students; but students instinctively take after their teachers, and it is here, more than in any other department of medicine, that example is better than precept. An instance occurs to us. Dr. Warburton Begbie, judged by the work left behind him, was not a great physician, yet his personal teaching is admitted by all who knew him to have been of a kind seldom seen. His kindness to his patients was unfailing, and from him students learnt that courtesy which is so often the greatest wisdom—even more of a mainstay in every-day life than high intellectual attainments. From a tolerably wide experience, we cannot call rudeness and want of tenderness a prominent blot in the British School of Medicine, but it does exist, and many a man has unknowingly laid the seeds of life-long hatred by a rude and unfeeling remark; for the sick, gentle and simple, are from their very illness ever over-sensitive. But this indifference to the feelings, let us even say welfare, of the sick has otherwise to be considered. We hold it, thus, that a physician must consider his patient before his pupils; and to expose a patient to a prolonged examination when labouring under the congestion of a spreading pneumonia on a cold winter's day, or to make his class handle a dangerous and painful aneurism, is overlooking the first and fundamental principle, not only of our art, but of our position as true gentlemen.

Turning to Dr. Gairdner's practice as a clinical teacher, we find in it details which seem to us over-strained, not for an ideal system, but for one which will work well in every-day practice:—

"Now to apply these remarks regarding clinical instruction to our own work in detail. We require, in the first place, a group of clinical clerks, to whom will be committed the keeping of the ward journals in a great measure; with the proviso, however, that in most cases they shall have been revised and critically compared with the facts of the case before it is finally inscribed. The examination of the details of the clinical record will usually, or as much as possible, take place in presence, not indeed of the whole clinical class, but of a select number of junior students. Use these opportunities well, gentlemen, for they are invaluable. The record, in its completed form, will be, it is to be hoped, a record of facts; but even facts are often tinged or modified by opinion; and where reasonable differences of opinion arise we shall be careful not to extinguish these, but to preserve them in the form of the record itself, which will in all cases be authenticated by the name of the reporter, and often of those also who have concurred with, or differed from, him in his statement of particular facts. In all cases, moreover, we require the *date* of the observation, and, as much as is convenient, the order in which the facts were elicited, to appear upon the face of the record. We allow no subsequent correction or revision of this (saving for plainly clerical errors), except in the form of a marginal or foot-note, similarly dated; and for this purpose we keep purposely a blank page open opposite every written page of our hospital report. Some of the most instructive of our bedside conferences have often arisen upon these late verifications or corrections of doubtful points in the original record of a case. When, in the course of an ordinary ward visit, I personally dictate the report of a first or of any future observation, it is similarly authenticated, and equally open, as in the case of the report of a junior, to future criticism or correction; and many of you can bear me witness that I never hesitate in allowing an error or a doubtful expression to be fully and deliberately discussed, and the correction, if necessary, duly inscribed as such upon the margin. Indeed, it is in these very difficulties and fallacies of observation that we frequently find the best materials for our clinical lectures. Finally, after a certain period of observation, and after a certain number of presumably exact details have been inscribed, we make upon the first blank page, opposite the beginning of the case, a *summary* of the whole observations, which in many cases, but not always, includes also a definite diagnosis, or at least the materials of one. On a second blank page we inscribe a connected statement of the details of treatment; on a third, the whole series, or a carefully constructed abstract, of temperature observations; on a fourth, urinary observations, etc. Diagrams of physical diagnosis, sphygmograms, etc., are inserted as required in the journals; and thus after a while there is built up gradually a completed record of the case, up to the moment of dismissal from the hospital, or of death."

Now, it is evident, we think, on the face of it that this procedure cannot be carried on in hospitals with great groups of cases, except the clinical teacher take much upon trust, or, at all events, confide the investigation of the case in the first instance to a skilled clinician other than himself. Certainly with a great number of students it is impossible to make all go through an examination equally elaborate, and so we must come to a mode of teaching which Dr. Gairdner alludes to only by implication—that is, *clinical demonstration*. He admits that, with a large class, one or two must be selected to make the examination; but the practical outcome is this—that the physician himself has to correct these; in other words, to proceed by demonstration. It seems to us, again, that Dr. Gairdner has not overlooked (for the whole is implied in his address), but failed to indoctrinate to a due extent, some of the most important principles of clinical teaching. The fact is that no one would set to work to chop wood with a razor: men must learn to use their fingers, and men must learn to use their ears; and if raw men join a class of clinical medicine conducted ever so well on Dr. Gairdner's principles, what will they learn? Sad experience teaches us—nothing. There must be a subdivision of labour in this kind of teaching as in others. Men must be taught the rudiments of diagnosis before it is good for them to follow a teacher round the wards.

Again, there is a method of teaching implied, but not expressed, in Dr. Gairdner's remarks, which, as an exercise, is invaluable; that is, the discussion of a single symptom, of two symptoms, or even more, if they are found related. By the Socratic method this plan may be worked out with the utmost benefit; or yet again, a little point, simple of explanation—so simple as to be overlooked—may prove a puzzle to a whole class, and yet when explained will give them zest in the

pursuance of a prolonged and careful examination of the patient. Dr. Gairdner is too skilled a teacher to be unacquainted with these arts; they are well enough known, but deserve to be recalled to mind, for they are simply invaluable. It is not by bare and elaborate detail that a case is best brought out to a student, but by showing how one thing hangs by another, and, if possible, illustrating both by example.

The difficulty we have indicated above, as to having advanced students and those nearly ignorant in the same class, may be further illustrated. Two methods are mainly pursued in clinical teaching; sometimes the two are mixed. On one the teacher goes the round of his wards, and says a few words on each case. This Dr. Gairdner objects to; he calls it *lecturing about cases*. The other is his own method of *thoroughly examining a case*. Both have their advantages. By the former we can get in a short time the cream of the teacher's, or rather lecturer's, experience as founded on the report of the case drawn up for him, and verified by himself; he may venture to state certain facts, such as (to take our former illustrations) the extent to which the pneumonia extends, or the relations of the aneurism; he need not ask all, or any, of his pupils to verify the statements made; he can proceed at once to give his experience and that of others on the subject. This is a form well adapted for advanced students, it is that adopted by many of our best London teachers; and we are sure of this—it is a form by no means to be despised. A few short remarks from a master of his art on each case in a single ward are often invaluable.

Again, we have the thorough examination: but this must in almost all cases amount to a demonstration verified by the personal examination of the patient by each student; and on this method an examination may be carried on for days, if the student is to be carefully trained to scientific methods. This is the best plan for junior students. But another and a very good plan is to limit the attention of the student to a few of the main factors of the case, to demonstrate these to him each by each; and so, without aiming at that exhaustiveness advocated by Dr. Gairdner, students are taught positively and negatively certain indications associated with certain forms of disease.

Dr. Gairdner is an open foe to certain kinds of clinical lectures. He says—"You will observe at once that our clinical method is widely different from that ascribed by rumour to an old friend of mine, who still lives, but who has survived all his ambitions, and will, I am sure, pardon me the use of this illustration. I happened to attend, long ago, the earlier part of the first course of clinical lectures delivered by this gentleman, and I was struck by the remarkably complete and exhaustive manner in which each whole subject was brought into view, upon the basis, usually, of a single case in the wards, which was simply read to us out of the journal by way of introduction, or text, so to speak. The current rumour was that the course of lectures in question had been elaborated in the course of the preceding summer, being written down every word in an exactly ordered fashion, according to all the respected author's previous experience and reading; so that the cases, as they occurred, were fitted into the lectures, instead of the lecture being adapted to the cases. It was a well-marked example of the method called by the logicians ὕστερον πρότερον."

Do we all agree to call this bad? We are glad we do not. Should we not all be happy to listen to Professor Gairdner reciting in set form the results of his experience, whatever theme they were attached to? The best course of clinical lectures we ever listened to was founded on this method: they struck the students most, and the students learned more from them than from others. We must not forget students in dealing with the subject of clinical teaching.

THE WEEK.

TOPICS OF THE DAY.

The Metropolitan Board of Works shows itself still averse to undertaking the preparation of a Bill for the prevention of floods; but it is more than questionable whether it is pursuing a wise course in endeavouring to shirk the responsibilities which certainly attach to it in its official capacity. The Select Committee of the House of Commons last session reported adversely on the Bill then proposed, affirming very decisively that the prevention of floods was not the duty of individuals, or of local boards, but of the central government of London. The Home Secretary has recently addressed a letter to the Metropolitan Board, in which he says that the prevention of floods appears to him of such vital importance to many who cannot help themselves that he hopes some means may be found by which another session may not pass without some remedy being provided. This communication and the report of the Works Committee have been brought before the Board, and referred back again for reconsideration to the Committee, a hope being expressed that "some measures would be devised which would have the effect of remedying this great evil." The Board has, unfortunately, committed itself to an opinion that the duty of providing effectively against floods rests with the river-side vestries and owners of property along the river banks; but it will be at once apparent that the only method of dealing with such a huge question is by one uniform scheme, projected and carried out by one authority, and not left in the hands of a number of individuals to be dealt with as each in his own wisdom may consider best. It is evident that the tone of public opinion on the subject will not admit of trifling or delay, and if the Metropolitan Board of Works will not undertake the task willingly and vigorously, it may find itself in the undignified position of having to set about the work under stringent orders issued by the Legislature.

A singular action was heard last week in the Braintree County Court, in which Mr. Joseph Nunn, who had been bitten by a dog belonging to Mr. Leatherdale, sought to recover damages. Nunn suffered acute pain after the injury, which extended all up his left side to the head, and he was confined to his bed for weeks. Dr. Simpson, his medical attendant, eventually sent him to the University Hospital, where, it was stated in evidence, his case presented such unusual symptoms that it had been commented on in several medical journals; these symptoms were of an epileptic character, and were attributed more to fright than to the actual bite. The jury, who were employed six hours in hearing the case, eventually awarded £30 damages.

The Holborn Board of Guardians has recently applied to the medical officers of the several workhouses of the Union for their opinion as to the advisability of allowing tobacco smoking in these establishments. At their last meeting, Dr. Yarrow, of the City-road Workhouse, stated that he thought tobacco should be allowed to those inmates suffering from chest diseases. Mr. Norton, of the Gray's-inn-road Workhouse (the infirmary of the Union), said that it was the custom in that house for the patients suffering from consumption to ask permission to smoke, which was granted. The patients generally found their own tobacco, and he had never received a complaint that smoking was offensive to anyone, and, if such a complaint had been made, the person who complained would have been removed from that part of the ward to another. Smoking he considered a treat to patients suffering from bronchitis and asthma. The patients did not generally smoke till evening, and he frequently ordered tobacco for such as were imbecile. The

Committee finally recommended to the Board that one or more wards in each establishment of the Union be appointed, in which no smoking be allowed, and that certain restrictions be enforced in the matter of smoking on the part of helpers in the workhouses; and these recommendations were approved.

A special meeting of the Manchester City Council was held last week for the purpose of discussing the scheme for utilising Thirlmere Lake, Cumberland, for the water-supply of the town. The scheme was opposed by some members of the Council, but a resolution empowering the promotion of a Bill in Parliament for carrying out the project was carried by a large majority. At Liverpool, also, the engineer of the Corporation has just reported to that body on the proposal to obtain a supply of pure water for the borough. This it is proposed to obtain from one of the sources of the Severn—the upper part of the river Verniew, in Montgomeryshire,—at a point where it is 817 feet above the sea. The river here runs through a deep and narrow valley, which it is proposed to convert into a lake about five miles long by one wide, a dam at the foot being raised seventy-five feet above the bed of the stream. It is stated that the scheme would increase the supply of water in the Verniew in the summer, diminish the floods, and improve the salmon-spawning grounds. The estimated cost of bringing 13,000,000 gallons of water daily from the proposed reservoir to Liverpool is £1,280,664; and in addition to this scheme it is proposed to apply for power for taking additional supplies from two of the tributaries below—the Cowny and the Marchnant. The water is spoken of as pure, soft, and bright. No engineering difficulties of any magnitude will have to be incurred, and the engineer recommends the necessary surveys and application to Parliament for a Bill to authorise the works.

The *Glasgow News* states that the praiseworthy efforts of Dr. Russell and his assistants to discover the source from whence the typhoid epidemic sprung, have happily been attended with success. It is now known that the disease has for some time existed at a dairy farm at Stonehouse, from whence the suspected dairies at Hillhead have been supplied. The further export of contaminated milk was promptly stopped.

The annual meeting of the Association for Preserving the Rivers and Lochs of Scotland from Pollution was held last week in Edinburgh, under the presidency of Sir Robert Christison. The report of the Council stated that a number of towns were considering how their sewage could be disposed of otherwise than by allowing it to go into the adjoining streams, and were in course of adopting measures for carrying out the Rivers Pollution Act. The Council recommended the members of the Association, and others, to avail themselves of their rights under the law of Scotland for preserving the purity of the rivers and streams passing through their properties. In moving the adoption of the report, the Chairman said his opinion was that no one had a right to do anything that would pollute food, air, or drink; and it was the duty of the Legislature to protect the public in these matters. Every year he saw confirmation of the doctrine which he had enforced upon the Association at its commencement, that there was no manufacture in which a nuisance might not be abated if proper care were taken. It was agreed to memorialise the Government as to the adoption of certain amendments which were considered necessary to be made in the Rivers Pollution Bill.

It is a matter for grave reflection to find that the Metropolitan Asylums Board are of opinion that imbecility, idiocy, and insanity are largely on the increase in the metropolis. The Board have already purchased 100 acres of land at Darenth, where an asylum to accommodate 500 idiot boys is being erected. A further proposal is before them, to build another asylum on the same estate, to accommodate 500 imbeciles. The City of London and other asylums for the insane exist in the same neighbourhood, the space to be devoted for the accommodation of the mentally afflicted of London being as large as the area of the whole of the City of London proper.

A committee was appointed in India, some time ago, to consider the arrangements at present in force in that country for nursing sick soldiers. Amongst the members were Surgeon-General Crawford and Deputy Surgeon-General Tresidder. This Committee has just made its report, and suggests several improvements, which the authorities will no doubt proceed at once to carry out. It proposes to put an end to the rough-and-ready system of hiring untrained and badly paid natives by the month, and to replace them by a regular enlistment of eligible men for a period of three years. At present, it is stated, the invalids are frequently grossly neglected by the native servants, and Europeans have consequently in many cases to be obtained for nursing duty from the nearest regiment. It is calculated that the proposed change would greatly reduce the number of hospital servants required, and correspondingly increase the efficiency. In one hospital where there are now twenty-seven natives employed as compounders, dressers, and coolies, it is considered sixteen would be sufficient. The proposed reduction in the number of hospital servants would effect a considerable saving, out of which the pay and uniforms of the new staff might be provided. The Committee further recommend that disciplinary powers should be entrusted to the medical officers—a suggestion which, bearing in mind the recent Army Hospital Corps Warrant in this country, will no doubt be acted upon.

Strenuous efforts are being made in Liverpool to obtain the introduction of a measure in the forthcoming session to amend the laws affecting the trade in drink. The Toxteth-park Guardians have originated a memorial to the Home Secretary on the subject, which has been unanimously supported by the various parochial authorities of the town. The memorial states that the Guardians are of opinion that the large increase in the number of pauper lunatics is in a great measure the result of intemperance, produced principally by defective laws regulating the sale of intoxicating liquors. The Guardians also express their belief that temperance would be promoted if the sale of such liquors were placed under the control of the ratepayers, and if public-houses were closed on Sundays.

ROYALTY AT THE COLLEGE OF SURGEONS.

H.I.H. THE CROWN PRINCE OF AUSTRIA, attended by the Chevalier de Scherzer, Professor Menger, Major Eschenbache, and Dr. Roth, paid a visit to the Museum of the Royal College of Surgeons on Tuesday, the 8th inst., when he was received by Professor Flower, F.R.S., the Conservator of the Museum, and Mr. Edward Trimmer, the Secretary. The former gentleman explained some of the valuable contents of the collection, in which his Imperial Highness appeared extremely interested. After remaining nearly three hours, he took his departure, much pleased with the visit, which he promised to repeat shortly.

THE LIQUEFACTION OF THE GASES.

OUR contemporary the *Pharmaceutical Journal* of the 12th inst. contains an interesting article on the liquefaction of the gases, and gives, from the *Comptes-Rendus* of the French Academy of Sciences, the methods employed by M. Pictet and M. Cailletet in effecting the liquefaction of oxygen, hydrogen, nitrogen, and atmospheric air. Day,

Faraday, and other investigators, at home and abroad, at various times, made efforts, with some successes, to accomplish the liquefaction of "permanent gases"; and Faraday succeeded in reducing carbonic acid, sulphurous acid, sulphuretted hydrogen, and some gas to a liquid state. In 1835 Thelorier obtained carbonic acid as a solid; and in 1845 Faraday again took up the work, hoping to see "nitrogen, oxygen, and hydrogen either as liquid or solid bodies, and the latter probably as a metal," but was foiled, remarking that after carrying the pressure of oxygen to 58·5 atmospheres, the cement of a joint gave way, and he "could carry the observation no further with that apparatus"; but afterwards he succeeded with many others; and all the known gases, with the exception of oxygen, hydrogen, nitrogen, nitric oxide, carbonic oxide, and coal gas, were condensed to the liquid, and some of them to the solid state. A few weeks ago, M. Cailletet succeeded in reducing nitric oxide to the liquid state; and at the sitting of the French Academy on December 24, 1877, it was announced that the liquefaction of oxygen had been effected by M. Raoul Pictet, at Geneva, on December 22. Very curiously, however, it was stated at the same time that the Secretary of the Academy had had in his possession for three weeks a sealed packet, showing that M. Cailletet, following up his work with nitric oxide, had also succeeded in liquefying oxygen and carbonic oxide on December 2. His memoir on the subject had reached the Academy on the 3rd; but in consequence of some consideration as to his pending election into the body, it had been entrusted in a sealed packet to the Secretary, instead of being published at once. At the sitting of the Academy on December 31, it was announced that M. Cailletet had further succeeded in liquefying nitrogen, hydrogen, and atmospheric air.

The two investigators employed different methods in obtaining these results—or perhaps we should rather say different machinery, for each worked by means of intense pressure and intense cold; the pressure under which success was attained varying, with the different gases, from about 200 to rather more than 300 atmospheres; and the temperature being reduced to —100° (Centigrade), and even lower. Neither M. Cailletet nor M. Pictet have yet succeeded in retaining any one of these gases in a liquid state; and, indeed, M. Cailletet can perhaps hardly with strict accuracy be said to have *liquefied* them, for, so far as we understand, he has only seen, and shown, them as forming in each instance a "fog," only to be produced by the gas in a liquefying condition. M. Pictet has shown liquid jets of oxygen, but he has not yet been able to collect or retain it. We may add that it appears that both these gentlemen are engaged in business pursuits; at least, it has been stated that M. Cailletet is an iron master, and M. Pictet an ice manufacturer.

As a proof, as well as in consideration of the interest taken by the public in these researches, we add the following particulars published by the *Times* and the *Journal des Débats*:—"The experiments of M. Cailletet were made in the laboratory of the Ecole Normale, in the presence of MM. Boussingault, Henri Sainte-Claire Deville, Berthelot, Mascart, etc., and these eminent men declared themselves thoroughly satisfied. The nitrogen was reduced to the condition of little drops, while the hydrogen became visible in form of a vapoury cloud. This was effected in the case of the nitrogen under a pressure of 200 atmospheres, and in the case of the hydrogen under a pressure of 280 atmospheres. Thus at last it has been demonstrated that all the gases, without exception, are subject to the common law, and can be reduced to a liquid state. The cold and atmospheric pressure together exercise so great a force of compression on the gaseous molecules, that they are compelled to take the liquid form. Atmospheric air is composed almost exclusively of oxygen and nitrogen; since, therefore, each of these gases has now been separately liquefied, it would seem that their mixture also ought to be open to similar treatment. M. Cailletet accordingly took some air, which he thoroughly dried and purified from carbonic acid, and liquefied it in the same apparatus which had been so successfully employed in the previous liquefactions. When he turned the cock the metamorphosed air trickled out, like some perfumed liquid from an evaporating bottle."

THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

At a special meeting of the Council of the Royal College of Surgeons, on the 9th inst., Mr. Luther Holden, one of the Vice-Presidents of the College, was unanimously re-elected a member of the Court of Examiners, to which he was first elected in 1873. At a quarterly meeting, held on the 10th, before the confirmation of the minutes of the ordinary meeting of December 13, a long discussion took place on that part of the minutes which related to the Bill for the Registration of Dentists; Mr. Hancock having proposed a resolution to the effect that, while the Council did approve of the Bill so far as it provided for the registration, in a separate and distinct register, of licentiates in dentistry of the Colleges of Surgeons of England, of Edinburgh, and of Ireland, and of the Faculty of Physicians and Surgeons of Glasgow, it could not sanction the proposal to register any persons practising dentistry without a legal qualification or licence, inasmuch as such registration would place unqualified persons on the same footing as licentiates. The motion was, however, lost, only seven members of Council voting for it. Mr. Hancock's motion to rescind the regulation requiring the registration of students at the College was, we are happy to say, carried. Two Members of the College, of twenty years' standing, were nominated for election to the Fellowship, in accordance with a clause of the Charter hitherto allowed to stand in abeyance. Mr. John Marshall was appointed representative of the College on the Committee of Reference, in place of Mr. Simon, who has declined that honour.

REJECTIONS AT THE ROYAL COLLEGE OF SURGEONS.

During the late examinations at the Royal College of Surgeons, of the 110 candidates examined, forty-four having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months. On the first day, out of sixteen candidates examined, just one-half were rejected; on the second day, twenty-four were examined, and only five rejected; the following day, out of twenty-four, seven were rejected; the rejections on the 15th out of twenty-four amounted to fifteen; and on the last day to nine out of twenty-two candidates. This large number of failures will not excite much wonder, however, in face of the fact that, out of the 110 candidates examined, no less than *fifty-one* offered themselves a second time, six for the third time of asking, three for a fourth time, and one for a fifth time; and of this number sixteen were again rejected. The proportion of rejections is lamentably high, and at first sight is strongly suggestive of grave inefficiency of teaching power. But the fact that nearly 50 per cent. of the candidates had been rejected before, some of them several times, appears to point pretty clearly to a different cause for such numerous failures—to a cause inherent in the candidates themselves, and not to defects in the system of education. Does it not seem clear that a considerable number of these gentlemen have mistaken their vocation, and that, even should they (after three, four, or five failures) succeed in getting qualified,

they never can hope to succeed in practice? It would surely be a great kindness to follow up, in some at least of these cases, a suggestion of the General Medical Council, and hint to candidates that they had better seek some other path in life. Mercy like this would be twice blessed: the mistaken candidates for a medical career would be saved, perhaps, from wasting their lives; and the profession would be relieved of a "residuum"—a deadweight of inefficient practitioners.

THE QUEEN'S SPEECH.

HER MAJESTY'S SPEECH at the opening of Parliament, on the 17th inst., was very much what was expected, both as to what was and what was not in it. We are not to go to war in connexion with the Russo-Turkish quarrel unless we are obliged to do so; but in the meantime we are to be prepared for war, and the liberality of Parliament is to supply the means of taking "measures of precaution." Other subjects of the Speech we will not mention, except the Bills to be introduced, and it will be observed that though no sanitary measure of any kind as regards mankind is mentioned, cattle, being of greater importance, are more fortunate. The following is the part of the Speech naming the measures to be introduced:—

"A Bill will be laid before you upon the subject of County Government, and your attention will be again called to the consolidation of the Factory Law, and to the Summary Jurisdiction of Magistrates.

"You will be asked at an early period of the session to take into your consideration a Bill on the subject of Cattle Disease in this country.

"The questions of Scottish Roads and Bridges, and of Endowed Schools and Hospitals in Scotland, will also be brought before you.

"Your attention will be invited to the subject of Intermediate Education in Ireland, and to the Grand Jury Law in that country.

"Among other measures for the amendment of the Law, a Bill will be laid before you to simplify and express in one Act the whole Law and Procedure relating to Indictable Offences."

MEDICAL SOCIETY OF LONDON.

AT the meeting of the Medical Society of London on the 14th inst., Dr. Foulis, of Glasgow, exhibited the patient from whom he has successfully removed the whole larynx, and—following up in this respect also the example set by Billroth and Gussenbauer—has with admirable effect supplied the patient with an artificial larynx. James Houston, the patient, had a sarcomatous growth in the larynx, which, after having been once removed, rapidly returned, and to such extent as to necessitate the removal of the whole of the larynx to give any chance of benefit. The operation was performed about four months ago, and recovery was uninterrupted. The operation of removing the larynx was first performed by Billroth, of Vienna, in 1873, and the first attempt at supplying a new larynx was made for Billroth's patient by Gussenbauer, whose original instrument was shown at the meeting. The instrument now worn by Houston is an improvement of Gussenbauer's by Dr. Irvine, of Glasgow. This is the first time the operation has been performed in England. It has been ten times tried on the Continent, with varying success. The present is the most successful case, the patient being in better health than he had experienced for many months. The artificial larynx consists of two tubes, one of which passes down the trachea, and the other upwards to the mouth. The patient can talk in a whisper without these tubes, but when a reed-plate is slipped into a groove in the lower tube a resonant sound is produced which is modulated into letters and words by the mouth. The articulation with or without reeds is perfect. The reeds are made of metal, vulcanite, ivory, horn, etc.; and the patient himself is fond of making reeds, which give his voice new and surprising tones. The voice is a monotone, varying in *timbre* according to the reed used. The sound-waves of the patient's voice on Kœnig's mirror are similar to those of other voices, as was shown by Mr. Ward with the mirror lent by Mr. Spottiswoode at the meeting of the Society. Dr. George Buchanan (the President), Dr. B. W. Richardson, Professor Lister, Mr. Savory, and others, spoke in terms of great admiration of the results achieved.

THE CHLORAL COMMITTEE OF THE CLINICAL SOCIETY OF LONDON.

THE inconvenient effects which occasionally follow the incautious or long-continued use of the hydrate of chloral have induced the Clinical Society to appoint a Committee for the purpose of investigating certain points in the action of this important drug. The scope of the inquiry has been defined within the following limits:—To investigate what deleterious effects follow the prolonged and continuous use of chloral in ordinary doses." The Committee consists of Sir William Jenner, Bart. (chairman), Dr. Andrew Clark, Dr. Buzzard, Dr. Duckworth, Dr. Barlow, with Dr. Farquharson as secretary. A report upon such a subject will be valuable in proportion to the number and accuracy of the observations upon which it is based; consequently the Committee invites the co-operation of the profession at large, and especially of those engaged in family practice. A list of questions has been framed by the Committee with the view of drawing attention to the points of most importance, and the Committee will feel much obliged by replies to as many of the inquiries as possible. The following is the list of queries relating to—1. Age; 2. Sex; 3. Temperament, if marked; 4. Occupation, sedentary or otherwise; 5. Habits as regards stimulants; 6. For what purpose was the chloral given; 7. In what doses; 8. For how long, and whether continuously, or with intervals of what duration; 9. If taken continuously for a prolonged period without obvious ill effects; 10. If use followed by obvious ill effects in reference to the (*a*) nervous, (*b*) circulatory, (*c*) digestive, (*d*) cutaneous, (*e*) urinary, or other systems; 11. Any further information on any other head, not tabulated, which your experience may afford. Communications to be addressed to the Private Secretary, at 53, Berners-street, or at his private address.

THE PUBLIC HEALTH (IRELAND) BILL.

ON Wednesday, January 9, the Chief Secretary for Ireland received at Dublin Castle a deputation from the Public Health Committee of the Corporation of Dublin, in reference to certain amendments suggested as necessary to be inserted in the Public Health (Ireland) Bill of 1877. Many of the proposed changes or amendments deserve every consideration. Thus, it is suggested that Clause 25, whereby the owner of a house within 100 feet of the power sewer is compelled to construct a drain thereto, or, if not within that distance, a properly covered cesspool, should secure that such house-drains shall be sufficiently ventilated and such cesspools properly constructed. It would also be desirable to have the word "house" defined, so as to include backyards and outbuildings in connexion with houses. Upon Clause 42 it was expected some difficulty would arise, owing to the ingenuity of certain persons. The clause provided that for the purposes of the Act the re-erecting of any buildings pulled down to or below the ground-floor shall be deemed to be a new building. In Dublin there was a practice of removing the bottom of the building first, and, having rebuilt or propped it, then to take down the top, thereby evading the regulation which would make the reconstruction

a new building, as defined by the section. The 141st section provided penalties against any person who, when suffering from a dangerous or infectious disorder, exposed himself in a public place or entered a public conveyance. There should be a summary power, also, of removing such persons from public conveyances. The 144th clause provided a penalty against any person "showing for the purpose of letting" any house in which there had been dangerous infectious disease, provided that the person who was negotiating asked a question on the subject. The Public Health Committee thought that the Bill should go further, and make it incumbent upon the person seeking to let a house in which there had been infectious disease to give notice of the fact. They also thought that in all classes of lodging-houses, including hotels, in which dangerous disorders broke out, the owners should be bound to give notice to the sanitary officer with a view of having the premises disinfected. Clauses 148 to 155 provided special regulations in the event of the outbreak of formidable epidemics. The Committee submitted that these regulations should be carried out not by the boards of guardians, but by the sanitary authority, the members of which had experience in the matter and a staff at their command. We are quite in accord with the Public Health Committee on this last point, as it is, we think, most inexpedient to supersede the usual sanitary authority and to transfer its powers to the boards of guardianss in epidemic times. It may be doubted, however, whether it would be politic to give the Public Health Committee the absolute control they wish to obtain over the District Medical Officers of Health in Dublin. If this were done, the wholesome independence of those officers would at once be sacrificed. In replying to the deputation, the Chief Secretary made the satisfactory announcement that the Bill would be introduced early in the session in precisely the same state as when withdrawn last year, but that ample opportunity would be allowed for the consideration of amendments in committee.

WHOOPING-COUGH IN MARYLEBONE.

In his monthly report on the health of the parish of St. Marylebone for December last, Dr. John Whitmore, the Medical Officer of Health, is obliged to record a very high death-rate, viz., 29·46 per 1000 of the population of the parish. This result is 7·72 per 1000 in excess of the death-rate of November, and 10·20 per 1000 above that of the corresponding month of 1876. This very high rate of mortality Dr. Whitmore attributes to the low temperature and damp atmosphere which prevailed throughout the greater part of the month, and which produced an excessive amount of bronchitis and inflammation of the lungs, especially amongst young children. More than 37 per cent. of all the deaths were caused by diseases of the respiratory organs. Dr. Whitmore adds a note upon the danger of children's parties in disseminating infectious diseases, notably whooping-cough, and he gives an illustration which lately came under his notice. A lady recently gave a children's party at which some fifteen or sixteen were present; amongst them was a little boy who was observed to cough violently, and who it was afterwards ascertained was suffering from whooping-cough. Of all the children present on that occasion, it is already known that twelve have taken the disease, as well as two nursemaids who were in attendance, and two of the cases have proved fatal. Dr. Whitmore makes some opportune remarks on the mischief caused by the popular belief that whooping-cough is not infectious as well as contagious, and says that it is undoubtedly both, and therefore all children suffering from it should be isolated from others that are healthy. We confess to a strong suspicion that an erroneous belief is by no means always the innocent, because ignorant, cause of such occurrences as that commented on by Dr. Whitmore. We have met with mothers not at all scrupulous about letting their own children risk being infection-carriers rather than lose an evening's amusement, though the very slightest risk of their becoming infection-receivers through like conduct of other mothers would excite displays of temper unknown to the repose that stamps the caste of Vere de Vere.

THE HEALTH OF PADDINGTON PARISH.

At a somewhat late date we have received the sanitary report on the parish of Paddington for the year 1876. Dr. James Stevenson, the Medical Officer of Health for the district, reports that according to his observations the births in the parish were most numerous in the first, and least so in the third quarter of the year under notice; whilst the deaths were most numerous in the first, and least so in the fourth quarter of the year. The death-rate contrasts favourably with that for the year 1875, and also with that of any one of the ten preceding years, or the decennial average rate, and is not only 6 per 1000 less than that of London generally, but is also lower than the rate of any one of the twenty largest English towns. This, however, Dr. Stevenson very rightly observes, is not a reason for relaxing sanitary precautions, or for being altogether satisfied with the regulations that at present exist, for if the laws of health were properly observed, and clearly ascertained sanitary requirements honestly and fully obeyed, this death-rate, low as it admittedly is, ought to be greatly reduced, probably to the extent of more than one-half. Thus, the number of deaths from the seven principal zymotic diseases during the year (which forms the best indication of the healthiness of a community) exceeded by only three the number of deaths from the same diseases in the year 1875. Nevertheless, these diseases furnished nearly one-sixth of the total deaths from all causes. The deaths of children under one year of age were absolutely the same (413) as in 1875; and, though fewer relatively to the increased population, were more relatively to the total number of deaths.

LIVERPOOL MEDICAL INSTITUTION.

The following office-bearers were elected at the annual meeting of the Liverpool Medical Institution, held January 8, 1878:—*President*: Dr. Waters. *Vice-Presidents*: Dr. Lyster, Dr. Wm. Carter, Mr. Manifold, and Dr. Oxley. *Treasurer*: Dr. Dickinson. *Hon. Secretary*: Dr. Caton. *Hon. Secretary of Ordinary Meetings*: Mr. Puzey. *Hon. Librarian*: Dr. Campbell. *Council*: Dr. Alexander, Dr. Bailey, Dr. Braidwood, Dr. Finegan, Mr. McCheane, Dr. Samuels, Mr. E. A. Broune, Mr. Harrison, Dr. Mathew Hill, Dr. S. Lewis, Dr. Robertson, and Dr. Turnbull. *Microscopical Committee*: President, Dr. Braidwood; Hon. Secretary, Dr. Ashby; Drs. Davidson, Glynn, S. Hicks, Lupton, Saul; Messrs. Hamilton, Newton, and Rushton Parker.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

The fourth meeting of the twenty-second session was held on Friday, January 4, at the Royal Kent Dispensary, Greenwich-road; W. Johnson Smith, F.R.C.S. (President), in the chair. Dr. J. Milner Fothergill read a paper on "Some Conditions which simulate Organic Disease of the Heart." Mr. Roberts, M.R.C.S.E., L.S.A., New Cross, was proposed as a joining member, and will be balloted for at the next meeting.

THE REGIUS PROFESSORSHIP OF PHYSIC IN THE UNIVERSITY OF DUBLIN.

By the lamented death of Dr. Stokes this post of honour became vacant, as did also one of the Physicianships-in-Ordinary to her Majesty the Queen in Ireland. The Regius Professorship of Physic is now in the gift of the University

Council, who on February 13 will proceed to nominate to the office. Already the names of several gentlemen of high standing in the profession in Dublin are mentioned in connexion with the Professorship, but it would be premature to speak more openly at present. Considerable interest is felt as to the appointment of Physician-in-Ordinary to the Queen, which will probably be made about the same time as that fixed for the selection of a Regius Professor of Physic.

FUNERAL OF DR. STOKES.

On Friday week, the 11th inst., the remains of Dr. Stokes were borne from his villa, Carrig Breac, Howth, to Saint Fintan's Churchyard, near Sutton, on the western slope of the Hill of Howth. In accordance with the express wish of the family the funeral was private, and accordingly the College of Physicians, University of Dublin, and Royal Irish Academy were not officially represented on the occasion. Notwithstanding most of the leading members of the profession of Dublin and its vicinity were present, and some fifty students from the Meath Hospital walked in procession before the coffin, which was borne on the shoulders of the neighbouring peasantry. On reaching the little churchyard, eight students carried the coffin to the grave, where the concluding portion of the beautiful burial service of the Church of Ireland was read. And so, on a bright frosty morning, all that was mortal of William Stokes was laid in the grave, near his own loved ones, under the ivy-clad walls of the ruined St. Fintan's Church. This touching simplicity in its *requiem* was a fitting sequel to a life of genius, virtue, and humanity.

THE GERMAN UNIVERSITIES.

Professor Cohnheim is said to have accepted a call from Breslau to Leipsic, as Professor of Pathology. Professor Volkmann, of Halle, on the other hand, has refused to leave Halle for Würzburg, to the great delight of his numerous friends at the former University. Halle without Volkmann would be like what a certain northern city is, we fancy, without Lister.

ROYAL SOUTHERN HOSPITAL, LIVERPOOL.

At a special general meeting of the trustees of the Royal Southern Hospital, Liverpool, held at the Hospital on the 7th inst., the rule limiting the tenure of office of Physicians and Surgeons to twenty-one years was altered, and the age of sixty fixed as that at which retirement must take place.

Curious Case of Ulceration of the Internal Carotid.—At the Petersburg Medical Society, Dr. Erichsen related a case of hæmorrhage, which he regarded as unique. A peasant, eighteen years of age, and otherwise robust, was admitted into the Marien Hospital for a phlegmonous angina of two days' duration. On the second day after his admission an abscess in the throat broke, discharging normal pus, and giving complete relief. On the sixth day a slight bleeding from the abscess occurred, which was easily arrested by a plug. But twenty-six hours afterwards arterial hæmorrhage appeared, which terminated the patient's life in a few minutes. At the autopsy, the cavity of the abscess, about the size of an egg, was found filled with fresh coagula. The wall of the abscess was in contact with the internal carotid, which was perforated by a circular aperture half a centimetre in diameter, a funnel-shaped dilatation from within outwards being recognisable at this point. No part of the wall of the artery in its further course exhibited any diseased appearance. As the pus was in a normal condition, the cause of the destruction of so firm a structure as the wall of the carotid in nine days is involved in obscurity. Dr. Wulff suggested the possibility of a secondary abscess having formed within the sheath of the vessel; but the preparation afforded no proof of this occurrence.—*Petersburg Med. Woch.*, December 29.

UNIVERSITY OF LONDON.

Meeting of Convocation.

The ordinary half-yearly meeting of Convocation of the University of London was held on Tuesday, the 15th, Dr. Storrar, chairman, presiding. The attendance of graduates was unusually large, the chief business for discussion being the Supplemental Charter submitted by the Senate, providing for the admission of women to the degrees of the University.

The Registrar laid on the table the regulations for degrees in music; they will be published in the forthcoming Calendar.

The new Supplemental Charter was then submitted. This Charter enables the Senate to examine women, and grant them any degree or certificate of proficiency that they have power to grant to men. A proviso is, however, made that no female graduate shall be a member of Convocation until Convocation shall have resolved to admit them.

The Report of the Annual Committee was presented and received.

Mr. Bompas, Q.C., M.A., LL.B., then moved "that the draft Charter be approved." He said that he had observed years ago that the prospect of examinations stimulated girls as well as boys to work, and that in the result there was no great difference between the two sexes. But he allowed, at the same time, that male and female were very different intellectually, and that they could not be confounded by any amount of similar training. He acknowledged, also, that there were difficulties in the way of granting degrees to women; but these were not insuperable, and he believed that for women's sake a standard should be fixed, and that this standard should be the same as the recognised standard for men. He regretted that in the Medical Faculty the degree carried with it special privileges. This was not the case with Law; and he believed that this University, as well as other universities, should not license a man to practise, but only recognise his knowledge. If a few women should, however, be in this way admitted to practise, he did not see why they should not. Mr. Bompas hoped that all side-issues would be allowed to rest. The Senate had yielded since the meeting in July. Neither should the question of other constitutional changes be raised at present; the chance of obtaining them would but be endangered by such a course.

Mr. Hensman, B.A., seconded the motion, contending that public opinion was in favour of the step.

Dr. Tilbury Fox opposed the Supplemental Charter. He said that difference of opinion was radical upon the subject, and there was no room for compromise. The Medical Faculty were anxious to improve the education of women, but they wished to consider first the means by which this could best be secured. The Chancellor of the University had written a letter to the Chairman of Convocation, which had been circulated among the members, and Dr. Fox said that he should like to make a few remarks upon it. Lord Granville would have better consulted his dignity had he remained neutral than by issuing a circular for the purpose of influencing the votes of Convocation. While the Chancellor disclaimed all intention of the kind, and protested that his desire was to remove misapprehension between Senate and Convocation, he stated reasons why Convocation should adopt a certain course. Convocation had not, Dr. Fox proceeded, sanctioned the admission of women to degrees. In 1874 they resolved that it was desirable to admit women "to degrees in the University"; but the proposer of that resolution had been particular in stating that he did not mean that women should be admitted to existing degrees. Again, in May, 1877, Convocation had resolved that it was inadvisable to admit women to degrees in medicine until they had considered the more general question of their admission to degrees in all Faculties. The Chancellor's statement in his letter was that "Convocation has on three different occasions recorded its opinion in favour of admitting women to degrees in all the Faculties, and has never expressed a contrary opinion." This was not a just statement, for Convocation had never explicitly sanctioned the admission of women to the *same* degrees as men. With respect to the history of the action of the Senate, a lady applied to the Senate in September, 1876, for admission to the examinations under Russell Gurney's Act. Legal opinion being in favour of the power

of the Senate to adopt the Act, it was resolved by the Senate, on a surprise motion—made without previous notice—to proceed to frame regulations for the examination of women. Mr. Osler was the mover of the motion for the adoption of the Act, and Dr. Fox charged him with having concocted this motion at Lord Granville's breakfast-table. Then came the meeting in May and the opposition of Convocation. In June the Senate declined to accede to the request of the graduates; and he could not understand how the Chancellor could say that he and Dr. Storrar had always warmly co-operated, when he led the Senators who opposed the request of Convocation presented by Dr. Storrar. In the next place, neither the Annual Committee nor the Senate had a line of evidence in support of the proposal of such a radical change. Was this as it should be? especially as the Senate had shown that its opinion on the subject was unsettled and changeable. Dr. Fox again urged the House to reject the Charter submitted to it. First, it did not meet the expressed wishes of Convocation; secondly, the subject had not been discussed. In his further remarks Dr. Fox said that it was impossible to avoid touching upon the question of privileges. The deputation from Convocation that had waited on the Senate was in a very humiliating position when it found that it had received no answer to its request. However, the Annual Committee thanked the Senate for giving up Russell Gurney's Act; and this step of Convocation was mainly taken on account of a letter sent by Dr. Carpenter, stating that they might consider that the Senate had abandoned its resolution. But Lord Granville had afterwards told Dr. Fox, in his own house, that Dr. Carpenter had no authority for saying any such thing! The Senate, in fact, still clung to the Act; and yet Lord Granville spoke of the Senate acceding to the wishes of Convocation! In conclusion, Dr. Fox said that he would appeal to the House on the desirability of being unanimous. They knew that there was a strong feeling abroad against the principles of the University. What was the cause of the agitation against the examination-system? What of the agitation respecting Owens College; what of the rumours of a Royal Commission? The University was threatened to be divided at such a time by a few women. He asked Convocation to be true to itself. The Annual Committee itself was split up. They ought to do nothing rashly; and he asked them therefore to reject the Charter.

The Chairman stated that he had just received a letter from the Chancellor, to the effect that Dr. Tilbury Fox had replied to Earl Granville's letter to the Chairman, giving his reasons for thinking that some of the Chancellor's statements were not consistent with fact. The Chancellor, therefore, had replied to Dr. Fox in the following terms:—That, considering the circumstances of the resolutions by Convocation and the words of them as they were communicated to the Senate, his statement about Convocation was not fairly open to the remark that it was not consistent with the facts.

Mr. Osler, LL.B., said that, although this subject was better discussed in Convocation by members of Convocation only, and not by those who were also members of the Senate, yet he felt compelled to speak. Dr. Tilbury Fox had coupled his name with that of the Chancellor, as having "concocted" this affair between them. He met this charge with an indignant denial. His motion in the Senate for the adoption of Russell Gurney's Act could not be called a "surprise" motion, when it called forth no remarks until a week later. He would deprecate the introduction of what occurred elsewhere into the present debate. With respect, however, to the meeting that had been said to have been held beforehand at the house of the Chancellor, he would say that the Chancellor had as much right to have a conversation on the subject of the University as anyone else. And it was a fact that of the three members of the Senate present at Earl Granville's on the occasion referred to, one was Lord Cardwell, who had voted on the side of Dr. Tilbury Fox all along.

Mr. Tyler, B.A., spoke against the acceptance of the Charter. He contended that ninty-nine out of a hundred women were dead against the movement. Let degrees be granted to them, but let it be ascertained before what such degrees should be.

Mr. Fitch, M.A., supported the adoption of the Charter, because he believed that the measure had a powerful bearing on general education. New forms of intellectual ambition were now open to women, and while the old universities had much share in the movement, the University of London had but little. Oxford and Cambridge had now lower examinations for girls as well as boys, and higher examinations for women as well as men. The examiners for the Tripos at Cambridge sent their examination-papers to the Colleges for Women. Everything short of actual admission was done, and admission was impossible, for residence was a necessity. The University of London alone of the English universities recognised merit independent of the conditions of its attainment; and they ought to do this in the present case by opening their degrees to all. Coming to the history of the movement in the University, Mr. Fitch contended that Convocation rejected Russell Gurney's Act in May upon its own merits only; in July the question of privilege was introduced; and, as a grave one, affecting the power and relations of Convocation, it had been urged by Convocation, and the Senate had yielded to the representations of Convocation in the matter. When requested by the deputation not to take any further action under Russell Gurney's Act, the Senate did what they were asked. It was true they did not rescind their resolution, but a body had no right to say that they would never exercise rights that they possessed by statute or by charter. He trusted that, by accepting the Charter, Convocation would at once restore harmony in the University, and do a signal public service.

Mr. Creak, M.A., said that the results of examinations were eminently satisfactory, not only to women, but to all concerned. It was now difficult for a lady to get a situation as governess unless she had passed an examination. With respect to the intellectual ability of women, he was able to inform the House that up to the present time twenty-three ladies had passed the examinations on papers set at the Tripos at Cambridge. Two had "taken" two triposes—in classics and mathematics. Was it fair to refuse a degree to such women? At the local Oxford and Cambridge examinations boys were in many subjects inferior to girls.

Dr. Quain said that he would return to the subject that was before the House. In his opinion no proposal could be more injurious to women, and no proposal could be more injurious to the University. The proposer of the original motion had more good sense than to urge that the degrees should be given indiscriminately to women. But upon the subject of the fitness of women to pursue the course of study for men's degrees, Dr. Quain said he would quote the opinion of a lady who was specially qualified to speak—namely, Mrs. Winkworth, of the Association for Promoting the Higher Education of Women, Bristol. This lady, in a letter addressed to the Senate in 1874, had said that "The experiment of giving an identical education to men and women is as yet very incomplete, and needs to be conducted in a cautious and tentative manner. . . . We have reason to believe that your examinations for degrees prove a severe strain on the powers of the average male candidates, . . . and this strain would be increased in the case of women." Dr. Quain urged that it was the duty of Convocation to inquire what education was most suitable for women. Mrs. Winkworth had added: "A curriculum framed with a special view to the requirements of women, differing from that of men, probably in the relative prominence given to certain subjects, in its range of options, in the absence of a competitive character, and its conditions of age, and leading to degrees (or certificates) not ranking as necessarily inferior in value, but differing in kind from those given to men, would be a far greater boon to women's education, in our opinion, than a mere admission to the existing examinations." Dr. Quain asked whether there were not persons in the Government, or in the Senate, who could come forward and say what they considered a suitable education for women. He would read to them Dr. Carpenter's opinion, in his reply to Mrs. Winkworth. He had said "that, experience having satisfied him that the requirements of the B.A. examinations are such as to task very severely the average of male candidates, he considered it undesirable to impose these requirements as the conditions under which alone females should be admitted to Arts degrees. . . ." Dr. Carpenter, therefore, suggested a separate curriculum for females. As the converse of this opinion, Mr. Magnus had said, with reference to certain higher school-examinations, that girls, being inferior to boys in some subjects, could not be expected to compete with them unless they dropped certain other subjects, such as Domestic Economy! It would not suit those who wished to encourage competition between men and women, Dr. Quain continued, to establish an independent curriculum; but this was what should be done, unless they wished to throw back half a

century the progress of female education. But the adoption of this Charter would also injure the University. It must be a failure; and in Medicine it would be ruinous. Sir James Paget, although approving of the measure, had stated in the Senate that if there were a concurrent examination for men and women in the surgical diseases of men it would be a scandal to the University. The effect would be to emasculate the examinations for male graduates. Dr. Quain said that he would not offend the sensibilities of members by saying what questions their sisters or their daughters might be required to answer. In another way the University would suffer, for if women were admitted, some of the most distinguished graduates would lose all interest in it. With respect to the grounds urged for the acceptance of the Charter—it was stated that it had been recommended three times. Once the principle had been approved of in Convocation by a majority of fifteen; and this resolution had been rejected by the Senate by seventeen to ten. A second time it was carried in Convocation in a house of forty or fifty. Therefore Convocation was no more bound to the principle than was the Senate. Coming to the history of the present dispute, Dr. Quain said that the movement for Russell Gurney's Act originated in pressure on the Government by persons of extreme views. Government referred the matter to the General Medical Council, which resolved that no profession was more unfit for women than the practice of medicine, but that it was not prepared to say that women should not be admitted to practice. The profession had, therefore, no right to be taunted with having a desire to exclude women from its ranks. But they were not anxious to educate women to perform great surgical operations, as had lately occurred in London in the presence of a most distinguished surgeon, in whose hand the knife would have been more becomingly placed. The Senate had accepted Russell Gurney's Act without motion—a proceeding which never could have occurred in any assembly where rules of business were properly regarded. The Senate referred the subject to a general committee, not to their Medical Committee. The Senate next disregarded the Memorial of the Medical Graduates. Neither this nor the subsequent proceedings of Convocation influenced the Senate, who allowed the resolution for the adoption of the Act to remain unrescinded; and had now offered the Supplemental Charter as a means of settling a difference which they had themselves raised. Dr. Quain trusted that, both for the sake of women and in the interests of the University, Convocation would refuse to accept the Charter.

Sir William Jenner said that when he came to the meeting he had intended not to speak, but some remarks compelled him to rise. The Chancellor, when he condescended from his high station to issue what must be called an electioneering circular—his letter to Dr. Storrar—should not have said that the Senate had entered into a compromise with Convocation. There was no compromise. The Senate did not withdraw their resolution to proceed under Russell Gurney's Act; they only arrested their action when they heard the opinion of Messrs. Herschell and Cookson. When they found themselves in a mess they offered the Charter, and this Charter Sir William trusted would be rejected. Next, with respect to the effect of the proposed measure, Mr. Fitch had pleaded for the improved education of women. He, too, desired to see the education of women improved. But with respect to Medicine, he would not hesitate to say that study and examination in this involved the study of the genital organs. Speaking solemnly, he would say, as had been said by another physician elsewhere, that he would rather follow his daughter to the grave than see her sitting on a form dissecting a male subject. He grieved to think that any graduate would feel differently towards his own child. The Committee appointed by the Senate to frame regulations had recommended that the questions put to men and women should be identical. The anatomy and pathology of the genital organs must therefore be admitted. He would hold up both his hands and pray that the graduates who knew comparatively little upon this subject would follow in the division the medical graduates who knew all the truth.

Professor Lister said that in Edinburgh and Glasgow Universities, when a matter that concerned one Faculty had to be considered, it was referred in the first place to that Faculty. The vast majority of medical graduates in the University of London viewed the admission of women to medicine with detestation. Especially was it to be deprecated that the same degrees should be given to the two sexes. The greatest deliberation was required in the consideration of the subject, and this Professor Lister strongly urged.

Mr. Farrer Herschell, Q.C., M.P., B.A., said that he was most anxious that the vote should be upon a definite issue on which there might be no misunderstanding. It seemed that the Senate had naturally inferred, from the resolutions of Convocation, that its opinion was in favour of admitting women. He would, therefore, urge them to consider the question whether women should be admitted or not. It did not follow, from the Charter, that they should be admitted on all subjects as at present. The Charter was not compulsory, but gave powers; and the governing body might put in force as many powers as it might see fit, or no powers at all. Various matters had been introduced into the discussion which should not determine Convocation. No one should say in future that the resolution was guided by various issues, and that the result might have been different. As for himself, he would say that on one occasion he voted against the resolutions for women. But he thought that the time had come to acquiesce in the views of the majority. With reference to the topics brought up, he trusted that no one would vote against the Charter from a feeling of resentment towards the Chancellor on account of his letter. Then, regarding the question of privilege, he owned he thought the Senate had bowed to the expressed will of Convocation: they had laid this Charter on the table, and had abandoned, therefore, their previous course. With respect to other reforms, they would not be sufficiently discussed now, and for their own sake they should be postponed. Lastly, it would be undignified to say that Convocation was not in a position to deal with the question. It had been three years before the House. Mr. Herschell concluded his speech by again urging Convocation to leave the questions of how the Charter might be applied for the future, and at present to discuss it on its own merits.

Mr. Murray, B.A., and Mr. Adams, B.A., next spoke in favour of the Charter.

Mr. Herford, in supporting the Charter, replied chiefly to Sir William Jenner's remarks about the effect of the study of anatomy on the female mind.

Dr. Wilson Fox, B.A., urged the rejection of the Charter, and said that the question was not the question of admitting women, but whether or not the present Charter should be accepted. He preferred that the whole subject should be reported on. For his own part, he would vote against the Charter because it admitted women to medicine.

Dr. Pye-Smith, B.A., said that he would vote for the Charter. The constitutional question was settled, and Convocation had achieved a great victory, for the Senate had adopted the view urged upon it. The Chancellor and Senate had exhibited a deplorable lack of statesmanship by declining to quit their false position; but now that they had made a concession, Convocation ought to keep them to it. This question should therefore no longer be mixed up with the main issue. In the next place, he felt that there were many constitutional changes desirable, and therefore they should settle all questions in dispute. They should not let a few women block the way to other reforms. Coming to the chief question, Dr. Pye-Smith said that Convocation should be consistent, and vote as it had voted on two previous occasions. Speaking to his professional brethren, he said that this was not a professional question. It had been tried to fasten the opposition on the Medical Faculty. But as regarded admission to Medicine, any opinion they might express would surely be an expression of knowledge against ignorance. In conclusion, he said that the only question, amid so much prejudice and difference of judgment, was the bold one. Women should be allowed to try. He would ask teachers in medical schools, with reference to the effect of medical education on young men, whether the tone of morality amongst medical students was not superior to that in any other class of young men engaged in study. Knowledge and mercy sanctified their work. He urged Convocation to accept the Charter for the sake of peace and of reform.

Dr. Moxon spoke against the admission of women to degrees and to a seat in Convocation, dwelling upon the latter result as the natural outcome of the former.

Dr. Bucknill also opposed the Charter, considering the so-called "higher education" of women to be mischievous.

Mr. Bompas replied, saying that regulations could be made for conducting the medical examinations in a seemly manner. This had been done at other places.

A show of hands was then made, and declared to be in favour of the approval of the Charter.

On a division being taken, it was found that there voted for the Charter 242, and against it 132: majority for the Charter, 110.

Dr. Pye-Smith then proposed, and it was resolved—"That . . . . the subject of all other constitutional changes be referred to the early consideration of the Annual Committee."

The other business of the meeting was then disposed of.

FROM ABROAD.

The Demonstrations at the Morgue.

These were commenced last week by Prof. Brouardel in the presence of Profs. Tardieu and Devergie (at whose instigation these *conférences* have been set on foot by the Faculty), several practitioners, and the first series of thirty selected students—this being as many as can be accommodated in so small a space. He began (*Gaz. Méd.*, January 12) by impressing upon his young auditors the importance of *discretion*, which, always an important professional duty, is especially necessary in legal medicine, which is concerned with questions that involve the honour of families and impassion the public mind. He then stated that it was not his object to teach "legal medicine" to an audience which would have to be replaced after ten lectures, but to instruct them in the art of making a medico-legal autopsy, and in drawing up a clear and correct report concerning it. In order to become a good medical-legist, a man must first acquire the knowledge necessary for the formation of an accomplished physician; but for the *practice* of legal medicine he must also attain the special knowledge which regulates the action of the medical expert, and the reports which he makes to justice. How to raise a cadaver, conduct the autopsy, and write a clear and correct report, even the most instructed physicians cannot know without having learned it; and the *conférences* at the Morgue are intended to supply this deficiency in the teaching of legal medicine in France. The pupils must always bear in mind the fundamental precepts that the procedure must always be methodically conducted, the surface of the body first being minutely examined, and then the various cavities, and always in the same order. Prof. Brouardel at once exhibited practically what he meant by performing himself the autopsy on two bodies, indicating carefully as he went on all the circumstances in the lesions discovered likely to assist the investigations of justice. Each student had to take notes, and at the succeeding *conférence* would deliver in his report, which would be publicly read and corrected.

The German Professoriate.

The pre-eminence of the German professorial body has long been a matter of remark, not to say envy, among the *savants* of other countries: but it has not been sufficiently considered that in Germany no other field lay open, until quite lately, for men of commanding talent and high aspiration among the middle class. Political life was a dead letter, and the military career an exclusive appanage of the aristocracy, while commerce was in the embryonic stage which is now undergoing rapid development. All the talent and energy thus set free seems to have concentrated itself in the professorial career, where it became exhibited not only in the production of men of vast erudition and unwearied industry, but also acquired a power in social life nowhere else to be attained, as a consequence of the traditional liberty of expression allowed to attach itself to the chair of the professor. Then, again, the emoluments of the chairs at the numerous universities offered a sufficient inducement for men of talent to seek to fill them whose aspirations were rather for renown and consideration than for a highly paid career; and we feel certain that did similar posts exist in France and England they would be eagerly sought for by men of no less eminence and industry than those who now adorn them in Germany. It is said, however, that a change is coming even in that learned land; and that the opening up of numerous other careers—at all events, far more profitable—has already had, and will have still more, its effect in diminishing the supply and lowering the standard of learned *savants*, considerable difficulty having been repeatedly found of late in finding fitting occupants of vacant chairs. As regards the medical professorships, the immediate effect seems to have been, as might be expected, to raise the market price of present celebrities; so that whenever a chair is vacant, the invited *savant* may almost make his own terms between those who seek to transfer his services and those who implore him to remain with them. The whole student and professorial world is kept in a state of trepidation until he has made his final decision; and his hesitations—not to say coquettings—are recorded in the medical press as among the most portentous events of the day. Several instances of this have occurred of late, and the chair of surgery vacant at Würzburg by the death of Prof. Linhart has had almost to go begging. Refused by Prof. Volkmann of Halle, by Prof. Czerny of Heidelberg, and by Prof. Socin of Basel, it has, we believe, at last found an occupant from among the minor stars, in the person of Prof. Bergmann of Dorpat. The Baden Government has succeeded in preventing the departure of Prof. Czerny from Heidelberg, and has conferred a title upon him for consenting to stay; while the determination of Prof. Volkmann to remain at Halle has called forth a most enthusiastic demonstration, in which students, professors, and townfolk all took part. In fact, nothing short of what the reporter calls a "solennes Fest" (which we are tempted to Anglicise into a "regular jollification") took place. After an official deputation had conveyed to the Professor in the morning its thanks for the decision he had come to, in the evening music, songs, and addresses engaged a crowded audience, consisting not only of the University authorities and students, but of practitioners from far and wide. After the Professor's praises had been sung and declaimed, he delivered one of his admirable orations on the recent progress of surgery, especially with regard to the new mode of treating wounds and its consequences. One of these consequences is that the character of unaccountableness and accident is gone, and the responsibility of the surgeon for his cases is increased: luck will play, henceforth, no part in surgery; all must depend upon knowledge and capabilities, and the surgeon will be judged by his results, just as is the workman or the artist. The mortality returns have told much upon the development of surgery, as by their aid we realise our responsibilities when the percentage of deaths exceeds certain limits. The Professor concluded by toasting the practitioners, whose education he had always had so much at heart. Toast after toast followed, accompanied by uproarious songs, winding up with one in the praise of carbolic acid.

Digitalis and Morphia in Heart Affections.

In his *Journal de Thérapeutique* for January 10, Prof. Gubler sums up as follows the conclusions of an elaborate paper on "The Comparative Indications of Morphia and Digitalis in the Course of Organic Affections of the Heart":—"1. Digitalis, the moderator and regulator *par excellence* of the circulatory rhythm, increases the energy of each systole in proportion as it brings about a diminution in the number of the cardiac revolutions. This result may be expressed in an arithmetical formula in these terms: The force dispensed by the heart in the unity of time being relatively constant, the absolute value of the fraction is so much greater as the denominator is less. 2. By means of this *cohibition*, with or without the aid of directly hypercinetic or even corroborant action, the probable existence of which has not been demonstrated, digitalis becomes a precious agent in special tonic medication in some subjects of nervous palpitation, and in most of those who have organic disease of the heart. 3. Its success is, so to say, assured as long as the asystolia depends upon disorder of the cardiac innervation, and on the ill-directed employment of the contractile force of the myocardium. Now, this *cardiac ataxia* is the normal condition of organic lesions of the heart in the early periods of their development, and it persists not only in the more advanced anatomical stages, but often also amidst the general complications which aggravate the symptoms in the gravest cases. 4. Nevertheless, a time comes when the asystolia is no longer the mere effect of the too rapid succession of more or less abortive, and consequently inefficacious, efforts. The debility becomes fundamental, and Bouillaud's *folie du cœur* gives place to

powerlessness. Then the reign of digitalis is over, and that of direct or indirect tonics, of *dynamophores*, and of stimulants commences. 5. Among all these remedies, the first place, without contradiction, belongs to opium and some of its principles, morphia especially possessing remarkable efficacy against the accidents resulting from cardiac paresis, which I designate *cardioplegia*. 6. By arousing the vitality of the capillary network, stimulating hæmatosis and the act of nutrition, it favours the increase of force in general, and especially that of the excito-motory force of the spinal bulb, and of the conductibility of the nervous cords which issue from it. It contributes also to keep up the circulation and the other great functions in consequence, by the calm it imparts to the sensibility and the moderation it consecutively restores to the rhythm of the movements of the heart. Again, it acts in the same direction by its hypnotic power, as sleep suppresses much expenditure, and as the *soporal congestion* is an anatomical condition extremely favourable to the restoration and nutrition of the nervous centres—very poor in capillary vessels. 7. If we are well informed as to the different aptitudes of digitalis and morphia, and if careful clinical analysis enables us to seize the two principal pathological conditions to which these great medicaments correspond, still, in spite of this, science is far from being able to guide us surely in the choice of the appropriate remedy in each particular case. What are the signs by which the practitioner my recognise that he ought to have recourse to opium rather than to digitalis? or—which in our opinion comes to the same—what are the differential characteristics by which he can distinguish *cardioplegia* from *cardiataxy*? 8. Digitalis is evidently indicated in simple lesions of the orifices and the valves, even when these are advanced, provided these exist in young persons otherwise well, or in more aged subjects who are as yet exempt from the general changes in the economy embraced under the term cardiac cachexia. Doubt commences when the asystolia is accompanied by grave complications, as anasarca, dropsy, albuminuria, cyanosis, orthopnœa, etc. In such cases we must proceed only tentatively. The same may be said of purely nervous palpitations, which, like the secondary circulatory disorders of organic lesions of the heart, may doubtless be divided into sthenic or irritative, and asthenic or paretic, between which their apparent characteristics do not allow of our distinguishing. 9. In doubtful cases it is digitalis which presents most chance of success, since it has been found to succeed when all hope seemed lost; but it must be given with caution and watching, so that it may be stopped in time if contra-indications present themselves. 10. The following rules should be observed in its administration:—Preference should be given to digitaline or to the tincture of the Codex, as other preparations are less efficacious and less safe. Infusions, whether in cold or warm water, possess too great nauseating or even cathartic power to allow of their being used in heart affections. Digitaline, however, should not be given in the pill form, but in an alcoholic solution properly diluted—two milligrammes per gramme being a sufficiently concentrated alcoholic solution. 11. The mean dose of the tincture of the Codex is represented by ten drops; that of amorphous digitaline is one milligramme, or fifteen drops of alcoholic solution; and of the crystallised digitaline one quarter milligramme, or four drops of the solution. This may be repeated two or three times in the twenty-four hours—the daily dose attained of the tincture being twenty to thirty drops, of the amorphous digitaline forty-five drops, and of the crystallised twelve drops. These doses need hardly ever be exceeded. 12. The digitalis should be given at a distance from the meals; and if the stomach is intolerant of it, it should be combined with tincture of cardamoms, essence of mint, etc. If in place of amending after the early doses, the anxiety increases, and the pulse becomes small and irregular, it should be suspended for two days, and then tried combined with opium and aromatics; abandoning it altogether if this association does not succeed. Although its beneficial effects are not observed until about the third day, yet the digitalis should not be prolonged beyond five or six consecutive days, for fear of toxical effects being produced by accumulation. 13. In organic disease of the heart, uncomplicated with grave lesion of the aortic bulb, and especially of the arch of the aorta, we may say that the later employment of opium coincides with the withdrawal of digitalis. Morphia may render assistance when the resistance of the economy becomes enfeebled. Its indication increases with the cachectic symptoms, and it becomes urgent and inevitable in the ultimate periods of the disease, when paralysis progressively invades the central apparatus of the circulation as the prelude of death. In cardiac affections morphia is the last safeguard of the patient and the *ultima ratio* of therapeutics. 14. But the indication of morphia is much more early in the course of aortic alterations, whether independent or complicated with lesions of the heart itself. It exists sometimes before the appearance of rational symptoms of the affection, often prior to any cachectic alteration, and almost always in the slightly advanced stages of the malady. In the first category it is required to assuage the acute pain of *angor pectoris*; in the second it serves to palliate the effects of the distension and wearing away of nervous branches by aneurismal dilatation of the aorta; and in the third it combats alike this paralysis from local cause and the paretic condition which results from the insufficient restoration of the centres of innervation, as well as the injury done to the sanguineous crasis and general nutrition. 15. Except the painful complication alluded to above, all the other conditions call for exclusively the stimulant and indirectly corroborative action of opium, and opium exhibits this only on the condition of being administered in small and frequent doses. Moreover, in order not to increase the existing torpor of the digestive organs, it is also desirable to employ it hypodermically. 16. The dose of the chlorhydrate of morphia should at its maximum be only 0·01 centigramme to commence with, and it would be better even to employ only half this quantity. The injections may be repeated two or three times in the twenty-four hours, continuing them almost for an indefinite time if the circumstances are imperious. 17. But the early doses becoming insufficient, they have to be progressively increased, especially during attacks of asystolia, diminishing them again when the crisis has passed or become appeased. The daily mass of morphia may thus be raised if necessary to four, six, eight, or ten centigrammes, distributed over three or four injections, made at equal intervals in the twenty-four hours. 18. These large doses must be continued as long as they are required to keep up the functional dynamism and sustain the economy, or at all events prevent its giving way. The inconveniences of chronic morphinism cannot be placed in balance against the dangers which immediately menace the existence of the patient. 19. In spite of their aptitudes being so different and their indications in some measure contradictory, opium and digitalis are far from always excluding each other, but often in the transitory phases or complicated forms of diseases of the heart afford mutual aid—as, for example, when the element "pain" becomes added to the motor disturbances of the organ, or when asystolia expresses not only the precipitation and tumult or ataxia of the heart, but also a certain amount of paralysis or cardioplegia. By contributing to the maintenance of the strength, the morphia injections insure the regulating effects of the digitalis, and at the same time act as a counterpoise to the depressing influence which the latter does not fail to exert as soon as the dose given becomes exaggerated. 20. The simultaneous or successful administration of these two great remedies in nowise precludes our having recourse to the various other means of treatment derivable from hygiene or the materia medica."

The Hospital Sunday Fund.—At a meeting of the Council of the Hospital Sunday Fund, held at the Mansion House on the 15th inst., the Committee of Distribution was re-elected. The members of the General Purposes Committee were also re-appointed, the Rev. John Baker, Wesleyan minister, and Dr. J. G. Glover, taking the places of Dr. George Bowden and Mr. Brudenell Carter, who had resigned. Sir Rutherford Alcock brought forward for consideration the fitness and expediency of including institutions, whether truss societies or provident surgical appliance societies, the object of which is to aid the infirm and crippled with instruments, either without cost or by payments adapted to their means. After some discussion, it was resolved that, "in the opinion of the Council, the question of admitting surgical aid and other kindred societies" to the benefit of the Fund "be referred for the consideration of the constituents of the Fund"; and the Lord Mayor was requested to call an early meeting of the Council for the purpose of further discussing the matter.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

ANNUAL MEETING, JANUARY 2, 1878.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

RUPTURE OF THE UTERUS.

Dr. ROPER showed a ruptured uterus. The patient was attended by a midwife. When the os uteri was fully dilated, and the head nearly on the perineum, a dose of ergot was administered, and symptoms of rupture appeared an hour and a half afterwards. The child escaped into the peritoneum, and delivery was effected by version. The laceration extended through the cervix uteri, and upwards as far as the right round ligament.

Dr. WILLIAMS said he had seen a case in which a similar rupture had occurred spontaneously when ergot had not been administered.

EFFECTS OF INJECTION OF PERCHLORIDE OF IRON.

Dr. HERMANN showed the uterus of a woman who had died of post-partum hæmorrhage. Her medical attendant had injected the organ with a solution of perchloride—one part to four of water. This was effective for a short time only; and then a rag, soaked with the saturated solution of perchloride of iron, was pushed into the uterus. The specimen showed well the difference in the effects of the weaker and the saturated solution. The upper part of the organ, which had been bathed by the weaker solution, was on section unaltered to an extent appreciable by the naked eye, though it was ascertained, by chemical tests, that the iron had come in contact with it. The lower part of the uterus, which alone had come in contact with the saturated solution, was black, hard, and corrugated, this change extending through the inner three-fourths of its thickness.

Dr. BRAXTON HICKS said that the case showed the truth of the view generally held with regard to the effect of perchloride of iron. Healthy tissue stands the tincture, but not the strong solution.

Dr. CLEVELAND asked what was meant by the term "saturated solution." He had used the strong Pharmacopœia preparation diluted with three parts of water, and thought it effective. The undiluted solution might act as an escharotic.

Dr. EDIS referred to a case of secondary post-partum hæmorrhage where a solution of iron (one to four) had been employed without permanently arresting the bleeding, in which two drachms of the strong liquid perchloride of iron were injected into the uterus about the tenth day after delivery and allowed to remain in. The bleeding was arrested at once. The patient made an excellent though a tardy recovery. There was no sloughing or untoward symptom.

Dr. ROUTH said the case brought up the whole question of injection of perchloride of iron. He had used it twice, and both patients died. When injection into the uterus is made there ought to be a free exit. In the case before the Society a solution of one to four was used; it proved inefficient, so that it is a bad plan to use a weak solution.

Dr. CORY had used it in several cases with success, and without bad result; the strength of the solution being one to four.

Dr. HAYES said that the specimen showed that very little of the injection had reached the fundus from which the blood flowed. In all cases of post-partum hæmorrhage where perchloride of iron was used the whole of the bleeding surface should be bathed by the fluid. In order to insure this the uterus should be emptied of clots and the injecting-pipe carried along the hand, and the injection directed against every part of the surface. By introducing the hand into the uterus, and retaining it there while injecting, a free exit was obtained for the fluid. He used equal parts of liquid perchloride of iron and iced water, and had most satisfactory results.

Dr. BARNES said the point of the syringe should be carried to the fundus. This could only be insured by introducing the hand into the uterus. Clots should be removed before injecting. One to four is a good strength, but a stronger solution might be used if necessary, but it should not be escharotic. This means of arresting hæmorrhage had stood the test of experience, and had saved many lives. The test for its use is the possibility of exciting reflex action. Where this cannot be done, use perchloride of iron.

EXTRA-UTERINE FŒTATION.

Dr. HEYWOOD SMITH showed parts illustrating extra-uterine fœtation. The specimen was referred to Drs. Madge and Aveling for report.

MALIGNANT DISEASE OF THE UTERUS.

Dr. SMITH also showed a specimen of malignant disease of the body of the uterus. The patient suffered from menorrhagia and a uterine tumour. The cervix was incised, and carbolic acid was employed. She rapidly got worse and died.

The result of the ballot for the election of officers for the ensuing year having been declared,

The PRESIDENT then delivered the Annual Address.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 8.

CHARLES WEST, M.D., President, in the Chair.

THE MICROSCOPIC ANATOMY OF CHRONIC INFLAMMATION OF THE SURFACE OF THE TONGUE.

MR. BUTLIN read a paper on the above subject, of which the following is an abstract:—Minute anatomy, hitherto undescribed, of the smooth, glossy tongue, called by Fairlie Clarke "chronic superficial glossitis." Its characters consist of thinning of the epidermis, destruction of the papillæ and other appendages, of thickening and increased vascularity of the corium and submucous tissue, and infiltration with small cells. Comparison was drawn between the characters of this disease and of psoriasis or ichthyosis of the tongue. Apparently no essential difference exists in the microscopical characters of the two diseases.

Mr. GASKOIN had lately seen a case of lupus affecting the left side of the nose, accompanied with a smooth patch on the same side of the tongue, which appeared to increase in extent *pari passu* with the destruction of the ala nasi.

Dr. THIN thought that the drawings well represented the earlier stages of epithelioma of the tongue. The smooth tongue met with in dysentery much resembled this condition microscopically.

Sir JOSEPH FAYRER referred to the smooth glazed tongue met with in the chronic or bile-diarrhœa of India, and indicative of an advanced stage of the disease. The normal condition was sometimes regained; but it was always of serious import.

The PRESIDENT asked whether the smooth tongue described by Mr. Butlin was to be regarded as a local disease. In the dyspepsia and intestinal diseases of children the tongue sometimes presented smooth patches. This condition was seldom seen after the age of twelve or fourteen, and it appeared to be connected with the second dentition.

Mr. BUTLIN had never seen a case in which lupus and the smooth tongue occurred together. He had seen a smooth tongue in a case of chronic diarrhœa in a woman; but it seemed as if the horny layers had disappeared. The smooth tongue in children was probably of the same character as that met with in diarrhœa and dysentery. He thought that the condition described in his paper was local; the patients had the affection a long time without presenting constitutional symptoms.

MATERNAL IMPRESSIONS.

Mr. WM. SEDGWICK, in bringing forward the subject of maternal impressions, said it was useful to anticipate some of the objections that might be urged against it, by premising that great care had been taken to avoid, as far as possible, any unnecessary reference to cases which possessed no practical significance, or which, from their doubtful character, would tend to increase the scepticism of those who were well qualified to judge of this alleged influence. It was an established fact in reproductive development that women, as a rule, transmitted with far more facility than men. The normal influence of the mother on the intellectual development of her offspring had been well and familiarly expressed in the term "mother-wit," whilst

"father-wit" was a term almost unknown; and in abnormal development it had been long known that women often served, and to a far greater extent than men, as conductors of an inheritance which they did not share. In like manner it was now popularly believed that it was the emotional impressions of the mother, and not those of the father, which admit of being imparted to the fœtus in the form of "mother's marks," to the exclusion of what might be called "father's marks." But this assumed limitation of emotional impressions to one sex did not always prevail, for it would be found, on inquiry, that originally either parent was thought to be capable of imaginatively affecting the offspring at the period of conception; and traces of this form of the belief had been lately found among some of the tribes in Central Africa. In directing attention to the influence of pictures and other æsthetic means of appealing to the imagination, Mr. Sedgwick remarked that there was an essential difference between cases in which some modification of fœtal structure had been slowly effected through the influence of the perceptive faculties, and those cases in which emotional impressions had been supposed to act on the fœtus by causing what has been erroneously described as a sudden arrest in its development. The occasional transmission to offspring of acquired defects of structure could not be logically objected to, since all abnormal modifications of the system must have been acquired before they could have been transmitted. It was, no doubt, difficult to distinguish between the alleged influence of maternal impressions and that of heredity. Complete elimination of hereditary influence, in the emotional transmission of physically acquired defects, could only be secured in cases of which the following might be selected as the type:—The wife of a clergyman had a child born with deformity of the hand, characterised by the absence of one finger, and the complete union of the middle and third fingers, the united extremities of which were covered by one nail. At an early period of her pregnancy she had been much affected by seeing a child with exactly the same deformity of the hand, and the fact of the impression in this case had been communicated to Dr. Montgomery by a lady who had accompanied the patient when she engaged the doctor for her confinement. It was remarked that the establishment, through hereditary influence, of acquired instincts in the lower animals, as well as the occurrence of hereditary talent in our own race, was apparently due to some modification of structure; and that when, in like manner, maternal impressions had been said to react specially, if not exclusively, on the nervous system of the offspring, the effect might with equal probability be referred to some modification of structure produced through the medium of the blood. Many of those, however, who believe more or less in the influence of maternal impressions would probably refuse to admit the necessity for any such dependence on structural change. Thus, Dr. Robert T. Lee had lately stated that "it would, on reflection, appear to be most natural that maternal impressions should be more frequently followed by unnatural condition of the intellect of the child than by any abnormalities of growth"; and in a lately published article on maternal impressions in one of our leading medical journals there had been exhibited a corresponding tendency to theorise in the same direction, the effect produced on the fœtus being referred to "an induced current of nervous impression." After referring to Sir Everard Home's Croonian Lecture on the alleged discovery of what had been thought to be the missing nerve-link, it was urged that the exaggerated importance which had been assigned to nerve-communication as the only probable way by which the supposed influence of maternal impressions could be conveyed to the fœtus had no doubt had a tendency in former years to retard and obscure the inquiry, and the opinion was expressed that the limitation of the influence of a maternal impression to a corresponding organ or tissue in the fœtus, as a consequence of some slight and inappreciable alteration in the blood of the mother being imparted to the local nutrition of her offspring, might physiologically be regarded as more probable than limitation effected by nerve-influence. There was no reliable evidence that a congenital defect had ever been the direct and immediate result of arrested development; whilst the popular belief that a maternal impression could be conveyed to the fœtus, and affect it like an electric shock, should be simply dismissed as a popular fallacy. The influence of the impression at an early period of pregnancy could only be conveyed to the part through the medium of the blood or nutrient fluid; and it was consequently improbable that the first stage in the production of abnormal development should be a local arrest of fœtal nutrition. After citing evidence to show that the arrest in cases of defective development had been preceded by increased determination of some kind to the part, Mr. Sedgwick directed attention to the comparative physiology of reproduction in the lower animals, and showed that when the tendency to an artificially developed excess of structure had, through hereditary influence, been pushed too far, it was apt to be followed by deficiency and arrest, as in the case of some top-knotted varieties of birds. Abnormal increase of structure without any subsequent arrest occurred in cases of supernumerary fingers and toes, which had been sometimes referred to the influence of maternal impressions; and there was local increase of the vascular tissue in nævi, and of the hair, if not always of the skin, in those pseudo-mimetic moles, which had been said to resemble the rats, mice, and other animals with hairy skins which had frightened women during some period of their pregnancy. It might be expected that a maternal impression sufficient to produce a physical peculiarity or defect in the fœtus through the medium of the blood would reappear—at least, in a modified form—in some of the succeeding offspring; but there was very little evidence of any kind in favour of such an occurrence; and generally when there had been a reappearance of the defect there had been an alleged recurrence of the maternal impression. In alluding to the many curious and some mystical delusions connected with this popular belief, Mr. Sedgwick called attention to the supposed transfer of maternal impressions to a selected part of the body, to the changes which were said to occur periodically in the nævi ascribed to maternal impressions, and to some of the scientific and other objections to the belief. In conclusion, he directed attention to the evidence in favour of the influence of maternal impressions derived from observations on the lower animals; and with reference to the episode of Jacob's rods, they were apparently employed not to originate, but simply to aid in the increased production of specially marked offspring. There had been many illustrations of the effect produced by variously coloured objects on the breeding of sheep and other animals since patriarchal times. Dr. Alexander Harvey had collected and published some satisfactory evidence on the subject, as had also other observers; and a good illustration of this alleged influence on the breeding of sheep had been lately communicated by a much respected clergyman in the West of England. In reviewing the evidence which had been adduced in favour of a belief in the influence of maternal impressions, Mr. Sedgwick admitted that it did not appear to be at present either sufficiently relevant or trustworthy, as regarded its limitation or its extent, for a final decision to be pronounced. There was indirect evidence that the influence of the mind over the body might, in the case of pregnant women, be so far extended as sometimes to affect the fœtus, and there was nothing which could be regarded as physiologically inconsistent with the belief in its uncorrupted form. But the direct evidence in its favour was limited to a comparatively small number of cases, in which the maternal impressions, received at definite periods of pregnancy, had been fairly well authenticated before the birth of the offspring. Some of these cases had been clearly independent of hereditary influence, and none of them could be accounted for by any theory of coincidence. As the only recognised medium of communication in such cases was the blood, it was probable that the influence of the impression was always gradual, and never sudden in its operation; and that the prevailing fallacy respecting the supposed suddenness of the effect produced had resulted from the original form of the belief having been corrupted in after years.

Mr. Donald Napier showed casts from the mouth of a lady aged twenty-five or twenty-six, in whom the milk-teeth was still present, none having been shed except two upper incisors. Other members of the family had the same peculiarity. He would not attempt to determine how far in the present case the condition was due to hereditary influence or to a dread of its occurrence on the part of the mother.

Mr. Savory said that diseases might be transmitted from the mother to the fœtus; but it was more difficult to conceive how an impression on the mind of the mother could produce a corresponding physical defect in the fœtus.

Dr. Thin would like to have the alleged cases of maternal

impression put to a test. General impressions in such matters were of very little scientific value.

Dr. Matthews Duncan said that the subject of maternal impressions was now and then brought before medical societies; but no progress would be made in it until coincidences could be distinguished from consequences.

Favus.

Mr. Gaskoin showed a case of favus in a boy, the child of Polish parents. The disease appeared to be of rare occurrence in London.

CLINICAL SOCIETY OF LONDON.

Friday, January 11.

Christopher Heath, F.R.C.S., Vice-President, in the Chair.

Lupus of Face treated by Linear Scarification aided by Erasion.

Mr. Balmanno Squire exhibited a woman aged thirty-two, single, a needle-machine worker, who had been affected with lupus of the face since the age of fourteen. The disease appeared first on the nose, and remained restricted to the nose until three years ago, when the disease appeared on the right cheek, also occupying here a distinct position quite isolated from the patch on the nose. Her condition in September, 1877, was that the lower third of her nose had disappeared, and become replaced by a thick scab covering an ulcer, the floor of which consisted of pale flabby granulations exuding a thin purulent discharge. The patch of disease on the right cheek measured two inches vertically by an inch and a half horizontally. It consisted of unbroken lupus-tubercles, and presented no scabs or ulcerations. On September 27, Mr. Squire operated on the whole of the diseased area both of the cheek and of the nose by scraping away the friable portion of the diseased skin by means of a small steel spoon provided with sharp edges, after the manner originally advocated by Dubini of Italy, and subsequently by Volkmann of Halle, and, as soon as the surface had healed, he again, after about a fortnight's interval, performed the operation. On the surface healing for the second time, a very considerable improvement was noticeable; in fact, the cure of the disease was evidently for the greater part already accomplished. There remained still various portions of skin which, although not sufficiently diseased to permit of their being scraped off by means of the spoon, were, nevertheless, evidently affected in an obvious degree with lupus-infiltration. These, accordingly, were treated by means of linear scarification, repeated at short intervals several times over the same area. The ulcers of the interior of the nostrils were treated in the same manner, namely, by operating through a nasal speculum. The patient did not on any of these occasions avail herself of anæsthesia, either general or local, but bore the process almost without flinching. She seemed now to be quite cured of her disease. The period between the time at which the disease had now long since seemed to be cured and this present time has been occupied by Mr. Squire in watching to see if any return of the disease took place, and by his eradicating by means of erasion with the sharp spoon, or by scarification with the scalpel, any minute traces of the disease which seemed to be still left unobliterated. His deviations from the course of his predecessors in this method had consisted in the use of much smaller spoons for the purpose of attaining greater accuracy in manipulation—an important point when it is requisite to eradicate even the smallest possible remains of the disease,—and for the other matter in employing linear scarification in place of the hitherto used and so-called multiple punctiform scarification, equally also for the purpose of attaining greater uniform precision in the treatment.

In reply to the Chairman, Mr. Squire said the nares were affected to the extent of half an inch, and that in some instances incising was not enough, scraping being required when the infiltration of leucocytes had proceeded to any depth.

Mr. Pick asked if there had been treatment, as he had seen good result from large doses of arsenic, pushed almost to poisoning. He had never, however, seen perfect healing, as out-patients generally disappeared before that period.

Dr. Whipham spoke of a case of lupus where both local and general treatment had been employed with little success. The woman came one day with her face quite raw on one side from the kick of her child, but the lupus speedily healed. The other side was then cauterised, and that too healed.

Mr. Squire had only used local treatment; and, in reply to a question from Dr. Althaus, said he had used Hebra's treatment with nitrate of silver, but only superficially, whereas Hebra used it deeply. Sometimes, so used, it left a permanent discoloration.

A Case of Chorea, complicated with Epilepsy, in the Adult Male.

Dr. Althaus read a paper on this case, which was that of a gentleman, both of whose parents had the neurotic constitution, and had moreover been first cousins. The chorea appeared when the patient was fifteen years of age, there being no history of fright, rheumatism, or endocarditis, the exciting cause having probably been masturbation. After having lasted for six years, the St. Vitus's dance became complicated with epileptic attacks, the first one of which occurred after exposure to a powerful sun, and which after a time became numerous, both in the daytime and during sleep. These attacks were peculiar, inasmuch as they could apparently be brought on by a variety of circumstances under the control of the patient, and could also frequently be arrested by other proceedings. The patient was good-humoured, somewhat childish, but very fond of reading. The symptoms of chorea were seen in all the voluntary muscles of the body, there being no difference between the two sides. There was great tendency to general vaso-motor disturbance. Dr. Althaus treated the case with arsenic and bromide of potassium, without result; and, after these medicines had been given for a sufficient time, with various other nerve-tonics and sedatives. Nothing, however, seemed to benefit the patient until, in 1870, hydrate of chloral was given, which greatly checked the restlessness and general convulsibility from which he then suffered, and was also useful in arresting the epileptic fits. The patient unfortunately soon contracted the habit of taking immoderate doses of chloral, and, although the chorea was nearly cured, his digestion and general health became greatly impaired, and the epileptic attacks became more frequent and uncontrollable. He died in 1874, under peculiar circumstances, being found dead in his bed, with a wineglass half full of chloral clasped in his hand; and it was believed at the time that he had died of an over-dose of the chloral. Dr. Althaus could not entertain this idea; but argued that, if chloral had killed him, there would have been complete muscular relaxation, and the patient could not have been found several hours after death clenching a glass half full of liquid. He thought that the patient had intended to take chloral for a fit, the symptoms of which were coming on; that he died in the fit before being able to take the chloral; and that, rigor mortis setting in immediately after death, caused the glass to remain clenched in the hand of the patient. Dr. Althaus drew attention to the value of the hydrate of chloral in the treatment of chorea, saying that cases of this disorder in adult males were generally incurable, but that in this case the chorea, which had lasted eighteen years, and was severe, was very nearly cured when no other medicine, nor the continuous current, had made the slightest impression on it. He explained this effect by the theory of chorea being caused by active hyperæmia of the corpora striata and of the territory of the Sylvian arteries generally, while chloral caused anæmia of these structures, and was, therefore, a direct antidote. After some further remarks on the pathology of the case, he discussed the question whether the custom now obtaining in this country of chemists supplying patients with any amount of a powerful medicine like chloral, from a single prescription, should not be checked by legislative interference. In the present case the patient had procured wholesale supplies of chloral from a West-end chemist at a time, and had thus rendered it impossible to regulate the dose. Dr. Althaus alluded to the law of Germany and Austria, that a prescription, after having once been made up, was detained by the apothecary, and could only again be used on the physician once more attaching his initials and the date to it. The present custom in force in England not only enabled patients to do themselves and their friends a great deal of harm, but also opened the door to crime, inasmuch as it rendered the Sale of Poisons Act utterly futile.

Dr. Cayley had used chloral in the treatment of chorea, but had not found it very useful, probably as he feared to give it freely to out-patients.

Dr. Southey had used both chloral and bromide of potassium in two cases, one being very bad. He gave ten grains of each every two hours till sleep was produced; after that the dose was reduced. Speedy improvement followed.

Mr. Soelberg Wells, referring to the subject of prescriptions, mentioned two cases. In one of these morphia had been ordered in small quantity as an injection under the skin, but the practice was continued till ten or twelve grains a day were used. He sent the patient to Levenstein at Berlin, who had treated of this matter (*Morphium sucht*). In another case arsenic was the substance used. One day a very large dose was taken, but the patient was seen at once, and the life saved.

The Chairman asked if the masturbation was stopped, or any surgical operation done to arrest it. He had often seen blistering do good. He thought the question of epileptics marrying an important one. He had found bromide of potassium the best thing in delirium tremens.

Dr. Burney Yeo, referring to the marriage of epileptics, mentioned a case where an epileptic attack came on shortly after marriage, which terminated fatally in a few days.

Dr. Althaus, in reply, thought the use of chloral in out-patient practice was not so advantageous as when the patient was under complete control. Chloral and bromide formed a good combination. He thought the prescription question very important.

This being the annual meeting, and the list of the new office-bearers suggested by the Council and elected by the Society having been read,

The Secretaries proceeded to read the Council's report and the Treasurer's report, which showed that the Society was doing well from a money point of view.

Dr. A. P. Stewart briefly moved the adoption of the reports, and the motion was seconded by Mr. Spencer Watson. This was at once carried.

Next, Mr. Maunder moved the thanks of the Society to the retiring Vice-Presidents and members of Council.

Mr. T. Smith seconded this, and it was unanimously carried.

Mr. Berkeley Hill moved a special vote of thanks to the retiring Surgical Secretary, Mr. Pick, adding a few words of appreciation for Mr. Pick's services to the Society.

This was seconded by Dr. Burney Yeo, and carried unanimously.

(*To be continued.*)

James Murphy, B.A., M.D., has been appointed to the Chair of Botany at the University of Durham College of Medicine at Newcastle-on-Tyne.

Académie de Médecine.—In the address on the proceedings of the Academy during 1877, which Prof. Bouley delivered on resigning the presidential chair (*Bulletin*, January 2), he stated that during the year the Academy had received the following official communications:—120 relating to the source of epidemics, 88 concerning mineral waters, 50 on secret remedies, 117 on the vaccine service, and 25 official requests for analyses of mineral waters. The members of the Academy have addressed to it eighteen communications, some of which, as those on typhoid fever, the treatment of rheumatism by salicylic acid, and amputation at the hip-joint, have led to interesting debates. Thirteen reports, some of them elaborate, have also been made by committees of the Academy on memoirs addressed to it. The scientific memoirs addressed to it by persons not members of the Academy, and consigned to special committees, were sixty-three in number. Besides these, there were twenty-five sealed letters (*plis cachetés*) received for deposit in the archives; "and if," as the President remarked with some *malice*, "each of these contains the secret of a discovery, it is a precious deposit from which the future will benefit." Then the Academy has received for its twelve prizes thirty essays for those of 1876, and forty for those of 1877—all of which have been referred to prize-committees for adjudication. The Academy has also performed 2601 vaccinations and re-vaccinations, and has expedited 16,000 charges of vaccine virus. It is evident from this account that a great deal of work has to be done by this learned body, and that its membership is no sinecure.

MEDICAL NEWS.

King and Queen's College of Physicians in Ireland.—At the ordinary Monthly Examination Meetings of the College, held on Tuesday, Wednesday, and Thursday, January 8, 9, and 10, 1878, the following candidates were successful:—

For the licence to practise Medicine—

Previous Examination.

Mahony, William Aloysius.

Final Examination.

Aherne, John Leonard.
Armstrong, Henry.
Arthur, Thomas Francis.
Barker, Annie Reay.
Madigan, Bartholomew.
Owen, Richard Foster.
Redmond, Joseph Michael.
Roe, Arthur Legge.
Spowart, William Ribton.

For the Licence to practise Midwifery—

Aherne, John Leonard.
Armstrong, Henry.
Arthur, Thomas Francis.
Barker, Annie Reay.
Madigan, Bartholomew.
Redmond, Joseph Michael.
Spowart, William Ribton.
Woodroffe, John Fitzhenry.

Royal College of Surgeons of England.—The following gentlemen passed their Primary Examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 9th inst., and when eligible will be admitted to the Pass Examination, viz.:—

Barton, William E., student of University College Hospital.
Bulteel, Marcus H., of St. George's Hospital.
McKeough, George T., of the London Hospital.
Plant, Charles, of the Manchester School.
Roper, Edwin, of Guy's Hospital.
Roth, Reuter E., of University College Hospital.
Squire, John E., of University College Hospital.
Williams, Walter T., of the London Hospital.

The following gentlemen passed on the 11th inst., viz.:—

Chipperfield, T. J. B. P., student of St. Bartholomew's Hospital.
Collier, William, of the Cambridge School.
Cooke, George W. H., of the London Hospital.
Denham, Charles A., of the Manchester School.
Ford, Lewis F., of University College Hospital.
Greensill, Joseph M., of the Middlesex Hospital.
Grimoldley, George H., of St. Bartholomew's Hospital.
Heaven, John C., of the Bristol School.
Ingledew, George, of University College Hospital.
Knight, William, of St. Bartholomew's Hospital.
Ladell, William J. S., of St. Bartholomew's Hospital.
Lunn, Ernest C., of St. Thomas's Hospital.
Newnham, William H. C., of Guy's Hospital.
Parkinson, William J., of Guy's Hospital.
Penruddocke, Charles, of the Bristol School.
Phillips, Henry A., of Guy's Hospital.
Smith, John, of Guy's Hospital.
Steele, Warwick C., of St. Bartholomew's Hospital.
Waldron, John, of the Middlesex Hospital.

The following gentlemen passed on the 14th inst., viz.:—

Benthall, Alfred E., student of University College Hospital.
Blakeney, Hugh T. W., of St. Bartholomew's Hospital.
Cook, Augustus H., of University College Hospital.
Cowen, Edward L., of St Thomas's Hospital.
Diggle, John A., of the Manchester School.
Dowsley, David H., of Kingston, Canada.
Foster, William, of the Cambridge School.
Frakes, Henry S., of the Manchester School.
Gwynn, Reuben H., of St. Thomas's Hospital.
Heygate, Frederick N., of St. Thomas's Hospital.
Kelly, Charles A., of University College Hospital.
Langridge, Albert H., of Guy's Hospital.
Long, Edwin W., of University College Hospital.
Maiben, Oswald, of the Dublin School.
Pepler, William H., of St. Bartholomew's Hospital.
Powel, William A., of University College Hospital.
Sequeira, Henry J., of St. Thomas's Hospital.

The following gentlemen passed on the 15th inst., viz.:—

Dimmock, Henry P., student of St. George's Hospital.
Haward, S. Monteith, of University College Hospital.
Logan, F. T. Bishop, of Guy's Hospital.
Lowes, Septimus, of the Newcastle School.
Rich, Evelyn A., of St. George's Hospital.
Ryan, Philip M., of St. Thomas's Hospital.
Skinner, Bruce M., of St. George's Hospital.
Steinthal, G. J. Haslam, of the Manchester School.
Woodman, John D., of St. Thomas's Hospital.

The following gentlemen passed on the 16th inst., viz.:—

Beresford, Charles W., student of University College Hospital.
Fraser, Donald A., of St. Mary's Hospital.
Grigg, William H., of the Westminster Hospital.
Gripper, Arthur D., of St. Thomas's Hospital.
Harries, John G., of Guy's and Charing-cross Hospitals.
Howard, Henry, of the Cambridge School.
Huxley, Frank E., of University College Hospital.
Laxton, T. Lowe, of St. Thomas's Hospital.
Parker, W. Turner, of St. Thomas's Hospital.
Partridge, Miles W. C., of the Birmingham School.
Vinrace, F. Coulson, of the Birmingham School.
White, J. Benson, of the Birmingham School.
Yate, H. Wright, of St. Mary's Hospital.

Forty-four candidates out of the 110 examined having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months.

The following were the questions on Anatomy and Physiology submitted to the 110 candidates who offered themselves on Monday, the 7th inst., when they were required to answer at least four, including one of the first two, out of the six questions; the examinations will be continued through the ensuing week. (On this occasion Mr. W. W. Wagstaffe, of St. Thomas's Hospital, the recently elected member of the Board, took part in the examinations):—1. State the functions of the pneumogastric nerve in relation to the heart, larynx, lungs, and stomach. 2. Describe the changes which take place in the ovaries and uterus at each catamenial period. 3. Describe the elbow-joint, and mention the structures in contact with it. 4. Describe the diaphragm—its attachments, relations, and action. 5. Describe in order the parts met with in the dissection required to expose the deep palmar arch. 6. Describe the innominate veins—their formation, course, and relations. Mention the veins entering them.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 10, 1878:—

Fergusson, Reginald Archfield, Ronald-street, Glasgow.
Maybury, Lysander, Frimley, Surrey.
Roper, George Arthur, Denmark-road, Camberwell.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Blackwell, Frederick William, London Hospital.
Green, Harry, General Hospital, Birmingham.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

PARKER, RUSHTON, F.R.C.S., B.S., Lecturer on Surgery at the Liverpool School of Medicine—Assistant-Surgeon to the Royal Infirmary, Liverpool, *vice* — Banks, appointed Surgeon.

NAVAL, MILITARY, &c., APPOINTMENTS.

ADMIRALTY.—Fleet-Surgeon George Birnie Hill has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet, with seniority of January 10, 1878.

WAR OFFICE.—MADRAS MEDICAL ESTABLISHMENT.—Surgeon James Byers Thomas to be Surgeon-Major.

BIRTHS.

BURGESS.—On January 14, at 254, Bethnal-green-road, the wife of F. J. Burgess, L.R.C.P. Lond., of a son.

CHAMPNEYS.—On January 12, at 4, Oakhill-park, Hampstead, the wife of F. H. Champneys, M.A., M.B., M.R.C.P. Lond., of 11, Wyndham-place, Bryanston-square, of a son.

DAVIES.—On January 14, at Pembridge-villas, Bayswater, the wife of Gomer Davies, L.R.C.P. Edin., of a daughter.

MACKINNON.—On January 11, at 2, Bellevue-place, Southampton, the wife of Surgeon-Major C. Mackinnon, L.R.C.S. Edin., of a daughter.

SMITH.—On January 13, at 2, Portugal-street, Grosvenor-square, the wife of Heywood Smith, M.D., of a son.

MARRIAGES.

BROWNE—GRANT.—On January 9, at St. Peter's Church, Hammersmith, John Walton Browne, B.A., M.D., eldest son of Samuel Browne, R.M., J.P., of Belfast, to Matilda Elwin, second daughter of the Rev. Francis Bell Grant, M.A., late Rector of Christchurch, Barbadoes, W.I.

BUCKELL—CORNWALL.—On January 10, at All Saints Church, Chichester, Ernest Hook Buckell, L.R.C.P. Lond., son of Leonard Buckell, M.D., of Chichester, to Maria Louisa, youngest daughter of the late Rev. George Cornwall, M.A., Rector of Earnley-with-Almodington, Sussex.

MYERS—MOLESWORTH.—On January 15, at St. Peter's, Eaton-square, Arthur B. R. Myers, M.R.C.S. Eng., Surgeon Coldstream Guards, to Blanche M. T., second daughter of Walter Hele Molesworth, Esq.

WILLIAMS—WHITE.—On January 9, at St. Mary Abbot's, Kensington, David James Williams, M.R.C.S., of Llaoelly, to Julia Hester Elizabeth, eldest daughter of Edward Fox White, Esq., of Lexham-gardens, South Kensington.

DEATHS.

BLUNDELL, JAMES, M.D., F.R.C.P. Lond., at 80, Piccadilly, on January 15, in the 88th year of his age.

CLARKE, JOHN, M.R.C.S., at Linton, North Devon, on January 9, in his 81st year.

GREENHOW, ELIZA BURNLEY, wife of Edward Headlam Greenhow, M.D., F.R.S., and second daughter of the late Joseph Hume, M.P., on January 15, at 14A, Manchester-square.

HALLER, MORITZ, M.D., C.M., late Commissioner in Lunacy for Austria, in Vienna, on December 27, in the 72nd year of his age.

HOLT, JOSEPH ROSE, M.R.C.S. Eng., at Uckington, Cheltenham, on January 11, in his 86th year.

HUBBERT, ELIZABETH, wife of Philip Hubbert, M.R.C.S. Eng., at Arundel, on January 10, aged 57.

KERR, WILLIAM CHARLES, M.D., at The Hale, Newnham-on-Severn, on January 12, in the 79th year of his age.

LANG, JOHN, M.D., of Southport, on January 5, in his 50th year.

STOKES, WILLIAM, M.D., D.C.L., F.R.S., at Carrig Braec, Howth, County Dublin, on January 7, in his 74th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Applications, with testimonials, to Mr. C. Rowlandson, Hon. Sec., The College, Durham, on or before January 26.

LOUGHBOROUGH DISPENSARY AND INFIRMARY.—Resident House-Surgeon. Candidates must have a medical and surgical registered qualification. Applications, with testimonials, to William Berridge, Secretary, on or before January 26.

SUNDERLAND AND BISHOPWEARMOUTH INFIRMARY.—Senior House-Surgeon. Candidates must be doubly qualified and registered. Applications and testimonials to the Secretary of the Medical Board, not later than January 24.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Narberth Union.—The Llanboidy District is vacant; population 4185; salary £35 per annum.

Worksop Union.—Mr. C. Fleming has resigned the Harthill District area 13,950; population 5299; salary £35 per annum.

APPOINTMENTS.

Bradford (Yorks) Union.—Isaac Waddington, M.D., C.M. Glasg., to the Horton West District.

East Ward Union.—Thos. Sayer, M.B. and C.M. Edin., to the Ravenstonedale District.

Leicester.—Henry Meadows, M.B. and C.M. Edin., reappointed Analyst for the Borough for one year.

Mansfield Union.—Morgan F. Hamerton, B.M. and M.C. Dub., to the Fourth District.

St. George-in-the-East Parish.—Henry R. Dale, M.R.C.S. Eng., L.S.A., L.R.C.P. Edin., as Assistant Medical Officer at the Infirmary.

Wycombe Union.—Edward C. Odling, M.R.C.S. Eng., L.S.A., to the Wendover District.

DUBLIN ARTISANS' DWELLINGS COMPANY.—The second ordinary meeting of this Company was held on Tuesday, January 8. Sir Arthur E. Guinness, Bart., M.P., who presided, stated that twenty-three tenements had been let since the last meeting, and that there were 120 applicants still unprovided with holdings. When the present contract was completed the Company would possess 186 houses. The capital subscribed up to December 31, 1877, was £31,630.

IF there be any truth in the following statement, the Russian soldier must certainly be credited with powers of digestion not enjoyed by the armies of other nations. An Austrian military paper, the *Vedette*, asserts that some bread of the same kind as that issued to the Russian troops in Bulgaria was recently obtained and examined by the Military Intendance in Vienna. A careful analysis showed that the bread contained 19 per cent. of sawdust and 14 per cent. of sand!

THREATENED STRIKE OF DOCTORS AT HAVRE.—A great sensation has lately been produced at Havre by the issue of a circular to their patients by the doctors of that city. It is nothing less than a menace of a strike on the part of the doctors, who announce a rise in the tariff of their fees. In future every visit sought for as urgent, or at a fixed hour, is to be charged as a double visit, and every night-visit will be taxed according to established classes, 10 fr., 15 fr., or 20 fr. The *Le Havre* says that this exorbitant pretence has excited general indignation.—*Gaz. Hebd.*, January 11.

ST. BARTHOLOMEW'S HOSPITAL.—An outbreak of small-pox occurred at this Hospital two weeks ago, but fortunately the cases (five in number) were confined to two wards. Restrictions were immediately placed on the visiting of patients by their friends; and, as is always the case, this necessary measure of precaution caused some excitement and complaint. But after a few days, the small-pox patients having been taken to a small-pox hospital, and the patients remaining in the infected wards, with their attendants, having been completely isolated, the restrictions as to visitors was removed with respect to all the other wards of the Hospital.

ELIMINATION OF SALICYLIC ACID BY THE SALIVA.—It is well known that salicylic acid is eliminated in very large proportions by the kidneys, the perchloride of iron detecting this substance in the urine by the production of a characteristic violet colour. But the kidney is not its sole emunctory, as Prof. Gubler has just shown that it also traverses the salivary glands. In some patients to whom six grammes of the salicylate of soda had been administered, he found, having induced salivation by the radix pyrethri, that the saliva treated by the perchloride also exhibited the peculiar violet colour.—*Journal de Thérap.*, January 10.

AT the annual meeting of the Liverpool Medical Institution, held on Tuesday, the 8th inst., the following gentlemen were elected to fill the various offices, etc., during the year 1878:—*President:* Dr. Waters. *Vice-Presidents:* Dr. Lyster, Dr. W. Carter, Dr. Oxley, and Mr. Manifold. *Treasurer:* Dr. Dickinson. *Hon. Secretary to the Council:* Dr. Caton. *Hon. Secretary for the Ordinary Meetings:* Mr. C. Puzey. *Hon. Librarian:* Dr. Macfie Campbell. *Members of Council:* Dr. Turnbull, Dr. Alexander, Dr. Finegan, Dr. Braidwood, Mr. M'Cheane, Dr. Samuels, Dr. Robertson, Mr. R. Harrison, Dr. M. Hill, Mr. E. A. Browne, Dr. Sigismund Lewis, and Dr. Bailey. *Members of the Microscopical Committee:* Dr. Braidwood (President), Drs. Ashby, Caton, Davidson, Glynn, and Hicks, and Messrs. R. Hamilton, Newton, Rushton Parker, and F. T. Paul.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The quarterly court of the Directors of the Society was held on Wednesday, January 9, by the kindness of the Royal Medical and Chirurgical Society, in their rooms, 53, Berners-street. The chair was taken by Dr. Pitman, Vice-President. The sum of £1238 was voted to be divided, according to their circumstances, among sixty widows; a sum of £55 was distributed to twelve orphans; and £25 10s. was given from the Copeland Fund to four applicants for assistance. The expenses of the quarter amounted to £39 1s. 3d. The Treasurer informed the Court that the Christmas presents had been distributed on December 17 among fifty-eight widows and fourteen orphans, and was received with much gratitude. The amount given was £326. Fresh applications for grants were accepted from two widows and two orphans. Six new members were elected.

TREATMENT OF FURUNCULUS.—Dr. Lieven observed at the Petersburg Medical Society that all modes of treatment hitherto tried (such as early incision, cauterising, and cold or warm applications) have failed to arrest the further development of furunculus that has once commenced. The following procedure, however, brings it to a stand:—A burning, pricking, itching, suddenly occurring in a normal portion of the skin, announces the commencement of the development of the furunculus, and on the same day a small and quite superficial induration can be felt at the spot. If the skin be now superficially scraped with a small knife, so that a drop or two of blood may be pressed through the epidermis, no furunculus will be developed. This result would seem to show that the affection originates in the uppermost layer of the corium, and perhaps in the capillaries of the papillæ, and not, as hitherto received, in the subcutaneous connective tissue, with succeeding necrosis of the corium and epidermis. Disturbance of the digestive organs (frequently diarrhœa) always precedes or accompanies furunculus; but a plethoric or decrepit constitution is no necessary condition, as it may occur in one that is quite normal.—*Petersburg Med. Woch.*, December 29.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

A QUERY.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I have a son, aged eleven, who has one leg about half an inch shorter than the other; the shortening is above the knee. There is no pain or other symptom of disease: the condition has, I think, arisen from a tight boot. Can any of your readers tell me the best treatment, or where I can find such cases mentioned, and oblige A SURGEON AND FATHER.

OPIUM CONSUMPTION—RUSSIA.

The spreading of the consumption of opium in the Trans-Baikal district is affirmed by the Russian journal *Siber*. It was first introduced by Chinese traders; and the native population, especially the women of the lower classes, have now pretty generally taken to it.

Linguist.—Yes, it is said the educated natives of Madras, and we believe of Bengal, in talking among themselves use English in preference to their mother-tongue, from the greater ease and clearness which they find in English when higher and accurate thought is to be expressed. Natives who do not understand one another can communicate in English.

Oxonian.—At Moscow and Kiew only does the English plan of boarding within college exist. The college is a kind of barracks, in which every student has one room, where he lives as it suits him, taking his meals by himself, or in messes which he forms with others. The theological students, who wear black gowns, follow a semi-monastic rule. The other students wear uniforms with facings according to the career which they are going to enter. The medical students sport grey and green. Moscow enjoys some reputation for medicine and law.

A Successful Candidate.—The following, we believe, is the distribution of the Board of Examiners in Anatomy and Physiology at the Royal College of Surgeons:—At table A, Messrs. Holmes and Durham; at B, Messrs. Wood and Wagstaffe; at C, Messrs. Power and Heath; and at D, Messrs. Hulke and Pick. You will see, therefore, that no two examiners from the same hospital are placed at these respective tables. The first is represented by St. George's and Guy's; the second by King's College and St. Thomas's; the third by St. Bartholomew's and University College; and the fourth by the Middlesex and St. George's Hospitals. Mr. Savory, of St. Bartholomew's Hospital, is the chairman, who only takes part in the examination when necessary, or to relieve a colleague.

REMARKABLE WEATHER—CANADA.

A correspondent, writing on the 24th ult. from Toronto, says:—"We have had a remarkably open winter so far, and to-morrow we are likely to witness the phenomenon of a Christmas without frost and without snow. Montreal intends having a regatta in celebration of an open Christmas."

FOOD OR CONDIMENT?

The high duty charged on salt in India much restricts its consumption. The poor along the sea-coast use salt earth scraped from the swamps washed by the sea, while in inland districts the scrapings of saltpetre pans are what thousands of families are reduced to consume. Much disease is said to be engendered by the scarcity of pure salt, and the trade in salt fish, which might supply a cheap and abundant article of food, is hampered by the high duty.

A POLICE MAGISTRATE ON CABMEN'S SHELTERS.

We may call attention to some remarks of Mr. Ellison's a few days since, following his adjudication of a case of drunkenness of a cabman, accompanied as they were with the promise of a contribution if any steps were taken to promote the object to which he referred. He remarked "that he believed by the establishment of shelters at the various ranks on the south side of London much of what was now complained of would cease. By such shelters the drivers in inclement weather would be comfortably housed until called up to take a fare. The south side of London was ill-supplied in that respect; and should a movement be set on foot for the establishment of such shelters, he would give £10 out of the funds of the Court towards the cost." We hope the suggestion of his Worship may be acted upon, and funds be forthcoming to provide the south side of the metropolis with the comforts these shelters afford to cabmen.

"WHOM SHALL WE HANG?"

Captain Sandys embodies the following facts in his report presented at the Epiphany Derbyshire Quarter Sessions just held:—"In June of the present year I obtained a conviction on a butter containing 70 per cent. of foreign fat. One of the magistrates before whom the case was brought (at his own expense) sent the reserve sample, which I had produced in Court, to Somerset House for analysis, the result obtained being almost identical with that given by Dr. Goode. Four months after this, when in a train, a passenger, speaking of the working of the Food and Drugs Act, and quite ignorant of my connexion with it, mentioned this very case, stating that he had sold the butter to the retail trader, that it could not have contained the amount of foreign fat stated, and he thought it a very hard case. I at once explained who I was, and told him that there could be no doubt as to the correctness of the analysis as made by Dr. Goode, for the authorities at Somerset House had given similar results. I then found that the article (called butter), when sent to him, was merely invoiced as '—— tubs of Normandy,' the word butter being omitted."

THE INTERCHANGE OF INFORMATION BETWEEN MEDICAL OFFICERS OF HEALTH RESPECTING EPIDEMICS.

At a meeting of the North-Western Association of Medical Officers of Health last week, final arrangements were made for a joint meeting of the North-Western Association and the Yorkshire Association, to be held at Rochdale on February 1. Dr. Kenyon (Chester) read a paper entitled "Suggestions for the Interchange of Information respecting Epidemic and other Diseases between Medical Officers of Health." He said that all had no doubt felt the great disadvantage to which they were put by the absence of a more frequent return, showing the progress of epidemic disease in the smaller towns and country districts. For want of this, medical officers were quite unable to trace the advance and recession of disease. The difficulty was further enhanced, inasmuch as the Registrar-General's returns referred to deaths only; and an epidemic might prevail for some time, or throughout its whole course, with a very small amount of mortality. If a very moderate amount of energy were displayed by the societies of officers of health and that part of the public interested in sanitary matters, the Registrar-General would, no doubt, be induced to find a means for at least an approach to greater perfection in the direction alluded to. He suggested, as a temporary and somewhat local expedient, that the Manchester and Salford Sanitary Association should extend the sphere of its operations, and co-operate with the members of the Medical Officers' Association, in order, by means of weekly or fortnightly statements, to obtain a knowledge as exact or approximate as might be possible of the state of their districts with regard to, it might be, a few only of the chief zymotic diseases. At present, he believed, many localised epidemics escaped attention, and the country had the credit of being more healthy than it was, and so the need for sanitary amendment was less recognised. A subcommittee was appointed to consider the question in all its bearings, and report to the Association at its next meeting.

COMMUNICATIONS have been received from—

Dr. Druitt, London; Mr. J. A. Bloxam, London; Dr. James Pollock, London; Dr. Fearnside, London; Mr. Jonathan Hutchinson, London; Dr. John Williams, London; Dr. Bruce, London; Mr. John Chatto, London; Mr. T. M. Stone, London; Mr. B. R. Wheatley, London; Dr. Spares, Mentone; Mr. Field, London; Dr. Carter, Liverpool; Dr. Galabin, London; Dr. Hitchcock, Greenwich; Dr. Bourneville, Paris; Dr. Spencer Cobbold, London; Dr. Barlow, London; Dr. Sansom, London; Dr. Hermann, London; The Secretary of the Queekett Microscopical Club, London; Dr. James Murphy, Sunderland; The Registrar of Apothecaries' Hall, London; Professor Attfield, London; The Registrar-General, Edinburgh; Mr. R. W. Parker, London; Mr. German Reed, London; Dr. Neale, London; The Secretary of the Royal Institution, London; Dr. J. W. Moore, Dublin; The Secretary of the Clinical Society, London; Dr. G. Hett, London.

BOOKS AND PAMPHLETS RECEIVED—

Tilbury Fox, M.D., F.R.C.P., On Ringworm and its Management—Samuel Wilks, M.D., F.R.S., Lectures on Diseases of the Nervous System—The Materia Medica of the Hindus, compiled from Sanskrit Medical Works, by Udoy Chaad Dutt, with a Glossary of Indian Plants, by George King, M.B., F.L.S.—G. M. Garland, M.D., Pneumo-Dynamics—Saint Bartholomew's Hospital Reports, Vol. xiii.—Jonathan Hutchinson, F.R.C.S., Illustrations of Clinical Surgery, fasciculus x.—Dr. Friedrich Björnström, Algesimetrie, eine neue einfache Methode zur prüfung der Hautsensibilitat—Transactions of the Canada Medical Association, Tenth Annual Meeting.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—La Province Médicale—Toronto Sanitary Journal—Glasgow Medical Journal—American Supplement to the Obstetrical Journal of Great Britain and Ireland—Richmond and Louisville Medical Journal—Revista de Medicina y Cirugia Practicas—Temperance Record—Home Chronicler—Westminster Review—Boston Journal of Chemistry—Revue des Sciences Médicales—New York Medical Journal—Chemist and Druggist.

APPOINTMENTS FOR THE WEEK.

January 19. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

21. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Lettsomian Lectures—Mr. Francis Mason, "On the Surgery of the Face." Lecture II.

22. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

Royal Medical and Chirurgical Society, 8½ p.m. Mr. C. Higgens, "On a Case of Rodent Ulcer." Dr. George Thin, "On the Proportion of Red Corpuscles in the Blood in some Skin Diseases." Dr. John Harley, a Second Communication "On Simple Atrophic Sclerema."

23. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

24. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

25. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Clinical Society, 8½ p.m. Mr. Pearce Gould, "A Case of Spina Bifida cured by Injection of Iodine" (a living subject). Mr. Berkeley Hill, "Cases of Spinal Curvature treated by Sayre's Plaster Jacket" (living subjects). Mr. Nunn, "Two Cases of Cancer of the Breast." Dr. Wm. Broadbent, "A Case of Paracentesis Thoracis."

Queekett Microscopical Club, 8 p.m. Mr. T. Charters White, "On Insect Dissection."

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Prof. Huxley, "On William Harvey."

VITAL STATISTICS OF LONDON.

Week ending Saturday, Jan. 12, 1878.

BIRTHS.

Births of Boys, 1342; Girls, 1339; Total, 2681.
Average of 10 corresponding years 1868-77, 2388·8.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	863	897	1760
Average of the ten years 1868-77	791·5	795·5	1587·0
Average corrected to increased population ...	...	...	1698
Deaths of people aged 80 and upwards ...	...	...	66

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	...	7	4	2	9	...	1	1	5
North	761729	24	25	19	2	11	4	9	1	3
Central ...	334369	...	4	4	1	6	1	2	1	1
East	639111	6	19	2	1	10	1	2	2	3
South	967692	5	42	10	3	33	1	5	2	5
Total	3254260	35	97	39	9	69	7	19	7	17

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·983 in.
Mean temperature	36·9°
Highest point of thermometer	47·3°
Lowest point of thermometer	25·7°
Mean dew-point temperature	32·0°
General direction of wind	Variable.
Whole amount of rain in the week	0·02 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 12, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Jan. 12.	Deaths Registered during the week ending Jan. 12.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2681	1760	47·3	25·7	36·9	2·72	0·02	0·05
Brighton	103923	44·1	47	56	48·3	26·6	36·5	2·50	0·03	0·08
Portsmouth ...	129161	28·9	81	47	50·0	30·0	37·8	3·23	0·02	0·05
Norwich	84620	11·3	56	29	47·0	30·5	37·8	3·23	0·31	0·79
Plymouth	73599	62·8	48	51	50·5	27·0	40·2	4·55	0·49	1·24
Bristol	206419	46·4	143	111	47·8	28·0	38·4	3·55	0·11	0·28
Wolverhampton ...	74240	21·9	49	39	48·3	26·7	36·0	2·22	0·23	0·86
Birmingham ...	383117	45·6	299	209	...	...	...	...	...	...
Leicester	121473	38·0	83	37	45·2	32·5	37·9	3·28	0·09	0·23
Nottingham ...	165267	16·6	100	61	47·2	32·7	38·5	3·61	0·20	0·51
Liverpool	632681	102·2	439	333	46·5	31·0	38·3	3·50	0·34	0·88
Manchester ...	360514	84·0	315	183	...	...	...	...	...	...
Salford	170251	32·9	152	69	46·2	26·0	33·2	2·33	0·49	1·24
Oldham	107366	23·0	84	59	...	...	...	...	...	...
Bradford	185088	25·6	142	59	47·0	31·4	37·9	3·28	0·35	0·89
Leeds	304948	14·1	221	123	49·0	34·0	39·3	4·06	0·40	1·02
Sheffield	289537	14·7	195	95	47·2	33·0	38·6	3·67	0·62	1·57
Hull	143139	39·4	114	58	47·0	31·0	36·9	2·72	0·31	0·79
Sunderland ...	112459	34·0	80	48	45·0	32·0	38·3	3·50	0·44	1·12
Newcastle-on-Tyne	144670	26·9	130	71	...	...	...	...	...	...
Edinburgh	222371	53·1	158	121	47·0	26·5	35·8	2·12	0·19	0·48
Glasgow	566940	94·0	427	266	45·0	24·0	36·5	2·50	0·17	0·43
Dublin	314666	31·3	153	192	47·2	25·2	37·8	3·23	0·06	0·15
Total of 23 Towns in United Kingdm	8373953	37·9	6193	4080	60·5	24·0	37·7	3·17	0·26	0·69

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·98 in. The lowest reading was 29·29 in. on Monday evening, and the highest 30·50 in. on Saturday morning.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

ABSTRACT OF AN ADDRESS ON THOUGHT IN MEDICINE.

DELIVERED AT THE MILITARY MEDICAL SCHOOL IN BERLIN.

By PROFESSOR H. HELMHOLTZ.

Professor Helmholtz gracefully acknowledges his own indebtedness to the study of medicine, and its value to himself as a training, which, more impressively than any other could have done, had asserted the eternal principles which should govern scientific labour—principles so simple and so often forgotten; so clear, and yet so often overlaid by some deluding mask. He remarks that, to realise the fact that theoretic questions respecting the application of knowledge may acquire an oppressive weight and a fearfully practical range, one must have watched the failing sight of the dying, witnessed the grief of despairing families, asked oneself the serious questions, whether art had done all that was practicable, whether science had prepared all attainable means to ward off death.

Whilst the more theorist may regard these subjects with indifference, he who has to contend with the hostile powers of reality dares not to cradle himself in pleasant illusions, but subjects what he knows and can do to sharp scrutiny, and to the bright, clear light of facts.

It was a fundamental error of the ancients that they pursued a false ideal of scientific study, owing to their misleading over-estimate of the deductive method. It is true that medicine was not the only science which fell into this mistake, but in none other were the injurious consequences so clear, or their interference with progress so great. Hence the history of medicine has an altogether special interest in the record of the development of the human mind. Probably, none is better fitted to show that a sound criticism of the sources of our knowledge is a highly important part of true philosophy.

The banner of ancient medicine bore the proud saying of Hippocrates—*ἰητρὸς φιλόσοφος ἰσόθεος* ("The physician who is a philosopher is godlike.") And, bearing in mind that the old philosophy embraced all theoretic knowledge, we may accept the boast. So understood, the motto characterises in three words the model after which we should strive. Who will venture to say if it be attainable? Certain it is, that later generations, wishful to enjoy the privileges of this elevated class, were not disposed to endure the long delay which so extended a course of study required. Hence the standard was lowered; of the laws of nature the so-called philosopher knew but little more than the unlearned laity. The effects of this false pretension told powerfully upon the action of the mind, the process of reasoning, and the formation of system.

An exaggerated importance was attached to the power of thought, as upon it depended the superiority of man over the lower animals, and of the civilised man over the barbarian. Hence it was a natural error that he should seek to give to this endowment its highest development, and that he should separate it from its proper foundation on observation and perception, in order to commence the wild flight of metaphysical speculation. In fact, it is no easy problem to disclose the sources of our knowledge, respecting which much has been said and written. Man owes his pre-eminence to his power of collecting the wisdom of past generations; but this is delivered to us already moulded, and whence it has been derived, or how much examination may have been expended upon it, is often not to be ascertained. This is especially the case if the transmission has taken place through many reporters; it must then be taken upon good faith: and thus it has come to pass that many strange things have been related and believed on the authority of our ancestors.

Another source of perplexity lies in the imperfection of language. Names are not readily devised for classes of objects or proceedings if there be no frequent need to speak of the individuals collectively. Several common characteristics are wanting. Now, if we select some of these, and group them in a definition, its common possession implies that there are other and unexpressed relations. And thus the fact that a certain class of objects or phenomena is embraced by a certain name shows that they are subject to a common and natural law, and that the result of the experience of past generations is handed down to us without appearing to be so.

Again, on reflection, an adult finds himself to have acquired an immense amount of common-place information, which he can trace back to his earliest years. Individualities have been long forgotten, but their frequent repetition has left indelible impressions on his memory. And, as only that is regularly repeated which is obedient to some law, so do the remains of bygone notions speak to the existence of law. Thus it is that, on consideration, a man finds that he has a considerable amount of knowledge, the origin of which he is ignorant of, and which has been present with him so long as he can remember. The ideas which he has formed, and which his native tongue has conveyed to him, assert themselves also in the objective world of things, and as he knows not that either he or his forefathers have fashioned them after the reality, thus the external world appears to him to be governed by immaterial powers. This notion finds expression in the works of Plato, and is met with again in those of Hegel and Schopenhauer.

Physical science followed the course of philosophy, and in the olden time medicine coincided with it in essentials; the deductive method appeared capable of effecting everything. It is true that Socrates had unfolded in the most instructive manner the inductive formation of ideas; but, as is so often the case, his excellent work remained all but misunderstood.

"I will not attempt to lead you," says the Professor, "through the chequered maze of pathological theories, varying with every addition to the knowledge of their authors, and mostly, as it seems, advanced by physicians who had acquired honour and reputation as observers and practitioners, independently of their speculations. There came a few gifted scholars, who copied the master, exaggerated his theory, made it logical and one-sided, careless of the opposition of Nature. The more rigid the system, the fewer and more energetic became the proceedings of medical art. The more the schools felt themselves opposed by the increase of real knowledge, the more they relied upon ancient authority, and the more intolerant they became against innovations. Thus the great reformer of anatomy, Vesalius, was summoned before the Theological Faculty of Salamanca; thus the Genevese not only burned Servetus, but the book in which he described the course of the blood through the lungs; and the Paris Faculty forbade the teaching in their lecture-rooms of Harvey's discovery of the circulation."

The foundations of the systems upon which these schools rested were in great measure doctrines in natural science, the employment of which was legitimate within a limited range. But it was not legitimate to presume that it was more scientific to refer all forms of disease to one mode of explanation rather than to several. Thus, the Solidists and Humoralists maintained their theories, in spite of all opposing evidence; and opinions were held as to the flux and reflux of the blood, which every venesection, had it been attentively watched, must have overthrown.

Indeed, the prime and principal fault of these systems was the false logical consistency to which their professors believed themselves pledged; the notion that upon one exposition a complete theory of disease and its treatment could be founded. A complete knowledge of the causal connexion of a class of phenomena affords, of course, the materials for a rational scheme. Thus, there is no nobler product of hard thought than modern astronomy, deduced, even to its slightest irregularities, from Newton's law of gravitation. But astronomers have never believed that this excluded the simultaneous influence of other powers; and the older philosophers and physicians fancied that they might draw inferences before they had made their data secure by induction. They forgot that every deduction is only safe to the extent of the principle on which it is founded, and that every new inference must again and again become a new test of its own foundations. It boots little, if the premiss be unsound, that the conclusion has been reached in the most strictly logical manner.

Very characteristic of those who erected their hypotheses into dogmata was their intolerance. He who works upon a well-established basis can readily admit the existence of an

error; nothing is lost but the matter wherein he is mistaken. But if a starting-point rests upon hypotheses which seem to be guaranteed by authority, or which have been adopted because they favour what it is wished to regard as true, then any flaw must hopelessly damage the whole superstructure of convictions. Hence the believing partisans must consequently claim the same degree of infallibility for every part of such work; for the anatomy of Hippocrates as much as for his doctrine of critical days in fever. Every opponent seems stupid or perverse, and in accordance with an old rule, any contest is more passionate and personal as the ground defended is unsafe. In our old dogmatic schools of medicine we have seen these general laws abundantly confirmed. Their illiberality was sometimes turned against each other—sometimes against the disciples of the eclectic physicians who employed different explanations for different diseases. This perfectly legitimate proceeding was regarded as tainted with inconsistency; and yet the greatest physicians and observers, Hippocrates, Aretæus, Galen, Sydenham, Boerhaave, have all been eclectics, or very lax followers of system. Half a century ago medicine was still under the influence of the important observations of Haller upon the excitability of nerves. The most remarkable of these was the discovery that the most varied influences, mechanical, chemical, or thermal, produced the same result—muscular contraction.

These stimulating agents, differing merely in strength, were classed under the common name of irritants. The altered state of the nerves was called irritation, and the living property upon which it depended, irritability. Without due consideration, this entire relationship was regarded as a fundamental property of animal life, and was attributed to other organs and tissues of the body, for which there were no similar facts forthcoming. It was believed that they were not independently active, but must receive an impulse from some excitant, such as air or food. The kind of activity was the special function of the individual organs, qualified by the vital power. Increased or diminished irritability became leading features of the categories under which acute diseases were grouped, and from which indications were drawn for reducing or stimulating treatment. Brown carried out this system for some time with obstinate one-sidedness and reckless consistency.

The vital power was at one time regarded as an aëriform spirit, or *pneuma*, lodged in the arteries. Paracelsus assigned to it the office of an Archæus—a sort of benevolent fairy, or "indwelling alchemist." The clearest scientific notion was that of the rational soul, or "*anima inscia*" of George Ernest Stahl, Professor of Chemistry and Pathology at Halle in the early part of the last century, a man of penetrating intellect, whose writings are still instructive. He supposed that the soul governed the body, acting through the medium of the physico-chemical powers of the matter taken into it. The second half of the century was too much tainted by the new notions of enlightenment to openly accept Stahl's doctrine. It was presented more scientifically as vital power (*vis vitalis*), whilst in essentials its functions were continued, and played an important part in disease, under the name of the restorative power of Nature. This doctrine entered into the pathological theory of alterations in the irritability of the body. It was attempted to distinguish between the immediate effects of the noxious or sickness-producing influence—the symptoms of disease, and the resistance set up by the vital power—the symptoms of reaction.

The latter were especially seen in inflammations and in fever. And to the physician fell the part of watching this reaction, and of stimulating or repressing it according to circumstances. And at that time the management of fever was deemed the best and most scientifically established part of medicine, and to it local treatment was duly subservient. It was very uniform, blood-letting—a measure indicated by theory—being largely employed. But with the rise of a new and more critical generation, which examined suppositions previously regarded as scientific, therapeutics languished. Indeed, they were all but abandoned by some of the younger physicians, who, despairing of their science, embraced empiricism.

"What we then became acquainted with," says Professor Helmholtz, "were the remains of the old dogmatism, the suspicious sides of which were soon clearly apparent. In the estimation of the vitalist physician the important part of the processes of life did not depend on the natural powers, which, working under firm law, and from blind necessity, brought about a given result. What such could effect seemed to him unessential, and hardly worth the trouble of a searching study. He fancied that he had to deal with a soul-like existence, to which a thinker, a philosopher, an intellectual man must be opposed. Of this spirit the following are examples:—

"It was the time when percussion and auscultation of the organs in the chest were being introduced into the clinical wards, and I have many times heard it asserted that they were coarse mechanical modes of investigation which a physician of penetration did not require, and which also degraded and dishonoured the patient by treating him as if he were a mere machine. Feeling the pulse was carefully practised as the best mode of testing the degree of reaction present. To count it by the aid of a seconds-watch was customary, but was regarded by some old gentlemen as a proceeding not in good taste. There was no idea, at that time, of measuring the temperature by the thermometer. As regards the ophthalmoscope, a highly distinguished surgical colleague said to me that he would never use the instrument, as it was dangerous to allow bright light to fall upon a diseased eye. Another declared that it might be useful for physicians with impaired sight, but that he did not require its aid.

"A professor of physiology, distinguished both as a writer and speaker, had a discussion with the professor of natural philosophy respecting the formation of images in the eye, and was invited to visit him and witness an experiment. He angrily declined, saying that a physiologist had nothing to do with experiments, which were suited only for natural philosophers. Another aged and very learned professor of therapeutics, who had taken much interest in the reorganisation of the University, and was anxious to bring back the good old time, pressed me strongly to divide the teaching of physiology—to take the purely intellectual part, and transfer the lower experimental portion to a colleague whom he regarded as good enough for the work. He abandoned me when I declared to him that I regarded experiments as the proper foundation of science.

"I relate these personally experienced instances to make clear what was the disposition of the old school, and even of honoured representatives of medical science, towards the modes of thought and study adopted in the natural sciences. And it is very intelligible how such a frame of mind in influential and respected men must have hindered progress."

The medical education of that period rested almost entirely upon book-learning. There were lectures. Experiments and demonstrations were in some places tolerably well provided; in others they were deficient. Of physiological and physical laboratories there were none. Liebig had just accomplished his great feat—the establishment of the Giessen laboratory,—but his example had not, as yet, been imitated. In the practice of anatomy, medicine possessed an important means of education for independent observation. Microscopic demonstrations were very isolated, and rarely seen in lectures; and microscopes were scarce and dear. One thing was learned in those days, which perhaps the present generation may not acquire so well: a careful study of the ways and means to arrive at an end; the exhaustive consideration of all possible dispositions and arrangements to reach a practicable path.

John Müller, the physiologist, who was then in his prime, gave an enthusiastic impulse to labour in the right direction. In his theoretic views he favoured the vitalist doctrines, but in essential points he was firmly and immovably a natural philosopher. To him all theories were but hypotheses, which must be brought to the test of facts, and decided by them alone. Even views upon points which most easily harden into dogmas—such as the mode of action of the vital power, or the activities of the conscious soul—he incessantly endeavoured to limit, to prove, or to confute by means of facts. Although the practice of anatomical investigation was most familiar to him, and that to which he most willingly had recourse, he nevertheless employed physical and chemical modes of research. Science is indebted to him for much sound work in many branches of physiology, amongst which may be mentioned the condition of fibrine in the blood, the mechanism of sight and hearing, and the specific functions of nerves.

(To be continued.)

LECTURES

ON THE PROGNOSIS AND TREATMENT OF CERTAIN VARIETIES OF CONSUMPTION.

DELIVERED AT THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

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Lecture I.

(*Continued from page* 57.)

I come now to the actual condition of the patient as a guide in prognosis, and this is divisible into *symptoms* (vital phenomena) and *physical conditions*. I take the latter first.

Before I do so, consider with me for a moment or two the story and physical state of ordinary continuous phthisis of the chronic kind, and then we shall see clearly in how far the more favourable cases deviate from the type which tends to danger.

The story of ordinary progressive phthisis is familiar to you. Without very evident cause, a patient loses flesh, and presents slightly feverish symptoms, chills, heats, and a rise of temperature of 1° or 2° in the evening. The loss of flesh has always seemed to me to be the earliest symptom. Then follow slight dry cough, and perhaps an hæmoptysis, trivial or abundant. You will have with this the physical signs known to you as indicating impairment of the elasticity of a portion of lung, generally at the apex, and alterations in its density. A portion of the lung is, in fact, blocked. Should the symptoms not stop after attaining a certain degree of intensity, and the physical signs showing these two conditions not clear up, you will have more fever and waste, a higher temperature up to 102° or 103° in the evening, with sweatings of a very marked character. At the same time, the portions of lung which showed impaired elasticity and increased density will give fluid, crepitant, or crackling sounds. These latter soon appear to extend downwards, and in a short time a fresh centre of disease, evidenced by the same signs, will appear in another part of the same lung (perhaps at its base) or in the opposite lung. The extending disorder daily assumes larger dimensions, and shows a continuity of disease, involving large tracts of the pulmonary space. With increased fever the patient emaciates, and a rapid reduction of vital powers exhausts him, even before the secondary disorders of diarrhœa, etc., have time to set in. This is the common story of continuous or progressive phthisis; and observe that there is a continuity of diseased structure, as it were, for the local congestions or infections in the part of the lung distant from that first attacked do not remain as insulated centres of morbid action, but join on to each other, and forming continuous masses of degenerating ulcerating tissues, melt down the lung as it were. This is the story of ordinary progressive phthisis. Now let us compare it with certain other forms of disease more slow and less surely fatal.

In considering the actual condition of any patient in chronic phthisis, not of the above described progressive kind, you will study his *physical conditions* and his *symptoms*. We have examined the nature of the morbid product in the lung; but you will find that its import is modified by its *position* and *limit*. It is observed that the apex is commonly the primary seat of catarrhal pneumonia, acute struma, and the rheumatic fibroid thickening of all the lung tissues; in the middle of the lung are found most commonly strumous nodules, dilated bronchi in fibroid lung; while the base is the frequent seat of unresolved pneumonia, and the chronic form of strumous alteration in children.

But you will find the *limit* of disease more important by far. The *massing* of disease in one apex, if it be circumscribed and well limited below, even if the amount of dulness be considerable and *wooden* in character, is not unfavourable. Such a mass of consolidated tissues, in breaking up, may produce even cavity, attended by great exhaustion of the patient; but if it be well limited and bounded by fibroid alterations in the subjacent parts of the lung, your case may become chronic, and outlive many painful predictions. These often become chronic single-cavity cases of the dry variety, with fairly preserved health. We may offer a good opinion, then, about such cases as have much dulness at one apex, with other signs of consolidation, or even with cavity already formed. They are often found in the subjects of rheumatism, and surrounding the blocked and broken-down alveoli there is a mass of thick pleura and fibroid tissue.

Another form of disease very apt to become chronic and present few symptoms of urgency, even for years, is a diffused amount of disease over a considerable extent of pulmonary space, mostly, no doubt, on its surface, and not affecting the full depth or thickness of the lung. The disease does not go right through, as it were; and there are intervals of vesicular lung-tissue, which preserve the shape of the organ and carry on its functions very considerably. The form of chest in such individuals is generally voluminous; and the contraction or flattening of the walls is moderate, and spread over a large surface. A scattered deposit, with intervals of healthy lung, is an arrangement of disease, as it were, preventing that continuity of morbid products which represents the progressive form of phthisis. And the story of such cases is in accordance with their pathology, for they are slow to spread and slow to soften; and while offering most of the symptoms of ordinary consumption, present them in a modified form and with a hopeful aspect. They are commonly one-sided, and occur in persons of well-made, full chest, without the hereditary element. They do not often run into cavity, for obvious physical reasons; and they are frequently the subject of moderate hæmoptysis, for the vessels of the lung are not altered and compressed by fibroid proliferation so much as in other forms of disease.

I would further say that, viewed as a whole, you will find *basic* cases the longest in duration and the slowest in progress, which is possibly due to the greater volume of the lung, and its more limited movements at this part, as well as to the mechanical reason that morbid secretions and hæmorrhages do not gravitate to these parts as when the primary disease is at the apex. For it has been recently advanced, with much show of probability, that degenerative *débris* from cavities at the top and effused blood may gravitate to the base of the lung, and so give rise to new centres of disease. Lesions involving the middle of the lung are more slow in progress than those at the apex, and the apex cases are those most tending to progressive destruction of tissue. You will remark also that softening generally begins at the back part of the apex, the signs being observable in the supra-spinous fossa before they present in the subclavian region.

The *stage* of disease is perhaps the least important element in a given case when the question is one of duration. We call the *first* stage that of consolidation of a portion of lung; the *second* the ulcerative; the *third* that of cavity. At first sight it would appear as if the last were to be most rapidly fatal, but it is not so in practice. Out of 3566 cases of chronic phthisis under my own observation at the Hospital, I found that forty-nine months was the observed duration of the first stage, sixty-seven months of the second, and sixty-six of the third. I mean that these cases had already lasted so long when they passed from under my care, many of them, no doubt, outliving this period for years.

So far as regards the duration of the different stages of phthisis, and it is well to remember that this division into stages is altogether artificial, and constructed to facilitate our descriptions and conceptions of the disease; it is obvious that the stages run into one another. Yet for practical purposes the classification has its uses, and so we retain it. The dangers incident to all these stages are extension of disease—extension by fresh infections, by congestions, and by active hæmorrhages; but those attaching especially to stage three are passive hæmorrhage, or bleeding by rupture of a pulmonary arterial branch, and pneumothorax. Therefore the third stage has two serious perils belonging to it, in addition to those which it shares with the other two.

I advise, therefore, that you should not found any opinion on the so-called *stage* of disease, but gather your materials for prognosis out of all the circumstances attaching to the case. The period of greatest danger in any case is that of *passage from one stage to another*—as of the first stage to the second, or of the second to the third,—for the changes then undergone in the lung are degenerative, ulcerative, and destructive of all the tissues, and at such time the irritative fever and waste are at their maximum. During such I advise you to decline any prognosis: for who can tell where these changes in the structure of the lung will stop, or who can guarantee the patient against fresh congestions which may successively destroy portions of both lungs, reducing your case to the continuous form of phthisis? It is, then,

in the *pauses* of the disease that you have opportunity to form a judicial opinion, and weigh all the events and antecedents of your patient by a just method of reasoning. These intervals in diseased activity, when nature seeks to repair the breach, are often of very long duration, and may, in favourable instances, be measured by years. During their continuance but few events occur; no extensions, congestions, or infections—that is, no septicæmic processes—take place; and your patient is at a lower average than health, but may have few inconveniences. If wise, he is on his guard against any undue expenditure of nerve or vital power; if wealthy, he may counteract the vicissitudes of climate by removal; and if endued with a fair digestive power, not enfeebled by excesses, he may, by renewed blood-making, repair the waste and anæmia caused by his disease. The pathological condition which conduces most to this limit of disease is the fibroid formations around the affected portion of lung, which wall it off, and prevent extension and promote contraction of tissues; the form of morbid product is that which either remains long without undergoing ulcerative change, or, having so degenerated, has cleared out all which blocked a portion of the lung, and left only a dry cavity; while the general state is characterised by a freedom from fever, and therefore a cessation of waste, and a vital ability to make and renew healthy blood. All pathological products in the lung may present either rapid liquefactive changes, or slow retrogressive or fibroid alterations, or the same case may exhibit them all at different periods; but at the pause time symptoms are in abeyance, nutrition is in advance, and we can estimate not only our patient's progress, but his future, with considerable accuracy.

Let us consider now the state of our patient as measured by his *symptoms*. It is obvious from what I have said that the period of progressive disease or of degenerative processes is that of most danger. And how is it evidenced in the system? Mainly by what is called fever, shown by high temperature, rapid pulse, and waste. When these exist, we may be quite certain that the local conditions in the lung are unfavourable. The temperature of advancing phthisis is almost uniformly higher in the evening, and at its minimum in the morning about seven, when it is occasionally even below 98°. A constant evening exacerbation is therefore unfavourable; and sometimes a second occurs about 11 a.m., beginning with chills, or even a rigor, and ending in sweating.

Waste is not only a concomitant of fever, but the direct result of hyperoxidation of the tissues; and its rapidity is of itself a measure of the fever, and the fever is generally an accurate measure of the lung-irritation. It is often observed here, however, where every patient is weighed once a fortnight, that waste may not only be arrested, but that weight is increased while the physical signs in the lung slowly advance; but from many observations I can say that the coincidence of increasing weight and existing fever is never observed. If your patient is gaining flesh he is not feverish, but if he be feverish he is not adding to his weight. While, therefore, slow morbid changes are going on in the lung, emaciation may be checked, but with rapid ulcerative action fever is always present, and waste of tissues with it.

In summing up the unfavourable conditions of a patient in advancing phthisis, notice also the increasing expectoration, and its change of character from mucous to purulent with fibrous lung-tissue seen with the microscope, and occasional slight attacks of congestive hæmoptysis. Concurrently you will have the dry crackle of the early stage, exchanged for moist crepitation, or this again for the larger bubble of gurgling. The purely bronchial sounds of voice, and cough, and breathing will pass into cavernous blowing and pectoriloquy, and a very dull percussion note partially clear up, indicating the cavern underneath.

Contrast with this state a patient with a nearly normal temperature and quiet pulse, without sweats, with diminishing expectoration, and increasing in weight. In such you have sounds which had been moist, passing through gradations of crackle, to merely harsh breath-sounds and long expiratory blowing. The chest-walls have fallen in, which is evidence of collapsed alveoli and the presence of fibroid alterations: and if the other signs indicate cavity, the further evidence of contractile changes in the chest will be found—namely, the heart drawn up or to the side, and the opposite lung expanding beyond the middle line.

From such conditions we cannot fail to gather indications of pathological changes in the lung which have seriously damaged a portion of its structure, it is true, but have ceased to extend, and which tend for the present to limit and repair the local disorder.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

ON THE ORIGIN AND NATURE OF MARSH MALARIA.

By JOHN SULLIVAN, M.D., M.R.C.P. Lond.

Some opinions which I have previously expressed on the origin and nature of malarial fever have been modified, others have been confirmed and strengthened, by what I have seen and heard during my residence in Rome. I purpose to describe the Roman fever, or the fever peculiar to Rome and to its Campagna, but in order to convey a more exact notion on the subject it appears to me both useful and opportune to consider previously the nature of malaria in general, from which so many types of intermittent fever derive their origin, in the number of which may be reckoned the "Roman malarial pseudo-typhoid fever." True intermittent fever and ague is the product of exposure to the miasma emanating from marshes, or of those conditions which render marshes unhealthy; and those conditions may be found where no marshes exist or may be evident to the senses. The conditions essential towards the development of marsh miasma are—"a soil in which stagnant water or detained pent-up moisture, in contact with decayed vegetable matter, is exposed to a temperature of a certain elevation"; and these conditions may be found beneath as well as on the surface of the earth, in a sandy or stony as well as in a marshy soil.

Previous to the experiments practised on the effluvia from marshes by the eminent Italian physicians, Lanzizi, Terrigi, Balestra, etc., and to the publication of the conclusions they arrived at, based on these experiments, no satisfactory opinion had been given on the nature of these effluvia.

Vauquelin detected in the miasma of the Pontine marshes a substance which rendered an ammoniacal reaction, emitted an odour of sulphur, and which was reduced to carbon by heat. Morcati of Milan, Thenard, and Dupuytren, having condensed these marsh emanations upon globes filled with ice, detected a glutinous matter of a putrid offensive odour containing sulphuretted hydrogen. All these experiments tend to prove that the miasma from decomposed matter is of an organic nature.

We are too apt to assign to objects familiar to a particular locality, properties which do not belong to them, but which are special to that locality; hence it has been supposed that malaria was an emanation from plants peculiar or common to marshes. But as the number of those plants is unlimited, varying with climate and locality, it is not easy to imagine that they should all possess properties of a similar nature. Humboldt mentions that in some parts of South America the plant "ippomane mancinillæ," the mangle, and other plants, are capable by their effluvia of producing fever and ague.

Stagnated waters, in which the hemp and rice plant are macerated, are supposed to possess the peculiar properties of malarial infection. The growth of these aquatic plants is as rapid as their decay, and thus a constant source of putrid emanations is kept up. This rank vegetation affords food and shelter to innumerable insects, reptiles, infusoria, etc., the dead bodies of which become mixed with vegetable decayed matter; and thus a muddy stratum is formed, which becomes a focus of fermentation under the influence of heat and light, especially when this mud is covered with only a shallow depth of water, which more easily admits the contact of the air with the bottom of the marsh.

The germ theory of malaria, as illustrated by the writings of Rivolta, Lanzizi, Balestra, etc., has taken extensive root in the medical schools of Italy. If a ray of solar light be made to pass through a slit in the closed shutter of a window, it will illuminate, as far as the ray will extend, visible dust. Professor Tyndall has found that this dust contains organic matter; "there will be found particles of ground straw, smoke, the pollen of flowers, the spores of fungi, and the germs of all things."

Professor Lister, who has founded his antiseptic theory on the exclusion or destruction of this dust, tells us what is the effect of its introduction into the blood of a wounded part; it will become fetid and putrefy, and this putrefying matter will swarm with organic life, the germs of which have been derived from the air. If such germs be found in respirable healthy air, what special germs may we not expect to find in an atmosphere tainted with the products of infection or of contagion?

Malaria is the product of the soil, independent of climate, which, if cultivated and cared for by the hand of man, is healthy; but if this soil be abandoned or neglected it becomes a source of disease in all parts of the world. The miasma which emanates from marshy or from damp waste lands contains the poisonous principle which renders the air unhealthy or malarial. This miasma is of vegetable origin. According to the theory propounded by Terrigi, Lanzizi, Balestra, and others, it is generated by the spores or reproductive cells of a microphyte of the genus *Alga*. Balestra teaches that it is formed of the granules or spores contained in the protoplasms of the cells of the alga so abundant in marshes, or in deposits of stagnant and confined water. These germs, under the conditions essential for their germination, generate an alga which flourishes and reproduces abundantly new sporules, which sink to the bottom of the marsh, or are scattered in the air, which they contaminate, especially when the marsh is drying up.

The source, therefore, of malaria, according to Balestra, is derived from sporules or reproductive cells of a very minute alga, which abounds in marshy soils, and is the product of putrefaction or of fermentation. Heat, stagnant water or pent-up moisture, in contact with decayed vegetable matter, are essential towards this process of fermentation, analogous to the saccharine, lactic, uric acid fermentations. This period of fermentation, according to Balestra, will represent "a paroxysm of intermittent fever, which requires the presence of these miasmatic spores, which, when introduced into the blood, act as ferments."

The Campagna and environs of Rome have ever, from the nature of the soil, been a source of malarial intermittent fever, although the condition of the soil may be greatly improved and modified by cultivation and increase of population. All diseases in Rome or its environs are influenced by, or are subordinate to, marsh malaria, and require the employment of a mixed or modified treatment.

The Campagna of Rome may be regarded as the nursery and endemic focus of fever and ague, just as Havana may be regarded as a focus for yellow fever, or the vast delta of the Ganges for Asiatic cholera. It is, therefore, a subject of great interest and importance to make ourselves acquainted with the opinions and writings of these eminent Italian physicians, who, availing themselves of great opportunities, have investigated and written upon these malarial diseases, peculiar to their native country as to their origin, nature, and effects upon the human organism.

Whoever entertains a doubt respecting the existence and reality of marsh malaria, should visit assiduously, and inspect some of the hospitals in Rome, directed by such men as Baccelli and Mazzoni: he would there see patients labouring under every type, degree, and complication of malaria, from simple intermittent, subcontinued, pseudo-typhoid, to the most pronounced and advanced cachexia. Some he would find profoundly anæmic, the countenance pale yet jaundiced; others, the skin tinged with a dark green, with blood highly decomposed and loaded with pigmentum nigrum. He would find, on examination, congestions and enlargements of the liver, and spleens of enormous dimensions, with all the consequent serous effusions. Great opportunities would be afforded him of studying the varied complications of malaria, whether of the brain, lungs, or abdominal organs, which, owing to the dyscrasia of the blood, consequent upon the absorption of a specific poison, would require a treatment opposed to that employed in true inflammation. I have therefore endeavoured to arrive at some conclusions respecting the cause and nature of malaria, based upon the past experience of many years in tropical climates, upon repeated observations made in the hospitals of Rome, upon the teachings of Baccelli, Galazzi, and others, and upon an attentive perusal of the valuable works of Terrigi, Lancisi, Lanzi, etc., on the origin and nature of marsh malaria.

So long as the algæ or plants which abound in stagnant waters live and grow, the surrounding air is capable of supporting life, they absorb carbonic acid, the nitrogenous materials essential for nutrition, and give out oxygen. But so soon as these plants die, the water is converted into a vegetable infusion, which holds carbonic acid and an albuminoid substance in solution, rendering it putrescent and infectious. During the process of putrefaction, microzymes, infusoria, and bacteria become developed. Finally, there remains at the bottom of the marsh a carbonised residue, a dark vegetable pigment, of which the slime or mud is chiefly composed.

In the months of July, August, and September the plants and graminaceous herbs in the "Agro Romano" perish, turn yellow, then black, putrefy, and fall to the ground; they form a stratum of some inches in thickness, extending far and wide. The inhabitants of the Campagna become squalid and sickly, and the land is malarial. The frequent rains, the heat by day, and the dews at night, all promote the process of putrefaction and unhealthy effluvia. But when the earth becomes deluged with rain, vegetable life revives, and the air becomes purified in autumn.

Plants of a cellular, non-ligneous structure undergo in the interior of their cells a kind of metamorphosis, dependent upon the loss of vitality, and upon the difference in the chemical composition of the materials of which they are composed. This change does not take place so long as plants, if cut down when the seeds have ripened, are preserved in a dry state. The cell-walls, which possess the property of absorbing fluids and the moisture from without, which they restore to the atmosphere, lose this property after the death of the plant. But of the materials contained in the cells themselves, a part becomes utilised and is conveyed to the parts of the plant which still live: while of the remainder, the hydrocarbons on one side, as the starch and the cells themselves, which are insoluble in water during life; on the other, the nitrogenous and albuminoid materials, as the chlorophyll, the protoplasm, the cellular juices, etc., exert a mutual chemical affinity between them. As decomposition advances from the mutual reaction of all these primitive elements, a new soluble substance or body is produced, the molecular condition of which has been described by Graham as the "colloid." This colloidal substance resembles mucus. So long as it remains in a dry state, it maintains its force of cohesion, is hard and unchangeable; but when exposed to moisture it loses its tenacity, and may pass through every degree of decomposition in proportion to the quantity of water with which it comes in contact. The cells of the herbaceous plants, and the liquids in which they are contained, are transformed into a putrid infusion, in which carbonic acid and albuminoid matter are held in solution. The contents of the cells are the first to become disorganised; next in order come the vessels and fibres of the plant; and lastly, the epidermic cells. Decomposition proceeds more slowly when vegetation is exposed to the hot dry air by day, and to the dews at night. The microscopic fungi hasten the process of disintegration and operate in the reduction of a decayed plant to its ultimate carbonised state, appropriating whatever nutritive matter may still remain.

These parasitical fungi have an exceedingly simple cellular structure, rich in nitrogen; they are exposed to the same metamorphosis as the vegetable cells, and thus they concur to augment the albuminoid element. In order that a chemical action should take place between materials of such opposite natures, and that the process of putrefaction, held in suspense by the dryness of the atmosphere, should be facilitated, a certain elevation of temperature combined with moisture is essential. When the entire mass is reduced into atoms or into dust, it constitutes the "humus" of the earth. In the meantime some of the most subtle particles are conveyed by the winds to the organs of respiration and of digestion, in which animal heat, moisture from the mucous membranes, supply to them all they require for their development; they adhere, are dissolved, and absorbed into the circulation, and thus infect the entire system.

In marsh cachexia, in tedious malarial chronic affections, we meet with black pigment in the internal organs, and sometimes in the blood itself. However, this pigment, although special to malarial infection, may be detected in other diseases besides malarial, which proves that it cannot be regarded as the cause, but as the consequence, of a pernicious infection. This pigment is the final product of the putrefaction of the algæ or aquatic plants submerged

in marshes. The black mud at the bottom is inflammable when dried. The humus or soil of the earth is formed by the residue of herbaceous plants disintegrated on its surface; it is the product of putrefaction caused by the combined action of heat, moisture, and air.

It thus follows that the carbonised mud at the bottom of a marsh, and the humus on the surface of the earth, are substances exactly identical in their nature. Both derive their origin from the metamorphosis of vegetable cells, and represent the ultimate product of putrefaction. Both possess the same physical and chemical qualities, and if portions of the two be examined by the microscope, both will be found to consist of black pigmentary granules.

It is a remarkable fact that this vegetable pigment so completely resembles the pigmentum nigrum found in the organs and tissues of man in some pernicious fevers and marsh cachexia, that were we not convinced that they derived their origin from a distinct source, we might find it impossible to distinguish between the two pigments, even with the aid of the microscope; and when the two are analysed we detect but little difference. Both contain a large excess of carbon. There is a larger amount of nitrogen in animal than in vegetable pigment. This last is the product of the decomposition of vegetable cells in plants, the former of the decomposition of the plasma and of the blood corpuscles in man.

It is not probable that this vegetable pigment is capable, if introduced into the system, of reproducing itself. But we know from experience that an albuminoid substance, however minute in quantity, is capable of determining morbid alterations in the constitution of the blood and the tissues, and such alterations develope in the organism the phenomena derived from infection. In all malarial districts the atomic corpuscles derived from decayed vegetable matter are to be found suspended in the atmosphere, or involved in the dews and fogs in such localities. The quantity of these spores is in proportion to the intensity of the infecting cause, to the nature of the locality, and to the season of the year In the atmosphere of the Pontine marshes, Lanzi, Terrigi, and others have detected minute shreds of vegetable tissue, algæ, infusoria, and a variety of spores derived from the mud in the marshes, or from the "humus" of the earth. They have also been found in the Campagna of Rome, but in far less quantity. It would therefore appear that this albuminoid product, similar to other species of morbid virus, will excite a special infection evolving fever and ague; and, finally, that this product of vegetable decomposition is the source and origin of marsh malaria.

All marshes are not unhealthy; some may be wanting in the conditions necessary to generate malaria. A soil saturated, like the Pontine marshes, with a mixture of salt and fresh water, is a fruitful source of malarial fever. The marshes which are found at the estuaries of large rivers in many quarters of the globe consist partly of saltish, brackish waters; they contain the *débris*, both animal and vegetable, brought down by the rivers; and this occult refuse gives rise to fevers of a most pernicious type.

The fatal influence from a paludal soil is greater at some seasons than at others. In hot climates the rapid evaporation caused by the solar rays soon discloses the mud by reducing the water of the marsh; then the organic matter begins to ferment, and the miasma thus developed infects all who expose themselves to its influence.

Decayed animal matter may produce some modification in the nature of malaria, but it is very certain that fever generated by the decomposition of animal matter solely is distinct in its nature from the fever of malaria. This miasma does not act with the same intensity at all hours of the day. At mid-day its effects are scarcely perceptible, although the quantity of malaria exhaled is greater than at any other period of the day, but it becomes transported more rapidly towards the upper strata of the atmosphere by reason of the rarefaction or dilatation of the inferior strata. Towards night, as the temperature lowers, especially during the summer in hot climates, the miasma settles down with the dews. Then it may be absorbed by the human body, when at the same time there is a sensible diminution in the transpiration from the skin. Hence marshy localities are more to be dreaded after sunset, when the miasma may determine a simple intermittent or a pernicious fever.

For the same reason it is also dangerous to expose the body to the cool morning air before the rays of the sun have dissipated the dewy vapours. The inhabitants of some unhealthy parts of Italy are well aware of these facts, and take good care to retire to their homes before sunset, and thus shut out the enemy. Towns and cities not far distant from these marshes are greatly exposed to epidemics of fever and ague unless sheltered by some such barriers as lofty trees. When the air is agitated, the miasma may be conveyed thither by the winds. That part of the town which is situated nearest to the source of infection suffers more than a part more remote, which may not suffer at all, as though the malarial poison had become modified or neutralised as it passed over the centres of population. Malaria prefers lowly situated places. The air pregnant with effluvia is heavier than pure air, and consequently low sites are more exposed to fevers than are elevated ones. Hence the expediency of inhabiting rooms in the upper part of the house, and of so constructing houses that the front should not be exposed to the winds which blow from a marshy locality.

But fever and ague may exist where no marshes are to be found. This is owing to the peculiar nature of the soil, not to climate—to the existence of those influences in an occult state beneath the surface of the ground, which exist in marshes in an open state above ground.

We therefore meet with epidemics of marsh fever in localities apparently dry and healthy, in underground habitations, in cellars, in damp localities with a rich uncultivated soil, during the exploration of lands that have long laid waste and uncultivated, as in the upturning of the soil for the laying down of railways, etc. But the conditions essential for the generation of malaria are always the same in every locality.

Let us next consider how the poison of malaria directly impresses the human organism, more especially the spleen and its peculiar function.

Rome.

INDIGENOUS LEPROSY.

By G. GASKOIN, M.R.C.S.,
Surgeon to the British Hospital for Diseases of the Skin.

We are assured that leprosy at the end of the past century had ceased to be anywhere endemic in Great Britain and its coasts, though now and then a case would be described from the outlying groups of the Scottish isles, or perchance from the neighbouring mainland. It is in continuation of such a series that a case or two would seem to have been projected into the present century. There is one reported by Dr. Edmonstone, an Edinburgh physician, in A.D. 1809, and even in the succeeding generation Dr. McCall Anderson declares that he has seen one such case originating in the Highlands. In the course of conversation with my contemporaries I have heard of other instances both in Scotland and in Ireland, but with no attempt at verification. In England, beyond what has been recently described, and what I may add thereunto, I have really heard of none. Whether to defect of observation or to complete failure of cases such *lacuna* is to be attributed, may be fairly a matter of doubt. But as touching the existence of leprosy among us, a large gap occurs in our literature. It is not, I confess, a subject which has till lately occupied my thoughts. I never looked forward to the time when the existence or revival of leprosy in England would come under discussion. Accordingly, what is mentioned here is taken from the gross of my experience. By an accident of my position in the year 1834, being then a student of medicine, I thus early became acquainted with a case of leprosy, or, if the term be preferred, of elephantiasis. In this case I was both socially and professionally interested. The part affected was the face. The subject was a farmer—as I believe, a sheep farmer—from Ludgershall, Wiltshire; the soil or geological formation I conceive to be marl or chalk. Much interest attaches to the exciting cause of the complaint, which was discovered in a too exclusive diet of bacon, agreeably to the habits of his class in Wilts and the adjacent counties. The patient was past middle life. His family were somewhat strumous, and were subject to chest complaint. He had suffered, I have reason to believe, from hardship and exposure, as well as the anxieties of his calling. The face was much deformed, being red, swollen,

and tuberculated. A great unsightliness arose from hypertrophy of the upper lip, in which part, some five years previously, the disease had its commencement. In the course of two years' time it had reached the lower lip, and subsequently had spread all over the countenance. The nose was turgid and irregularly knotted, the prominent portion, and especially the tip, being much affected. On the face were many hardened lumps discharging a sanguineous sanies, and some of them a purulent fluid; they healed, and were renewed from time to time. There was scabbing inside the nose, and a marked vesication of the buccal cavity.

Such are the main features of the case from notes which were taken at the time, which, however defective in some respects, are in many points exceedingly ample. This patient threw up his farm to come under medical treatment in London, where a certain advantageous connexion he had in the medical world insured for him the best of advice. He took the several remedies adapted to elephantiasis. Improvement up to a certain point was followed by subsequent relapse. I regret that after the period of one year I neglected to preserve any further notes of his case.

In the year 1873 I briefly reported a case (see *British Medical Journal*, December 6, page 655) which under any point of view was of a rare and interesting character. It was undeniably tubercular leprosy. There were very large tubercles on the face and other parts of the body, but from the fact of their appearing first on the dorsal surface of the toes, and these being followed by buenæmia of the leg as a prominent feature, I was led to describe the case as one of elephantiasis Arabum that had merged into elephantiasis Græcorum. In deranged sensation, in divergence of pigment, there was nothing wanting to constitute the disease as leprosy. It came with rapidity, and was accompanied in its progress by much shivering and fever. I regret now that I did not record the case with greater fulness and particularity of detail. It is of great pathological significance, as tending to show, not only the diathetic character of buenæmia (which is less in question), but also something of identity in the two forms of elephantiasis—a view which is contrary to present teaching in England and India, but which is not without support elsewhere. If the latter view were sustained, we should look with more of interest to the lymphatic system in elephantiasis Græcorum.

This patient had never left the country. He was a large, fair-haired man, with early proofs of scrofula. Born in Herefordshire, he acquired the disease by toiling amid cold and wet as a navigator and stonemason in the chalk cuttings of Sussex.

I may here be allowed to draw attention to the well-marked case of elephantiasis Græcorum recorded by Mr. Nourse, of Brighton (*Medical Times and Gazette*, September 2, 1865, page 251), which was found in a woman at Steyning, Sussex, on the same geological formation of marl or chalk as in the two former instances. It is a strongly marked case of tubercular leprosy. The experience of Mr. Nourse in Egypt and Norway gives great support, if such were needed, to the case.

Besides this, of a comparatively recent date, there is one other recorded by Dr. Owen Rees in the *Guy's Hospital Reports* for 1868. I have always regarded this case as indigenous, but the objection has been made that the woman who was its subject had long resided in the neighbourhood of the East India Docks—an objection which would, indeed, be of much weight if the case were without a parallel.

In the year 1875, on May 31, I saw a patient, C. G., aged thirty-nine, of whom the following notes remain:—This woman has a determined look, and an apparently unconciliating manner, which is very much out of the common. She is more than hard-featured; certain deep-cut lines or furrows descend from the forehead and brows—they are truly leonine. The intervening folds are large and coarse, as from subcutaneous or cutaneous infiltration. They are also a little raised. The lines are very limited in number, and almost vertical; of smaller wrinkles there are few or none. The nose is prominent, not turgid; the eyes are dark and clear. The skin of the face is here and there a little spotted, but not flushed with red; it exhibits throughout a morbid coarseness. The patient has a frowning and almost menacing look. She applies to me on account of some teasing lichenous spots on the face, accompanied with a high degree of irritation. These are few in number, and of uncertain character. The irritation is greatest about the upper lip. There are a few pits remaining from the ravages of small-pox.

On the first visit I had marked this case—rather hesitatingly, I confess—as leontiasis. On the second visit, with improved acquaintance, I found her fully aware that she was the subject of leprosy. She wept, lamenting her hard fate, but always with something of resentment in her tone, complaining of the way in which she was first told of it—her attention having been directed to a Bible commentary with a detailed account of leprosy. This woman was a stray child. She never knew the breast of a mother, and was brought up by hand among strangers. She had neither kith nor kin, and spent her life in service of a low class. She chanced to be a patient in the Hampstead Small-pox Hospital at the time of its removal, and supposed herself hardly done by, her fever then being at its height. At this time she was twenty years of age. Two years after there occurred an event to which she was at no loss to attribute the commencement of her present symptoms. The house in which she had her service took fire in the night time, and she had to make her escape from the roof. She was for a considerable time exposed to inclemency of the air in charge of several children, having nothing on but her linen nightdress, till at last some one lent her a petticoat. Her suffering on the occasion was extreme. A fortnight after this a red flush came across her face, chiefly at the upper part, attended with immense irritation. This she felt worse in the upper lip, just where she suffers most from it now, this itching being the principal feature. A dread of ridicule withheld her from early seeking relief; but in two months' time she applied to the Hospital for Diseases of the Skin at Blackfriars, and in course of time to other hospitals. During this period, which extended over several years, she has had large patches on the body, attended by intense pruritus, which is only relieved by washing freely with cold water; they were chiefly on the arms, hips, and chest. There were also sores, with watery pimples; but she spoke of these as no longer troubling her. Inside the mouth, at the time of her visit to me, there were watery vesicles, such as are often found in elephantiasis.

I regret to say that after the fourth visit the patient disappeared from my clinique. I feel the case is wanting in corroborating circumstances, which I might have made good with more intimacy. I understood the patches had disappeared, and only in the face the irritation remained. The large wrinkles in the face she distinctly referred to the action of disease; they were too peculiar not to arrest attention. The sufferings must have been certainly acute which led her to so many institutions and physicians, of whose skill and care she spoke with gratitude.

This comprises all I have seen in this country of indigenous leprosy, so far as my memory carries me. I mean, of course, the elephantiasis Græcorum. Of elephantiasis Arabum I have met with instances, and I believe they are not uncommon. Whether leprosy is a disease or a dyscrasia; whether it is traceable in any minor shades which remain among us still; and what assemblage of symptoms are necessary to constitute a leprosy,—may yet be the subject of discussion.

Russian Lady-Students.—It will be remembered that an Imperial ukase recently recalled to St. Petersburg the Russian ladies who were studying at the Polytechnicum of Berlin, with threats of severe punishment for those who did not hasten to obey. We learn that eight of these ladies, belonging to the first families, have been condemned by the Russian tribunals—six to exile in Siberia, with several years of hard labour (in the mines!), and two to prison. They were accused of taking part in secret societies.—*Union Méd.*, January 19.

Purulent Ophthalmia of Infants.—Dr. Luton, of Rheims, states that the tincture of iodine in distilled cherry-laurel water is a far more efficacious and innocuous means of treatment than the nitrate of silver. One gramme of the tincture may be added to twenty grammes of the water of medium strength (20°), and produces a collyrium the colour of pale brandy. Some of this should be dropped into the eye four or five times a day, external lotions being also abundantly employed. It has proved rapidly successful at the Hôtel-Dieu of Rheims.—*Revue Méd.*, January 7.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CLEVELAND-STREET ASYLUM.

DISEASE OF THE HEART, WITH PERFORATING ULCER OF THE DUODENUM.

(Under the care of Dr. LEDIARD.)

E. T., aged twenty-eight, flower maker, was admitted on March 15, 1877.

History.—Had rheumatic fever when she was sixteen for eight or nine weeks. Since then she has been subject to annual attacks of pain in the joints. Dyspnœa has come on since last Christmas. She has spat blood; more recently she has suffered from dropsy. Has had two miscarriages, and has one child living five years old.

On admission, there was orthopnœa, with dropsy of the legs and abdomen; scanty and albuminous urine; troublesome cough, with profuse sputa; double aortic murmur, and enlargement of the liver. With the ophthalmoscope, well-marked pulsation of the retinal arteries and veins was easily seen; details of fundus very clear; no hæmorrhages.

She was treated with iron and digitalis, and improved very much, the dyspnœa abating and dropsy disappearing, and she was able to be up and about; but in May she was taken with faintness, and became slightly jaundiced, with pain in the right side—the liver seemed very much swollen, bulging from the epigastrium to the navel, and acutely tender. This was followed by diarrhœa and hæmorrhage from the nose; jaundice increased, and so did the tenderness over the liver; the dropsy and dyspnœa also increased. Finally, she had general abdominal tenderness and symptoms of peritonitis, and died in a state of stupor on June 4.

Post-mortem.—Heart large; some old pericardial adhesions; no effusion; aortic valves incompetent; vegetations on both aortic and mitral valves. Lungs non-adherent, congested, and œdematous. In peritoneal cavity there was a large amount of bile-stained fluid, mixed with flakes of lymph and thick mucous-looking coagula; peritonitis general. Liver, three pounds and a quarter, very nutmeggy, and displaced downwards. Right kidney, six ounces and a half; left, three ounces and a half; atrophied and puckered, but not granular. Spleen, eight ounces and a half; healthy. Gall-bladder natural. Intestines somewhat contracted, and contained a coating of thick mucus resembling gruel. The stomach was healthy, and the pylorus also, but the duodenum presented a round and clean-cut perforation, the size of a sixpence, at its posterior aspect and immediately beyond the pylorus. The surrounding parts were free from adhesions.

Remarks.—The tenderness over the liver in this case was most acute, but, in the absence of rigors and pyrexia, was not thought to point to abscess.

NEWCASTLE-ON-TYNE INFIRMARY.

FATAL OBSTRUCTION OF THE BOWELS, CAUSED BY A CONSTRICTING BAND OF INFLAMMATORY LYMPH.

(Under the care of Dr. BYROM BRAMWELL.)

THOMAS C., aged forty-one, labourer, married, was admitted on April 29, 1875, suffering from obstruction of the bowels.

Previous History.—He enjoyed good health until three months ago, when his present illness commenced with vomiting and constipation, alternating with diarrhœa. For the last ten days the bowels have been completely obstructed. He has been a very heavy drinker.

Condition on Admission.—The abdomen was enormously distended and tympanitic. This was especially the case in the region of the ascending and transverse portions of the colon. There was no pain or tenderness on pressure. Vomiting was constant, the matters ejected having a slightly fæculent odour. The rectum was packed full of hard fæces. The face was flushed, the expression dull and heavy. The body was well nourished. The urine contained a small quantity of pus and some hyaline casts, but no appreciable quantity of albumen; on adding nitric acid it became very dark, and sulphuric acid made it quite black.

Treatment.—The rectum was thoroughly cleared out. Ice and hydrocyanic acid were administered internally.

Subsequent Progress of the Case.—On May 1 the vomiting had ceased. The abdomen was still greatly distended; there had been no passage. On the 6th he passed for the first time a large quantity of wind per anum. This was followed by an evacuation. The matters passed were liquid and very frothy. On the 7th there was another similar motion. On the 9th he was worse, having vomited a large quantity of fæcal matter identical in character with that passed per anum. On the 10th he was very drowsy, and still vomiting fæcal matter. The abdomen, which was still enormously distended, was carefully examined under chloroform, but no cause for the obstruction could be detected. Full doses of morphia were ordered. On the 14th he was better. The abdomen was less distended. There had been two free evacuations. On the 19th he was still improving. A dose of castor oil was administered, and was followed by a very copious evacuation of the same sour, frothy, liquid fæces. On the 20th he felt so much better that he was allowed to sit up. On the 29th he was again worse; the abdomen distended; the fæcal vomiting and constipation again present. The temperature, which for some days had been rising, was 103·2° Fahr. On the 30th he was collapsed, frequently vomiting, free from pain; abdomen enormously distended. On the 31st he died.

The following is the temperature and pulse chart:—

	Pulse.		Temperature.	
	Morning.	Evening.	Morning.	Evening.
May 18 . . .	110	111	99°	99·6°
,, 19 . . .	120	122	99·1	98·6
,, 20 . . .	116	122	98·6	98·2
,, 21 . . .	106	110	97·8	99
,, 22 . . .	122	128	98·4	98·4
,, 23 . . .	110	132	97·6	99·2
,, 24 . . .	126	132	97·6	98·2
,, 25 . . .	122	128	97·8	99
,, 26 . . .	132	126	99·8	100
,, 27 . . .	126	122	100·1	99·7
,, 28 . . .	136	146	101·4	102
,, 29 . . .	152	154	102·5	103·2
,, 30 . . .	152	152	102·6	102·6
,, 31 . . .	154	153	99·4	100·2

Autopsy.—The post-mortem was made twenty-four hours after death. The body was well nourished. The abdominal parietes were laden with fat. The transverse colon was constricted about its middle, so that the calibre of the gut was hardly large enough to allow of the passage of the forefinger. At the point of stricture the gut was firmly bound down by old and recent adhesions. The internal surface of the gut at the point of stricture was ulcerated. The ulcer was partly healed. The stricture had apparently been produced by the contraction of the ulcer and by external bands of inflammatory lymph. There was no general peritonitis. There were no other ulcers in the intestine, which contained a large quantity of the same liquid, sour, frothy fæces described above. The liver was intensely fatty and friable. The heart and kidneys were also fatty. All the other organs were loaded with fat.

A HEALTHY LOCALITY.—Dr. J. C. Reid, Medical Officer of Health of the Urban District of Newbiggin, in his quarterly report to December last, congratulates the authorities on the smallest death-rate it has ever been his good fortune to have to record for one quarter, and that quarter a winter one. In the corresponding period of 1875 there were eight deaths registered; in that of 1876 there were seven deaths; but in the quarter under notice there were only two deaths of adults, aged respectively fifty-seven and sixty-nine, and one of a new-born infant. The locality must possess exceptional advantages of some kind, or exceptional good fortune, for further on in his report Dr. Reid speaks of certain streets complained of more than once by the inhabitants. One woman "had to lift the water from the doorstep, and the puddle around stank when she tried to make a gutter"; whilst her cottage and several others were unprovided with even an attempt at sewerage. The authorities will do well to accept and carry out Dr. Reid's suggestions, or some day this exceptionally healthy locality will become conspicuous from quite an opposite state of things.

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Medical Times and Gazette.

SATURDAY, JANUARY 26, 1878.

MEDICAL TRAINING IN SCOTLAND, ESPECIALLY IN ABERDEEN.

Whilst we were discussing the training in practical medicine afforded by the teaching of Professor Gairdner in Glasgow—teaching which is most excellent as far as it goes,—another pamphlet came into our hands. If we had any complaint to make with Dr. Gairdner's style of teaching, we should broadly put it thus: that Symptomatology, having exact diagnosis in view, is pursued too closely, to the exclusion of Pathology and Pathological Anatomy on the one hand, and Therapeutics on the other. Unfortunately, no such complaint has to be made as to the sister University of Aberdeen. The pamphlet before us is an Address delivered before the Aberdeen Medical Students' Society, by Dr. Alexander Ogston (a son of the well-known Professor of Medical Jurisprudence), who is Honorary President of the Society, and also one of the Surgeons to the Aberdeen Infirmary. It is not easy to assign to this pamphlet (which is published by the Society) its due place. It is the work of one whom we know to be a vigorous and enthusiastic worker, and who has striven to infuse a wholesome spirit into a School which, as a school, has somehow tended to languish. It was addressed to a Society of Students—not *ex cathedrâ*, but as a member, so to speak, of their own body; and so it is difficult to hold hard and fast to every word uttered. But, making all allowances, it shows that there is vast room for improvement in the relations of the School to the University, and to its own several component parts. This is the gist of the author's complaint: "A student comes to our University, when he has reached a certain stage of education, prepared to spend a certain amount of money, and four years of his life, and in return supposes that at the end of that time he will be sent forth into the world with a licence to practise, and be furnished with all the training and lore that will enable him to practise all the branches of his profession—medicine, surgery, jurisprudence, and midwifery." Now, this, though hardly intelligible to an Englishman, might be called a fair demand in Scotland, where the idea of teaching is much more closely associated with a university than that of granting degrees merely. The students are trained as well as examined, and by a good many the examinations are looked upon only as an important part of training. But, putting this aside, the point Dr. A. Ogston makes next is that the students are allowed to graduate and are sent away hopelessly uninstructed in certain forms of disease—notably these: Diseases of the Ears, Diseases of the Throat, Nose, and Windpipe, Diseases of the Eyes; Insanity. Perhaps we had better stop here; but Public Health is untaught, Pathology scarce recognised.

Perhaps it will be best to proceed with the burden of Dr. A. Ogston's complaint, all of which we believe is perfectly correct; and let us next try to trace the *lædentia* in the case. Chief of these, he says, is the over pre-eminence given to certain preliminary subjects—notably Anatomy, Chemistry, Natural History, Botany, and Physiology. Here we had better quote Dr. Ogston's own words:—

"I appeal to the testimony of every practitioner to say whether it is not correct that a knowledge of how to use either the laryngoscope, or the stethoscope, or the ear speculum, or the ophthalmoscope, is not of more value to him than nineteen-twentieths of the sciences of botany, anatomy, chemistry, physiology, or natural history. A young doctor, knowing little save the preliminary subjects, is a man of comparatively no value compared with the experienced medical man who has forgotten most of them, but has learnt, by constant use, the thorough application of the practical subjects, and of the means and appliances used in them. So soon as a student obtains his diploma and enters practice, he begins to find a burning want of more knowledge of disease, and how to treat it. He finds that the subjects he chiefly studied at the university, and on excelling in which he perhaps prided himself, are of far less value than he had been led to believe, while there is a large mass of material of which he had but a faint conception, that he has to acquire painfully and slowly, and which he perhaps can never now hope completely to acquire. Most keenly of all he feels the want of a proper training in the application of certain instruments of diagnosis and treatment, the ophthalmoscope, laryngoscope, etc.; but they cannot be learnt, or can be learnt by few, save in a regular class, and as part of a curriculum of medical study. Bitterly is the want felt, and felt to the very end. Such a man remains for ever behind his day and generation.

"Even those who have started in life, well provided in these respects, speedily come to see that much indeed of our present curriculum training was unnecessary, and that much of what was learnt might have been advantageously replaced by more attention having been devoted to the practical subjects. As men advance in years, experience, and completeness, they no longer care to maintain their student-knowledge of the preliminary subjects, but strive more and more to obtain a mastery of disease, and of the methods of studying it; and comparatively neglect, with impunity and even advantage, the things which, ere they could judge for themselves, they had been led to regard as the all-in-all in medicine.

"Instead, what have we? We have careful provision made for a student spending, or rather wasting, two years in the study of such subjects as chemistry and botany, and three years in acquiring anatomy, while the most valuable part of his curriculum—the study of medicine—is compressed, with very few exceptions, into one year; indeed, it is not going beyond the mark to say, into five months.

"An Aberdeen student, who is supposed to need two years to learn chemistry and botany, and three years to learn

anatomy, is actually believed to be capable of learning the practice of medicine, midwifery, and jurisprudence in five months. Only those who know the monstrous disproportion between these subjects can form an idea of how ludicrously unfair and inadequate such a distribution of time is.

"Not only so, but the universities are carefully arranged so that no one shall be interested in remedying this state of matters. The examinations are so fixed that a student cannot rid himself, however great his knowledge, of these bloated preliminary subjects, until he has perspired his given number of years in their study. Numerous and eminent professors are at their post to insert every possible detail of them, whether useful or valueless, into the student, and to see, at the pass examinations, that he has committed every one of them to memory; while the great needs of his profession, the tools by which he will have to make his bread and hold his own in the competition with his compeers, are entrusted to an insufficient number of professors, who do their best to face the difficulties of teaching subjects overwhelmingly large in an impossible space of time. Every new and even fanciful detail of the preliminary subjects is carefully and laboriously instilled into the students, while other subjects, ten times their value, are in our own school not taught at all, or are taken up under every possible discouragement by some man unconnected with the university, and who, instead of being encouraged and assisted, is met with the coldest indifference and neglect by the authorities of the very institution he is endeavouring to benefit."

Such is the burden of the complaint: let us turn to the proposed remedy. It is not, however, so easy to come to that, for there are still other complaints—notably that the chairs are filled by "specialists," each supposing that his own subject is the most important in the curriculum; and that such specialists constitute the governing body. This word "specialist" seems, however, to be here used in a peculiar sense; for the author seems to apply it to such professors as make the study and teaching of one particular branch of medical education their calling. Strange that we in England should be striving after that which is found apparently to work so badly in Scotland—a system where each man should stick to his own particular branch of teaching, and leave others alone! There is still another ground of complaint—that the assessors to the professors as examiners are underpaid, and are not appointed for long enough periods. Dr. Ogston would have them appointed for life, or a long period of years. As to being better paid, we have not a word to say; but if there was one thing more than another that roused public clamour against the College of Surgeons under the old *régime*, it was this very evil of life examiners. Under such a system, examination soon falls behind teaching, whereas the opposite should be the case. It is quite clear, therefore, that neither of these constitutes the sought-for panacea for Aberdeen.

Still another complaint brought up is that the available funds of the University are wasted on class grants and museums, which do not correspond in value to the money expended on them; or on a uselessly large staff of teachers in some one especial department. Instead of such expenses, Dr. Ogston would have classes established and examinations enforced on such subjects as ophthalmology, otology, pathology, mental diseases, throat and nose diseases, dental surgery, operative and minor surgery, dermatology, and hygiene. This, as far as we can make out, is the remedy he would suggest for the present untoward state of things. But to interpolate all this into the present curriculum necessitates serious changes in that; and to this the author next directs himself. It is, however, hardly our duty to follow him here beyond one point—and in which we heartily agree with him—which may be said to be this: that the student should be allowed to pass his examinations as soon as he acquires the requisite knowledge; this is especially the case as regards such subjects as botany, chemistry, and materia medica properly so-called, though Dr. Ogston would remit this last subject to the end of the curriculum. But system-building is harder work than system-breaking, and from it we shall, meantime at all events, refrain. Apart, then, from such changes as we have hinted at, Dr. Ogston's scheme of reform may be said to amount to the interpolation of the classes mentioned above, and a shortening, together with a limitation of the scope, of the more strictly scientific courses of instruction. We must confess that to us these proposals seem strangely inadequate to the purpose had in view; and if the teaching of great subjects is to be so broken up we are quite sure the list proposed is not half begun. It will be noticed that the list of new subjects suggested, with one or two exceptions, all belong to the domain of surgery, with the wants of which we conceive the writer to be best acquainted. But surely medicine has its claims; and what of midwifery and of diseases of women and children? Can anyone say that instruction in these branches is of less importance than in those mentioned. Everyday practice lies to a very great extent amongst women and children; and can it be said that a man skilled in ophthalmology, otology, pathology, mental diseases, not to speak of throat and nose diseases, and dental surgery, is one whit better prepared for practice than if he knew them not, provided he knows nothing about women and children? A dozen other subjects occur to us, but these are enough to show the scope of our argument.

We cannot pretend to a deeper insight into such matters than one on the spot, but all through the address there seems to us to run a vein of thought which appears to show that whilst appreciating the objections to the present system of teaching in Aberdeen, the true mystery was hidden from the author. He brings out the objections clear enough—the teaching is not sufficiently practical for modern wants; but, as far as we can make out, the suggestions proposed would not greatly improve matters. The University authorities are called upon to introduce new classes, classes, classes—ever classes. But where is the material to come from? It is impossible to teach one of these subjects practically without the living material, and how is the University to provide that? It will do little or no good to multiply lectures or abstract examinations without the teaching from the living patient.

This is what seems to us to be at the root of the evil—that there is no cohesion between the University and the Hospital. In Glasgow that has been secured by building a new hospital; in Edinburgh it has been secured by other means: but in Aberdeen it is by a mere accident that the Professors of Medicine and Surgery have posts in the Hospital, and the last Professor of Medicine never had such a post. It is clear that when this is the case the teaching can never be practical in the true sense of the word. Teachers who cannot take their students from the class-room to the bedside must thrash the wind. The workers at the hospital cannot get the students; the workers at the medical school cannot get the material. Hence the tendency, on the one hand, to disappointment at the want of recognition by the University; and on the other, to purely theoretical teaching and examinations. Unfortunately, the School at Aberdeen is not large enough to admit of subdivision. Consequently the Extramural School, which has been the safety-valve for Edinburgh, is hardly to be looked for, but a hearty co-operation of University teachers with Hospital teachers, the establishment, above all things, of something like the German Poliklinik, where the materials of teaching are to be sought for all over the city, would, we venture to suggest, do more for the welfare of

the School than the introduction of a dozen special courses. Not that the subjects suggested ought to be overlooked, but this ought to be carried out in a truly practical manner.

There is, as it seems to us, in this Address a slight tone of bitterness against certain of the University authorities. We may be deceived, for at this distance we can hardly tell, —but this we would suggest, that more may be gained by endeavouring to obtain the aid and concurrence of these authorities in new schemes than by suggesting curtailment of their courses. Such matters, however, concern others more than ourselves.

Finally, our reflections have turned thus: How comes it that a School, apparently so flourishing as Aberdeen, is yet in reality in so backward a state?—and it struck us that the pass-lists helped to a reply. There we constantly see men from hospitals and schools all over the country as graduating at Aberdeen. Such men may have acquired their practical knowledge elsewhere, and, knowing this, the University authorities may have slumbered, leaving their own students to do the best they could. We trust it is not so; but at all events Dr. A. Ogston has done good service by directing public attention to the state of the Aberdeen Medical School.

LANGENBECK ON THE REMOVAL OF FOREIGN BODIES FROM THE ŒSOPHAGUS.

Some excellent hints on the extraction of foreign bodies from the pharynx and œsophagus are contained in a lecture delivered by Professor von Langenbeck before the Berlin Medical Society, a full abstract of which will be found elsewhere in our pages.

The finger, he says, should always be used to try and extract large foreign bodies before any instrument is introduced, and the latter should be reserved for those cases where the foreign body is too firmly impacted for the finger to remove it. Tracheotomy would probably always be performed too late, for large objects—such as sets of false teeth, which are among the commonest sources of these accidents —may rapidly kill by pressing the epiglottis firmly down on the rima glottidis, and suffocating the patient. Before chloroform is administered to elderly people the surgeon should always make sure that they are not wearing false teeth.

The finger should also always be used to feel for small pointed bodies, such as needles, fish-bones, etc., which are so apt to lodge in the hollows between the glosso-epiglottic ligaments.

Large bodies, like lumps of meat, potatoes, etc., not unfrequently lodge in the œsophagus at the level of the cricoid cartilage, and may give rise to great dyspnœa by pressure on the larynx or trachea. They can readily be detected at times by a globular prominence on the left side of the neck, but are often difficult to extract owing to spasmodic contraction of the œsophagus above and below them.

In two cases of this kind, Professor von Langenbeck succeeded, by squeezing the mass between his fingers, in altering its shape, so that in one case it was readily extracted by the forceps, and in the other it passed down into the stomach.

If the body cannot be felt in the neck, we must not trust to the patient's statements as to its position, for they are generally wrong, but must examine the œsophagus with an instrument from within. Von Langenbeck strongly condemns the use of a whalebone bougie armed with a sponge for this purpose, as recommended in many German works on surgery, for it is impossible to *feel* with it, and hence to discover the position and the consistence of the foreign body; and the latter is frequently pushed deeper down, and rendered impossible to move; or it may even, as has actually happened, be forced through the wall of the œsophagus into the posterior mediastinum. The use of such an instrument must be restricted to the removal of *soft* bodies, which may be pushed down into the stomach (if need be) without doing harm. Professor von Langenbeck himself invariably uses a *polished iron ball*, fixed to the end of a whalebone rod, for catheterising the gullet. If well oiled, this instrument enters easily, can be easily moved about during exploration, and with it hard bodies, such as coins, needles, and bits of bone, can be detected with certainty.

Where he simply wishes to try and force a soft object into the stomach, von Langenbeck prefers a gum-elastic œsophageal bougie. It enters with great ease, and no harm can be done with it.

Foreign bodies, which may become dangerous by wounding the œsophagus or by impaction in the bowel, should always be extracted by the mouth if possible. Under this head fall pieces of bone, splinters of glass, coins, needles, and fish-bones. Prof. von Langenbeck has performed a large number of such operations without a single accident. He invariably uses von Graefe's "coin-catcher," an instrument which, all things considered, leaves nothing to be desired.

There is an additional reason for promptly extracting foreign bodies from the œsophagus—namely, that if allowed to remain they may become a source of serious danger to the patient. Adelmann collected 314 such cases (*Prager Vierteljahrschrift für d. Prakt. Heilkunde*, Bd. iv., 1867), and among these there were 109 *deaths*. Of course there are numbers of cases where the foreign body is either successfully extracted or else pushed onwards into the stomach, which are never published.

If everything else fails, and the cervical portion of the gullet is implicated, œsophagotomy must be performed. This operation is comparatively rare; up to 1872 it had only been done twenty-six times for the removal of foreign bodies. Von Langenbeck gives the details of two later cases of his own in the lecture before us, and points out that since there were in these twenty-eight cases twenty-three recoveries and five deaths, œsophagotomy must not be regarded as a very dangerous operation. He describes the details of the operation, which closely resemble the account given in English works—for instance, in Bryant's Surgery. One or two points only deserve notice in von Langenbeck's description. To render the œsophagus prominent before incision, he recommends a strong gum-elastic œsophageal bougie or a flexible pewter sound to be introduced, provided the prominence of the impacted foreign body is not sufficiently marked. One condition may be met with during the operation which may make it extremely difficult to perform—namely, swelling of the thyroid gland from venous stasis. This condition, which Professor von Langenbeck mentions owing to his not having found it described elsewhere, is always present if a large body has been impacted for several days at the level of the cricoid cartilage, and has caused dyspnœa by its pressure on the larynx. The swollen gland spreads out over the œsophagus so as to completely cover it, and it is necessary to divide the fascia enclosing the gland, so that the latter may be drawn away from the œsophagus.

Lastly, the Professor warns surgeons not to force their way inwards in an operation like the above with the finger or with blunt instruments, for fear of injuring vessels or delicate nerves. "The nearer an operation has to be performed to important organs, the more closely must our manipulation resemble the finest anatomical dissection, and operators cannot be too strongly warned not to tear the tissues in the manner just described."

THE WEEK.

TOPICS OF THE DAY.

A FRESH outcome of the business talent and "canniness" of the Scotch is shortly to appear in the concrete, in the shape of a Co-operative Sanitary Association. Its object is to be to secure the exclusive services of one or two well-educated young engineers, who, under the control of a consulting engineer of high standing, will, when required, inspect and report upon the dwellings of members, giving estimates as to the cost of any alterations that may be deemed advisable. The annual subscription to the Association is to be one guinea, and the Professor of Engineering in the University of Edinburgh so strongly approves of the scheme, that he has offered to give the Association his services gratuitously for the first year. The people of Edinburgh have been led to this plan of obtaining sound and cheap sanitary advice from a fruitful though saddening experience of the large fees which they have had to pay when seeking the services of high-class sanitary engineers, while they have also learned that from neglect of such necessary advice their houses frequently get into an insanitary condition before they themselves are aware of the fact. On the other hand, they have found that the cheap sanitary engineer is generally in league with proprietors of patents, or plumbers, whose influence on his opinion is certain to direct it to a channel not always conducive to the interests of the householder. Another feature of the scheme is that each member, on payment of a trifling fee, may secure the services of the officials on behalf of any charitable society whose work might be aided by them, or for any person in whom a member may be interested, but who is too poor to obtain for himself good sanitary advice. If the Association should prove a success, it will no doubt be imitated in many other large towns.

The editor of the "Classified Directory to the Metropolitan Charities" has published some interesting statistics as to the sums received by the various institutions. He says—"As far as can be ascertained, the total amount reported as received during the year 1876-77 was £4,651,132; the total for the previous year was £4,114,849, showing an increase of £536,283. On comparing the table for 1876-77 with that for 1875-76, it will be observed that although the grand total is so much larger, yet the income of many of the groups of charities has decreased. The following are among the groups with decreased incomes:—Bible societies, book and tract societies, missionary societies, charities for the blind, charities for educational purposes, orthopædic hospitals, hospitals for women and children, provident dispensaries, surgical appliance societies, and a few others. On the other hand, there has been a large addition to the income of the following groups:—General hospitals, special hospitals, free dispensaries, homes of a voluntary character, orphanages, reformation and prevention societies, institutions for social improvement and protection, and general relief. There is every reason to belief that a large proportion of the half million of money given for the relief of distress in India would, in ordinary circumstances, have been contributed to charitable purposes in this country, and more especially to those institutions the income of which has fallen off."

In accordance with a request conveyed to him by the Dean of the London School of Medicine for Women, the Dean of the Faculty of Medicine in Paris has given the number of ladies studying medicine in that capital since the year 1865. The number is thirty-two, nine of whom have obtained diplomas, twenty-three being still engaged in their studies; of these latter, six are stated to be English, twelve Russians, and five French.

A correspondent of a contemporary, writing from Rome, says that the body of the late King Victor Emanuel was embalmed before the lying-in-state, but, in accordance with the etiquette of the House of Savoy, this process did not take place until forty-eight hours after death. Decomposition had then commenced, and a chemical bath was the only means possible; the process cannot be said to have succeeded well, and as a result the face was much discoloured.

The tones of the fully expected suburban opposition to part of the metropolitan water-supply scheme are beginning to be heard. A largely attended meeting of owners and ratepayers residing within the district of the Uxbridge Local Board of Health was held at Uxbridge last week with reference to the proposal of the Metropolitan Board of Works to obtain a supply of water at Redhill, Denham, Bucks, and Hayes, Middlesex. The chairman of the Local Board, the Rev. A. D. Hilton, said the members of that Board were unanimously of opinion that it was their duty to take immediate steps to protect the town from injury, it being very probable that the Redhill works would drain the Uxbridge works, and render them and the drainage, which had together cost £35,000, perfectly useless. The following resolution was cordially adopted:—"That this meeting approves of the proposal of the Uxbridge District Local Board of Health to oppose the Bill in Parliament promoted by the Metropolitan Board of Works for the metropolis water-supply, and to charge the expense of such opposition upon the general district rate under the control of the Local Board. At the same time this meeting requests the Board to endeavour to arrive at some amicable arrangement with the Metropolitan Board of Works for the protection of the water-supply, and for the interest of the district, before taking active steps to oppose such Bill."

In the face of some very serious rumours which have been circulated as to the health of Jamaica, it is satisfactory to be able to state that the reports received at the War Office and the Admiralty by the last mail from that island are very reassuring. The Commodore observes that the health of the ships and the station generally is good. There had been no fresh cases of yellow fever amongst the troops at Newcastle, where, however, there had been seven fatal cases; nor was there any fever reported at Kingston. The weather was cooler and dry, and it was hoped that no further spread of the disease was to be anticipated.

At a recent meeting of the Marylebone Vestry, Mr. Edwards, representative of the parish at the Metropolitan Board of Works, stated that Colonel Sir J. M. Hogg, M.P., chairman of that Board, had commissioned him to inform the Vestry that eight gentlemen had offered £1000 towards the planting of trees on either side of the road from the "Angel" at Islington to Edgware-road, embracing Pentonville-hill, Euston-road, and Marylebone-road, and running through the parishes of St. Pancras, Islington, and Marylebone. Sir James having received the offer, was desirous that the representatives of the three parishes should communicate the matter to their respective vestries for their consideration, and probably to ascertain in that way whether the parishes would subscribe the remainder of the money that might be required. The statement was ordered to be referred to the Works Committee for consideration.

The members of the new branch of the Volunteer Service just established, the "Volunteer Ambulance Corps," held their first drill on the evening of the 11th inst., at the Riding-School, Albany Barracks, but we believe that in future the drills are to be held at the Wellington Barracks. The attendance comprised between thirty and forty medical men attached to Volunteer battalions, and about 150 Volunteers. Under the direction of Surgeon-Major Staples, of the

Army Medical Department, and four sergeants of the Army Hospital Corps, the class was instructed in stretcher drill, and in the bandaging of various imaginary wounds, the nature of which was stated upon cards pinned upon the breasts of those selected to act as patients. Great attention was exhibited on the part of the class, and as many more applications have been received for enrolment in the corps, this portion of volunteering duties promises to be as popular as its great utility should make it.

We are sorry to see, in the columns of one of the Service journals of last week, a suggestion that a military man should be appointed to preside over the Army Medical Department, with a senior officer of the Department to assist him in matters of professional organisation; and this suggestion occurs in an article which professes to deplore the already enfeebled condition of the Army Medical Service! It is presumed that our contemporary is honestly anxious to improve the position of the Army-Surgeon, but we question whether a more mischievous suggestion could have been put forward; and as a brief but most apt answer to it we will simply commend to the editor's consideration the following paragraph from another column of his journal with reference to a similar scheme for the Navy:—"There seems to have been a rumour recently set afloat, the truth of which we cannot possibly credit, to the effect that the Admiralty contemplates abolishing the office of Director-General of the Medical Department. Such a step would, we believe, be most prejudicial to the well-being of the Service. What we want at this time, almost more than at any previous period, is to strengthen the Medical Departments both of the Army and Navy."

A despatch, addressed by the Secretary of State for India to the Governor-General of India in Council, and bearing date the 10th of the present month, has just been issued. It directs the formation of a Commission, to consist of three or five of the most competent persons, including at least one native, and none of whom shall have taken an active part in the labours or controversies of the past year, whose duty it shall be to collect with the utmost care all such information as may assist future administrators in the task of limiting the range or mitigating the severity of famines in India, or of placing the people in a better condition to endure them.

The Stafford House Committee has made all its preparations in anticipation of the advance of the Russians, so as to guard against the possibility of the capture of the surgeons of their staff, and to provide for their probable isolation by the complete investment of Rustchuk and Erzeroum. A three months' supply of money and stores, calculated upon present expenditure, has been furnished to the managing surgeons at each of these places, to enable them to continue without intermission their care of the wounded in the hospitals already established through the good offices of the Committee. The Foreign Office has also been solicited to convey to the Russian commanders notices of the position and constitution of the Committee's various hospitals, which come within the provisions of the Geneva Convention.

THE LONDON WATER-SUPPLY.

The London Vestries and District Boards, the direct electors of the members of the Metropolitan Board of Works, have received a report from a sub-committee of delegates from the local bodies of the metropolis on the proposals of the Metropolitan Board regarding the water-supply. The sub-committee consider this an exceptional occasion "for the united and vigilant action of the local governing bodies of the metropolis," and they direct attention to the enormous expense involved in the schemes of the Board of Works. They say that "it is currently reported that the united claims for the purchase of the water companies are computed at £25,000,000, being more than double their estimated value in 1865, and more than four times that originally mooted before Sir James Graham's Committee in 1851, viz., £6,000,000." The demand for such a sum, they remark, alone suggests the most careful attention; but, in addition to this, there is the scheme for creating a second supply for domestic purposes and a constant high-pressure service, estimated to cost £5,500,000. And thus it appears, as a starting-point, that "the present inflated income of the water companies (about £1,300,000) would not be sufficient to pay the interest upon the capital outlay and the cost of maintenance and management of the works." Therefore, "without taking into consideration the further large individual expenditure which would be thrown upon the ratepayers by Clause 16 of the Metropolis Water-Supply Bill, the Committee strongly recommend united action on the part of the local authorities in guarding the ratepayers against the expenditure of so immense a sum without most carefully and jealously watching the progress of these measures."

PRINCIPAL CIVIL MEDICAL OFFICER, STRAITS SETTLEMENTS.

It will gratify many of our readers to hear that Lord Carnarvon has conferred on Dr. Thomas Rowell, of Singapore, one of the best appointments in his gift—namely, that of Principal Civil Medical Officer for the Straits Settlements. We believe this has been entirely due to Dr. Rowell's perseverance, uprightness, and genuine ability, taken in conjunction with his medical attainments. It was only a few months ago that Dr. Rowell was here working as hard in the hospitals as the hardest-working student. We believe everyone has reason to be congratulated on such an appointment.

PATHOLOGICAL SOCIETY OF DUBLIN.

The meeting of this Society, fixed for Saturday, January 12, was adjourned owing to the death of Dr. Stokes. At the meeting of Saturday, January 19, the following resolution was moved by the Rev. Professor Haughton, M.D., seconded by Dr. Head, and carried unanimously:—"That the Pathological Society of Dublin desires to express the deep sympathy of the members of the Society with the family of their late distinguished fellow member Dr. William Stokes, Honorary Secretary, and one of the founders of the Society; and that the Society had endeavoured, however inadequately, to express its sense of their sad bereavement by adjourning the meeting of January 12 (the next after his lamented decease)." Dr. Kidd afterwards showed a remarkable instance of spontaneous amputation in a hydrocephalic fœtus, with double hare-lip and cleft palate. A fine cord passed across the fingers of the right hand, amputating the tips of the fingers, which were united with one another. A band of attachment passed also from the dorsum of the great toe to an indentation above the ankle on the right side. The contraction of the lymph was gradually causing amputation of the leg at the site of the indentation. Dr. Kidd alluded to the views entertained by the late Dr. W. F. Montgomery, and by Professor Gurlt, of Berlin, as to the etiology of these spontaneous amputations. Dr. Gurlt considered they were produced by the contraction of lymph-bands connected with the amnion. Professor E. H. Bennett presented a series of specimens of melanotic carcinoma from the sole of the left foot, popliteal space, and groin of a boy aged eleven. The evolution of tumours in these three situations had occurred almost synchronously. That in the popliteal space was supposed by the lad's friends to have resulted from a blow of a hand-ball—erroneously, for, when admitted to hospital, immediately after the accident, a mass of enlarged glands, not inflammatory, but evidently the result of some new

growth, existed in the groin, and a malignant tumour had already developed under, and probably from, the plantar fascia of the foot. A fungous condition of this last-named growth ushered in hectic and diarrhœa, which wasted the patient. The swellings were painless until the one on the sole of the foot fungated. Extensive secondary engagement of glands throughout the body, including the thymus, had occurred, but there was no thoracic or other visceral disease. The mesenteric glands and those in the opposite iliac fossa were absolutely healthy. The growths presented a cystic character in parts, with spots of black pigment, which proved on microscopical examination to be melanotic cells arranged in the pattern of a carcinoma.

HEALTH OF THE WANDSWORTH DISTRICT.

THERE may be excellent reasons for the delay, but it is to be regretted that the report on the sanitary condition of the Wandsworth District for the year 1876 should only recently have been published. We make this remark in the interests of the district, and of the medical officers who compile the very carefully prepared report, because much of the information contained in it will be passed over as out of date. The death-rate of the district for the year under notice is stated to have been 20·5 per 1000; but this high return is sought to be accounted for, in some degree, by the fact that it is necessary to adopt the official method of calculating the population, whereas it is evident that such a method largely under-estimates the numbers. The infant mortality is stated to have been 43·3 per cent., the principal causes enumerated being diarrhœa, premature birth, etc.; the compilers remark that as it is well known that improper and insufficient food and clothing, as well as exposure to climatic changes, are the chief causes of the former disease, they protest strongly against the inhuman custom of leaving infants to the care of children, or in the hands of unprincipled persons, that their mothers may undertake the duties of wet-nurses, or hands in factories, etc., while the father is alive and in full work. The compilers also call attention to a defect in the powers at present possessed under the Public Health Act in regard to the compulsory removal of infectious cases. At present, only in cases of overcrowding can such force be exercised, and then only after a tedious application to a local justice, during which the time for action is lost, and the mischief done. It seems to them that the law should give the local authority power to remove a case of infectious disease, if the patient's life would not be greatly endangered by such removal, whenever the health of neighbouring families, or even of the same family, is obviously imperilled.

NATIONAL HOSPITAL FOR CONSUMPTION.

THE annual meeting of the Governors of this Hospital was held on the 22nd inst., at the offices, 12, Pall-mall, under the presidency of Lieutenant-Colonel Atherley. Letters were read from Viscount Eversley (the President), the Duke of Grafton, the Earl of Powis, etc., regretting their inability to attend. The report of the Board of Management stated that the institution, which is situated at Ventnor on account of the superior salubrity of its climate, having now been finally completed, the whole of the 102 bedrooms were occupied by patients. The number of patients treated had greatly increased, and the mortality was only 5 per cent. The sum of £9256 19s. 10d. had been received during the past year; and on December 31 last there remained only £103 16s. 4d. in hand towards the present year's expenditure, after allowing for liabilities due. The Earl of Carnarvon will take the chair at the biennial dinner, to be held at Willis's Rooms on February 20 next, and the Board rely mainly on the subscriptions then received to maintain the institution, there being no endowment. Votes of thanks to the various officers and to the chairman brought the proceedings to a close.

THE MEDICO-CHIRURGICAL SOCIETY'S COMMITTEE ON CROUP AND DIPHTHERIA.

THE Secretary to the Sub-committee of the Royal Medical and Chirurgical Society on the Relations of Diphtheria and Croup desires us to state that the Committee are anxious to obtain the notes of any case in which the formation of false membrane in the air-passages has succeeded upon a definite exposure to cold; and will be greatly indebted to any gentleman who will favour them with such information. They would also be glad of a specimen of the larynx and trachea or of expectorated false membrane from such a case, either in a fresh condition, or preserved in spirit, Müller's fluid, or other suitable reagent. Cases and specimens should be sent to the Secretary to the Committee, Dr. Greenfield, 93, Wimpole-street, W.; or at the Society's Rooms, 53, Berners-street, W.

THE INDIAN FAMINE FUND.

THE last weekly statement of the Madras Executive Committee to the Mansion House Committee says:—"The famine is passing away, crops have ripened and are ripening; but the after-effects of such terrible scarcity as the Presidency has experienced during the past year have been, and continue to be, very great. The more detailed the inquiries made in famine-stricken regions, the more serious was the distress found to be; but side by side with records of poignant distress and terrible suffering are to be found particulars of the exceeding great good which 'the Fund' has wrought, and the great part it has played in bringing the country back to its normal condition, and in infusing a new life into the people. The death-rate still continues very high." The amount sent to district committees to date—and in many cases almost the whole had already been distributed—amounted to nearly 8,000,000 rupees. Of this the Mansion House Fund contributions exceeded 5,000,000 rupees; and Indian princes had contributed 55,000 rupees, the Maharajah of Baroda, the Maharajah Holkar, and the Maharanee of Cassubazzar having each given 10,000 rupees, or, roughly, £1000.

THE PHYSICIANSHIP TO THE QUEEN IN IRELAND.—THE REGIUS PROFESSORSHIP OF PHYSIC IN THE UNIVERSITY OF DUBLIN.

DR. ALFRED HUDSON, the representative of the Crown for Ireland on the General Medical Council, and Physician to the Meath Hospital, has been appointed Physician-in-Ordinary to her Majesty the Queen in Ireland, in succession to the late Dr. Stokes. This appointment will give great satisfaction to all who are acquainted with Dr. Hudson's abilities and high personal character. It is a fitting recognition of his professional eminence; and we have no doubt that he will do credit to the mantle which has thus fallen upon him from the shoulders of his friend and colleague William Stokes.

The names of at least four gentlemen, all eminent in their profession, are mentioned in connexion with the office of Regius Professor of Physic in the University of Dublin: they are those of Dr. Banks, who was formerly King's Professor of the Practice of Medicine in the School of Physic in Ireland, one of the Physicians to the Whitworth and Hardwicke Hospitals; Dr. Hudson, Physician to the Queen in Ireland, formerly Physician to the Meath Hospital; Dr. William Moore, at present King's Professor of the Practice of Medicine in the School of Physic; and Dr. Benjamin G. MacDowel, Professor of Anatomy in the University of Dublin, and one of the Physicians to the House of Industry Hospitals.

THE CONJOINT SCHEME.

We understand that the Committee of Reference appointed under the Conjoint Scheme will meet at the College of Surgeons on Monday next, to further consider the report to the several medical authorities on the regulations for carrying out the Scheme.

MEDICAL PARLIAMENTARY AFFAIRS.

If the present quiet aspect of affairs in the East proves, as is at least possible, only an illusion, there would be little chance of the long list of Bills read for a first time in the House of Commons on Friday, the 18th inst., becoming law during this session. We mention some of the most important of these, affecting the interests of the medical profession:—

The Earl of Cork moved for a Select Committee of the House of Lords to inquire into the prevalence of habits of intemperance, and into the manner in which those habits have been affected by recent legislation and other causes.

Leave was also granted for the introduction of a Bill to consolidate and amend the Acts relating to Public Health in Ireland, and to amend the law relating to County Infirmaries, and to the Relief of the Poor in Ireland.

Mr. Cross introduced a Bill to consolidate and amend the law relating to Factories and Workshops.

Mr. Macdonald: A Bill to amend the law relating to the Liability of Employers for Injuries negligently caused to persons in their employ.

Sir Wilfrid Lawson and Mr. Sullivan: For power to enable owners and occupiers of property in certain districts to prevent the common Sale of Intoxicating Liquors.

Dr. Cameron: A Bill to facilitate the Control and Care of Habitual Drunkards.

Dr. Lush: A Bill to amend the Medical Act, 1858.

Mr. Holt: To make provision for the more effectual Prevention of Cruelty to Animals.

Mr. Forsyth: To provide facilities for the establishment of Public Baths and Washhouses.

Sir J. McGarel Hogg: To make provision for the purchase by the Metropolitan Board of Works of the undertakings of the several Water Companies supplying water to the metropolis, and to certain places in the neighbourhood; and for the supply of water by the said Board to the metropolis, and to such places and for other purposes relating thereto.

Sir Harcourt Johnstone: For the repeal of the Contagious Diseases Acts.

Mr. Errington: To amend the laws relating to the Qualifications required for holding certain Medical Appointments.

Mr. Bruce: A Bill to amend the Public Health Act, 1875.

Sir J. McGarel Hogg: To amend the Metropolis Local Management Act, 1855; the Metropolitan Buildings Act, 1855; and the Acts amending the same.

Mr. Wheelhouse: To provide for the Education of the Blind and Deaf Mute Children.

Mr. Pease: To alter the law enforcing Penalties for the Non-vaccination of Children.

The above list of measures introduced this session were all read a first time.

On Monday, the 21st, Sir J. Lawrence gave notice of motion to ask the Home Secretary whether information had reached him of an outbreak of small-pox in the Isle of Man; whether the governor and his family had left in consequence; and also whether it was true that the vaccination laws are disregarded in that island.

Tænia Solium in a Young Child.—Dr. Heisberg, of Nebraska city, writes:—"According to medical authorities, tænia occurs very infrequently in early life. Dr. Lewis Smith, who has had much experience, says in his work on the 'Diseases of Children' that he has met with but one case only under the age of five years. I have now in my possession a specimen of tænia solium recently expelled from a child about two years of age. One portion thereof was fifty-nine inches long at the time of expulsion, and was accompanied by forty-nine detached and separate segments. The whole length was estimated to be about eight feet. It was expelled after administering spirit of turpentine with castor oil. The tænia, however, still remains, as segments have been since discharged."—*New York Medical Record*, November 24.

THE MEDICAL SOCIETY OF LONDON.

At the meeting of the Medical Society of London held on Monday, January 14, Mr. Wordsworth exhibited six persons belonging to one family, who are all affected by congenital displacement of both crystalline lenses.

They consist of Mrs. H., her two sons, and their three children. A third son of Mrs. H. (who is now in New Zealand) was examined many years since, and his case described in the first volume of the *Royal London Ophthalmic Hospital Reports*, by Mr. Dixon. In addition, Mrs. H. states that her own father, his youngest brother, and her grandfather were all similarly affected. If this be so, there is a series of *ten* cases occurring in *five* successive generations.

They all complain of being short-sighted, and on close examination by oblique illumination, and when viewed by the ophthalmoscope, the crystalline lens in each eye is seen to be displaced, and its edge visible in the pupil.

For distant vision they look through that part of the pupil in which the crystalline is absent; and for near objects through the crystalline itself.

The family recognised the defect in all who were subject to it; and in those they considered exempt the examination confirmed their opinion.

The annexed statement, made by Dr. Morton, Clinical Assistant at the Moorfields Hospital, fully shows the particulars of these very interesting cases:—

Mrs. H., aged fifty-nine. Displacement, both eyes upwards and inwards. Irides light brown. Lenses becoming opaque. Vision = $\frac{2}{200}$ scarcely, and J. 1 at 8″. After atropine with $\frac{1}{4} = \frac{2}{500}$, and with $\frac{1}{2}$ = J. 1 at 6″.

George H., aged thirty-seven. Displacement, right eye inwards; left inwards and slightly downwards. Irides grey-blue. Vision: Right eye = $\frac{2}{200}$ nearly, and J. 19; with $\frac{1}{20} = \frac{2}{700}$; with $\frac{1}{3}$ = J. 12 at 6″. Left eye = $\frac{2}{200}$, and J. 1 at $1\frac{1}{2}$″; with $\frac{1}{14} = \frac{2}{500}$, and with $\frac{1}{3}$ = J. 1 at 5″.

William H., aged thirty-five. Displacement, right eye upwards and inwards; left inwards. Irides brown. Vision: Right eye = $\frac{2}{200}$, and J. 1 at 2″; with $\frac{1}{3\frac{1}{2}} = \frac{2}{500}$, and J. 1 at 8″. Left eye = not $\frac{2}{200}$, J. 1 at 2″, with $\frac{1}{2} = \frac{2}{200}$; with $\frac{1}{3\frac{1}{2}} = \frac{2}{500}$, and J. 1 at $5\frac{1}{2}$″.

Maud H., aged ten. Displacement, both eyes inwards. Irides grey. Vision: Both eyes = $\frac{2}{200}$, and J. 1 at 2″; after atropine with $\frac{1}{14} = \frac{2}{200}$, and with $\frac{1}{2}$ = J. 1 at 4″.

Alfred H., aged five. Displacement, right eye upwards; left upwards and inwards. Irides grey. Vision not proved.

George H., aged seven. Displacement, right eye upwards and outwards; left upwards. Irides brown. Vision not proved.

The Société de Chirurgie de Paris.—This body has just elected three foreign corresponding members, viz.:—Mr. Callender, of London; Prof. Arlt, of Vienna; and Prof. Reverdin, of Geneva.—*Union Méd.*, January 15.

A Caution as to Increase of Dose.—The practitioner, before concluding as to the innocuity of excessive doses of an active medicine, should make sure that the patient who is supposed to have taken them has not deceived his attendant by omitting to take the whole or part of what has been prescribed. On this point Dr. Hergott refers, in the *Revue Médicale de l'Est*, to a very instructive case. A painter, under treatment by Prof. Forget for saturnine paralysis of the extensors, was directed to take strychnia pills, which, producing no effect, were successively increased to two, three, five, and six in number. Astonished at no effect being produced by strychnia of good quality, M. Forget made the patient swallow five of the pills in his presence. In two hours he was dead, and the pills that had been prescribed were found behind his bed.—*Presse Méd. Belge*, January 6.

THE SICK AND WOUNDED IN THE RUSSO-TURKISH WAR.

(*Continued from page* 46.)

THE following are selections and extracts from official reports kindly sent to us by the Stafford House Committee:—

Dr. McQueen's Report, dated Yamboli, December 23, 1877.

Since the date of my report, up to November 23, Dr. Edmunds and I remained at Rasgrad, attached to Nedjib Pacha's division, treating an average of a hundred sick each morning at the camp. We reached Osman Bazar on the 27th, the last part of the journey being performed in a storm of sleet and snow. On arriving at Osman Bazar we learned that the camp was at Achmetli, at the base of the Balkans. On the morning of December 4 the Turks attacked the Russians, and drove them from Marian and Elena. Early in the day we stationed our ambulance at a house in the village of Mariau, and were engaged until after dark, extracting bullets and dressing the wounds of the men as they were carried off the field. We attended to over 120 cases that day, to seventy cases on the 5th (not seen on the previous day), on the 6th to seventeen cases, and on the 7th to twelve cases which had been brought in from outlying villages, and cases previously treated by Turkish surgeons, but anxious to have their bullets extracted. We thus attended to 219 wounded; these included thirteen Russians. On the day of the battle a number of the Russians were taken prisoners. Over fifty of these were placed under our care and protection by Sulieman Pacha, who also entrusted us with the care and treatment of the Russian wounded, who remained in our house until December 8; one of these, a captain, with a gunshot wound at the upper part of the spine, causing paralysis of both upper and lower extremities, died on evening of the 6th. We also had a Turkish colonel, mortally wounded in the abdomen, in the house under our treatment. The wounded were distributed among the houses in the village, which was deserted by the Bulgarians on the approach of the Turks; and having thirteen Russian wounded in our house, with only a scanty supply of biscuits, we could do but little towards giving them food. We applied to the authorities for bullock arabas, and transported the wounded to Achmetli, about eight or nine miles distant, where a temporary hospital had been formed; from thence they were sent on to hospitals at Kezan, and across the Balkans to Slivno. On the forenoon of the 8th we had all the wounded (258 in number) transported from Marian. On the early morning of December 9 our house took fire, and we had to bundle out our goods and stores *hurriedly* and sleep in the yard amongst the snow until daylight. The same day we moved on to the camp at Elena; the weather was now very severe. We remained at Elena until the night of the 13th, when the camp retreated towards Achmetli; we travelled all night, and reached Achmelti at daylight. We rested the day, and started the next morning to cross the Balkans at Kezan, to Slivno and Yamboli. Owing to the nature of the roads and the difficulty of getting the artillery along we travelled slowly, and had to spend the night among the Balkans without any shelter except a good covering of snow. We started on the forenoon of the 19th by a bridle-path across the Balkans to Slivno: the snow had been falling fast since the previous afternoon, and was then over two feet deep and drifting. We slept in the little village of Vetshna, and went on the next day, reaching Slivno after a very difficult, cold, and fatiguing journey. The road went right over the very high Balkans, and in many places the snow was up to the horses' necks. At Slivno we learned that Fuad Pacha had gone by rail from Yamboli to Tatar-Bazardjik, where we are now about to follow him.

Dr. Hayes' Letter, dated Varna, December 24, 1877.

Soup has been given since September 11 to November 30 to 4927 sick and wounded soldiers. The contractor's price per tin of soup is one piastre metallic, or a fraction over one penny English money, which I venture to think can hardly be called expensive when the difficulties of obtaining meat for soup for two or three hundred men, at three hours' notice, in the middle of this country, are considered. Our soup-room at Tchernavoda has now been opened since the end of October, and about 400 wounded have been supplied with soup there, when often they have had to wait several hours, or even a night, for the train. I have made twenty journeys by railway, either with the wounded or on the Stafford House Committee's business. On no occasion have sick or wounded travelled by train since the beginning of August without a Stafford House transport *employé* accompanying them. The Stafford House ambulance carts here stationed have on all but two occasions of the above-mentioned dates been on duty, and sometimes our bearers and carts are the only ones at the station. They have carried upwards of 1000 sick and wounded from the station to the town hospitals, and have on many occasions carried convalescents from the hospitals to the pier for embarkation. Before our work was begun here, last August, the wounded and sick often remained all night without shelter in the station. Since we have been at work this has never happened, though I and my helpers have often to wait at the railway till 2 a.m. before all can be got away.

I am in receipt of your letter of 14th, which reached me on the 17th. I believe I informed you in my last letter that I had visited McQueen's ambulance at a village called Marian, near to Elena; since then I have been to Rustchuk, and have been very busy attending to the transport of 1081 wounded; many of these had never been dressed, and I had much to do for three days in that way. The railway line is blocked with snow, and there is no communication with Rustchuk. I send you a list of things for that hospital, which is doing a great deal of real good work.

Dr. Ryan's Report, dated Erzeroum, December 7, 1877.

Harvey leaves to-morrow for Constantinople. I am very sorry to lose him, for he has been very valuable and obliging since he came here, and has done all he can to be of service. Now that Williams has arrived, we can get on quite well without him; in fact, for the last few days he has had simply nothing to do. Morisot makes himself very useful in helping me to bandage, and in giving out beef-tea to the patients, etc. We have only two regular dressers, and I have handed them over to Drs. Wood and Pinkerton, and so am without one myself. We have to-day in hospital 305 patients. I am most satisfied with the Turkish servants in the hospital; I find that by paying them half of their salary from the Government they work most satisfactorily: this applies especially to the two dressers, who are capital men. We have weeded and sent out most of our light cases, so that we have a great many grave ones in at present. Williams, the dragoman, makes himself very useful in the hospital, and I am very pleased with him. We have had nine cases of typhus fever among our wounded. I have weeded them out from the wards, and have had a room specially prepared to receive them. I am happy to say that they are all doing well. I should like to have sent them out to the Turkish Medical Hospital, but as they had all wounds I was unable. We have performed three amputations since we took over the hospital. The first was an amputation at the shoulder-joint (a gunshot wound, shattering the head of the bone), performed by myself. The poor fellow went on very well for three days, but then got an attack of pleurisy, from which he died last night. The majority of our deaths have been from pyæmia, which was raging when we got the hospital; but by paying the greatest attention to the ventilation of the wards, I am in hopes of diminishing very considerably the number of cases. We have also had six deaths from gunshot wounds penetrating the lungs. Many of our patients complain greatly of the cold, and unfortunately the supply of wood is very limited, and at the present time it is impossible to buy more, so that we can only make up for its deficiency by giving extra blankets to them, which Mr. Zohrab, her Majesty's Consul, has handed over to us, being some of those sent out by that most generous nobleman, Lord Blantyre. I make a point, after finishing my cases, of going round and giving personally beef-tea and mutton-broth to those of our patients who are most in want of it. I enclose you a plan of our hospital, which speaks for itself. I have had occasion several times to call on the head of the hospital here, who has always received me with great courtesy, and who has been only too willing to assist me in every way. I do not know what we should do without Mr. Zohrab, who devotes a large portion of his very valuable time to our hospitals. The cold is intense, the thermometer registering at night 40° below freezing point. Every night five or six soldiers are found

frozen to death on outpost duty. There are at present 5050 sick and wounded in Erzeroum, and I believe that about 150 to 200 sick come in daily, not more than fifty going out. There has been a report in the town that 6000 wounded were being sent here from Kars by the Russians, but I have made special inquiries from Mukhtar Pacha, who knows nothing about it; so that must be false. I have received £200 T., which I have at my credit in the bank here. I find Williams most useful to me in the hospital. Mr. Morisot does all he can for us, and bandages very well.

[Since this report was written Mr. Zohrab has been recalled, Dr. Fetherstonhaugh invalided home, and Dr. Pinkerton and Mr. Morisot reported very ill.]

Mr. W. S. Stoney, Assistant-Commissioner, Stafford House Committee, writing from Pera, on January 1, 1878, makes the following statement with respect to a rumour that the Stafford House surgeons had left Erzeroum:—"The special correspondent of the *Levant Herald*, writing from Erzeroum, on December 13, says:—'The English doctors of the Stafford House Committee to-day informed the Medical Council that they were obliged to quit Erzeroum, and that it would be advisable to replace them on the ambulance.' I am afraid your correspondent must have been misinformed, since Dr. Ryan, Chief Surgeon of the Stafford House Hospital, telegraphs to me on December 31:—'Send good plucky doctors and working dragomans; if blockaded before arrival, don't fear for us. Our hospital working well. Health of town very bad.' And again the same evening—'Deniston and myself strong as horses; capital spirits; won't hear of leaving; doing capital work. Not much matter about sending another doctor.' There are at Erzeroum two British hospitals under the care of Stafford House and Lord Blantyre's surgeons, containing 300 and 150 beds. Of the five surgeons composing the *personnel* two have been invalided, and one is in hospital at Erzeroum. Assistance has been sent, and further aid will be despatched by next boat."

Dr. Barker's Report of Roumelian Railway Ambulance, dated December 29, 1877.

On the 23rd inst. soup and charcoal were served out to the men (480 in number), and their wounds attended to. On the 24th, soup served out, and they received bread for two days from the Government. The morning of the 25th occupied in preparing the carriages for the wounded. At twelve o'clock soup was served out to the men in the carriages, and we left about 3 p.m., arriving by 5 p.m. at Philippopolis. We did not leave Philippopolis till 1 p.m. the next day, during which time the men remained in their carriages. When we started we got to the first station, where we had to wait two hours and a half (why I know not). After which, for the three succeeding, we had a stoppage of two hours each, and arrived at Tirnova at 3 a.m. Here it poured with rain, and as it fell it froze, so that it was only with great difficulty we could distribute the soup, the carriages all being locked by the frost. At Adrianople we had only one man dead. All the men were sent up to the hospital. Next day (27th) another train arrived from Bazardjik, in which there were said to be 700 men. We started in the evening with 629 wounded, the worst cases being left behind at Tchorlou. Received soup, bread, and tobacco. At Stamboul all the men received good soup. We collected all the blankets which we had distributed at Adrianople, and placed them in a waggon for our next trip.

Dr. McIvor's Report, dated Adrianople, December 22, 1877.

Patients in hospital, December 22, 243. Operations performed during the week: two partial resections of humerus, two of tibia, one of fibula, and two of tarsus; one extraction of bullet from calf of leg; one removal of toes; and ten minor operations. During the week Mahmoud Damad Pasha visited the hospital, and on leaving expressed himself highly satisfied with the care we took of the patients, saying he would specially mention the same to his brother-in-law (his Imperial Majesty the Sultan).

Dr. Brewer has succeeded General Sir William Codrington as the representative of the parish of St. George's, Hanover-square, at the Metropolitan Board of Works.

CAMBRIDGE NATURAL SCIENCE TRIPOS: SCHOOL OF HUMAN ANATOMY.

The following are the questions in Human Anatomy which were set in the recent examination for the Natural Sciences Tripos at Cambridge. The examination extended over four days:—

Describe the temporo-maxillary joint in man, and the movements which take place in it. How does it differ from the corresponding joint in the lion?

Describe the ilio-cæcal valve in man, and its mode of action. What special purposes does it serve at this part of the alimentary canal?

Give an account of the development and descent of the testicle. With what parts in the female do its parts severally correspond?

What are the peculiar features of the dorsal part of the spinal column in man (the features in which it differs from the cervical and lumbar parts), and what are the purposes served by those peculiarities?

Give the structure and development of the choroid and of the choroidal epithelium in the human eye.

Describe the pectoralis major muscle in man, including the disposition of its fibres. What is its action? What relation has the clavicle to its action; and what is its action in animals, as the horse, in which there is no clavicle?

Describe briefly the muscles on the anterior or extensor aspect of the leg and foot, and compare them severally with the muscles on the extensor aspect of the forearm and hand.

Describe the arch of the aorta in man. What circumstances account for the special liability of this part to over-distension?

How is the occipital bone connected with the several surrounding bones? How is it developed; and what reasons are there for regarding it to be serially homologous with the vertebræ or not?

What are the differences observable by the naked eye in the mucous membrane of the several parts of the alimentary canal, below the pharynx, of man? How do you associate those differences with the functions of the parts?

What changes take place in the human brain after birth? Can any reason be assigned for its large size in proportion to other parts of the body at birth?

How are the several teeth of the second dentition in man developed? How do they differ from the teeth of the orang; and what relation have those differences to the configuration of the maxillæ?

Through what parts of the bone has the section in specimen M been made? Name the four canals painted red and yellow and traversed by the two bristles. Which of the vertebræ is N? What are O and P?

Give the mechanism of pronation and supination of the leg, naming the muscles concerned in it. Compare it with pronation and supination of the forearm.

What is the course of the left vagus nerve, and what are its branches? Account developmentally for the peculiarity in the course of its recurrent branch (the inferior laryngeal).

Give the anatomy, with the connexions and development, of the fornix in the human brain.

State the distribution of the nerves to the several muscles in the human arm, forearm, and hand. What relation has the plan of distribution to the grouping of the muscles in harmoniously acting sets? Point out any exceptions to such relation.

Describe the membrana tympani in man, and its structure. What are the provisions for regulating its tension, and for maintaining the moisture requisite for its suppleness?

Practical Work.

Make a dissection of the part before you. Write a description of it, and make any comments upon the disposition of the parts that may occur to you.

There was also an examination *viva voce*.

Food.—The declared value of beef, "fresh or slightly salted," imported last year, was £1,266,280. The previous year it was £462,947, showing an increase of £803,333. During the past year the value of eggs imported was £2,472,481.

FROM ABROAD.

Foreign Bodies in the Œsophagus.

The following is the substance of a paper read by Prof. B. von Langenbeck to the Berlin Medical Society on "Foreign Bodies in the Œsophagus and Œsophagotomy." After indicating the usual places where foreign bodies are detained in the œsophagus, the Professor went on to say (*Berliner Klin. Woch.*, December 17 and 24) that he had met with three cases in which voluminous bodies detained in the pharynx by compressing the epiglottis against the rima glottidis threatened to produce immediate suffocation. The first of these was produced in the lecturer's presence, by a boy playing with another at catching a small apple thrown into his mouth. After succeeding several times, he suddenly fell on the floor with widely-opened mouth and a blue-coloured face. Fortunately, it was found that the apple could be extracted by introducing the forefinger beside it. The second case occurred in the person of a very robust gentleman, who came to consult the lecturer concerning a hernia. Lying down on the sofa in order that it might be examined, he suddenly became lifeless and blue in the face. On the forefinger being introduced, a complete set of false teeth was withdrawn, the pulse and respiration, however, not returning until some seconds afterwards. Dieffenbach relates an entirely similar case. In the third instance, a lady, about to undergo amputation of the breast, exhibited at the very commencement of the administration of chloroform laborious stertorous breathing and a dark-blue colour of the face. The finger, introduced to draw the tongue forwards, detected and withdrew a set of false teeth. In other cases of this kind the patients do not always escape so easily; and it is very desirable that dentists should caution those to whom they supply teeth in order to prevent these accidents. Surgeons, too, before administering chloroform to elderly people, should ascertain with certainty the existence of false teeth, and insist upon their removal. In the removal of large foreign bodies the finger is the instrument to be resorted to before all others; and if they are too firmly fixed to be removed by it, then forceps or levers should be used. Tracheotomy is always too late in such cases. When, also, small pointed foreign bodies—as needles, fish-bones, etc.—are detained in the pharynx, and especially in the sacculi formed by the ligamenta glosso-epiglottica, the finger should never be omitted to be introduced, in the hope of bringing the body into the mouth, or at all events to ascertain its exact position before employing the forceps.

When a foreign body of some size, as a large piece of meat, hard dumpling, potato, etc., passes through the pharynx, it not infrequently becomes detained in the œsophagus opposite the cricoid cartilage, and by pressure on the larynx or trachea causes great difficulty of respiration. Its position is easily ascertained by the projection it causes on the left side of the throat, but its removal is often very troublesome owing to the spasmodic contraction of the œsophagus which takes place above and below the foreign body. Forcibly thrusting it down cannot be too strongly deprecated, as injury to the œsophagus cannot be avoided with certainty. A peasant applied to the lecturer for relief, having thirty hours before attempted to swallow a huge piece of sinewy meat, which, being retained, almost induced suffocation. Repeated attempts were made to remove the foreign body by means of a slightly curved, strong forceps, but it proved immovable, only some of the fleshy fibres coming away. Œsophagotomy was contemplated, as during the attempts at removal the difficulty of respiration was so greatly increased; but the projecting tumour having been seized by the fingers in the neck, raised from the larynx and compressed for some minutes, the respiration became much more free. The foreign body, although not moving from the spot, had assumed, through this manipulation, a more elongated form, and was removed by means of the forceps with some exertion of force. Another man applied on account of the obstruction to respiration and swallowing caused by a pretty large piece of tough meat which had for twenty-four hours obstructed the same part of the œsophagus. Violent retching, caused by tickling the fauces and attempts with the forceps to withdraw or thrust it down, failed to dislodge the body, which was placed as in a diverticulum of the left side of the œsophagus. The tumour which it formed in the neck was then seized with the fingers and squeezed so powerfully that the body slid down into the stomach. Dupuytren dealt with a potato in the same way, which had resisted all attempts to withdraw it or force it into the stomach. When the position of the foreign body is not indicated by its projection in the neck, we must bear in mind that the indications furnished by the patients themselves are very deceptive. Oftentimes they are unable to denote its locality, and sometimes assign one that is far distant from the real one. Thus, a woman in whom a set of teeth was lodged opposite the cricoid indicated the cardia, and a man referred the obstruction caused by a piece of bone to the cervical portion of the œsophagus, when it really existed in the thoracic portion. Catheterism of the œsophagus may therefore be required to ascertain the situation of the body. The general and almost traditional practice of employing the probang, either for the withdrawal or for the thrusting down of the foreign body, cannot be too earnestly deprecated. A more irrational practice can scarcely be imagined, and no other instrument has done so much mischief in proportion to the number of cases in which it has been employed. By it we are able to ascertain neither the situation nor the condition of the foreign body; and, in place of its withdrawal or propulsion, it sometimes becomes only forced deeper into the œsophagus, and may even (as in two cases which the lecturer has met with) be thrust through the wall of the œsophagus into the mediastinum. When soft bodies obstruct the œsophagus, the forcing of which into the stomach is desirable, the probaug may be used; but in all cases when the condition and position of these are unknown, or their extraction seems possible, catheterism must be first performed. For this purpose Prof. von Langenbeck uses a whalebone staff, to the lower end of which is attached a smooth polished iron ball. This, when well oiled, slides readily down the œsophagus by its own weight, is easily movable to and fro, and enables us to detect with certainty hard bodies, such as coins, needles, and pieces of bone. If the object is to force into the stomach a harmless substance, the nature of which is known, he employs an elastic œsophageal sound; this acts upon the foreign body as efficaciously as the probang, but slides down the œsophagus far more easily, and renders injury much less possible. Foreign bodies which may wound the œsophagus, or become dangerous in the intestinal canal—such as bone, fragments of glass, coins, needles, etc.,—should, in Prof. von Langenbeck's opinion, be always extracted, their extraction being a far more certain and less dangerous procedure than forcing them into the stomach. In a great number of such operations he has never met with any accident. The instrument which he exclusively employs for this purpose is Von Graefe's coin-extractor. This passes with facility, and without any injury, into the œsophagus beside the foreign body, and during its withdrawal seizes it with a certainty that leaves nothing to be desired. Prior to its introduction, some oil should be injected into the œsophagus, and then the end of the instrument should be guided by the left forefinger over the root of the tongue and epiglottis against the back of the pharynx, and thence into the tube. On withdrawing it very carefully, if the least resistance is encountered we must desist, and move it gently to and fro in order to disengage it from any possible entanglement in the mucous membrane. When the instrument with the foreign body has arrived opposite the cricoid cartilage, difficulty in completing the extraction is caused by the cartilage springing backwards; but this may be obviated by pressing the end of the instrument, which has now become visible, against the posterior wall of the pharynx. When the isthmus fauciam has been reached, we should always, and especially with restless children, have the left forefinger in readiness, in order to seize hold of the foreign body, which might otherwise escape. A pair of firmly grasping pharyngeal forceps, and this coin-extractor, constitute all the apparatus required. There is, however, one inconvenience attending the coin-extractor that must be noticed—viz., when the foreign body becomes so firmly wedged into the extractor that this cannot be loosened from it and withdrawn. Prof. Adelmann relates a case in which the extractor, thus embracing the foreign body, could not be removed during two days. In the case of a girl who had swallowed a shawl-pin, which occurred to the lecturer, its position at the lower end of the œsophagus having been detected by means

of the sound armed with the iron knob, it was seized by the coin-extractor. So firmly, however, had it penetrated the œsophagus that it could not be withdrawn; and, after repeated efforts, when the attempt was abandoned, the instrument could not be separated from the pin until after half an hour, when the pin slipped into the stomach. Bloody stools followed, and the patient complained of great pain in the stomach for a month after the accident, but the pin has never been found.

Casting one's eye over the statistics, it would be concluded that the passage of foreign bodies into the œsophagus is a very dangerous occurrence; for of the 314 cases collected by Adelmann, 109 proved fatal. But the proportion of fatal cases is far less than this, for the great majority of cases, when the foreign body is easily extracted or passes into the stomach, are never published at all. In Prof. Langenbeck's thirty-four years' practice he has had a very great number of these cases, and has never met with a fatal occurrence. Pieces of money can always be removed, and some of the pieces of bone slip into the stomach as soon as they have been dislodged by the extractor; but the great majority of flat and pointed pieces of bone are removed. In the two fatal cases of perforation of the œsophagus related by Prof. Busch, the sponge-probang had been employed, and the foreign body could not be detected. However, from this statistic the conclusion is to be drawn that if the foreign bodies be not promptly removed, and if unsuitable and violent manipulations are employed, they may seriously endanger life. Above all things, it is important that the body be removed as soon as possible, and that the practitioner at once proceeds with decision.

When the removal cannot be accomplished, and the nature of the body does not admit of its being thrust into the stomach, when the cervical œsophagus is the part of the tube concerned, we should perform œsophagotomy. It is a comparatively rare operation, for, according to König, from the time of its first performance by Goursault in 1738 to 1872, it has only been executed twenty-six times for the removal of foreign bodies. Its indication has been generally believed only rarely to occur, while its danger and difficulty have been exaggerated; and an examination of recorded cases of foreign bodies in the œsophagus shows that it should have been performed much more frequently, and that, without doubt, many lives might have been saved by it. The twenty-six operations referred to by König, and two now related by the lecturer, were followed by twenty-three recoveries and five deaths, some of the latter being due to the too prolonged residence of the body: so that the operation must be regarded as one attended with very little danger. Almost all living surgeons agree that the mode of making the incisions recommended by Guattani is the best, the skin on the left side of the neck being divided from the middle of the thyroid cartilage to the anterior edge of the sterno-cleido-mastoid, and to about five centimetres above the manubrium sterni. After the superficial fascia has been divided, the sterno-cleido is drawn outwards and backwards by means of double hooks, and the common carotid then becomes visible through the middle cervical fascia. The fascia is to be divided in the direction of the long axis of the wound, and drawn outwards and backwards by means of strong hooks, the carotid being kept out of the operation-field. It must not be forgotten that this artery lies more superficially than the œsophagus, and that the latter only becomes visible after the deep cervical fascia has been divided. This is done at the outer edge of the sterno-thyroid muscle, after having drawn the larynx by means of a hook to the right side. The muscle being now drawn towards the median line, the œsophagus becomes visible. Before opening it an œsophageal sound, made of gum-elastic or pliable metal, should be introduced for the purpose of projecting the œsophagus more to the left, and rendering its opening more easy and certain. The separation of the fascia in order to expose the œsophagus is best accomplished by raising it by means of two hook-forceps and dividing it between them, allowing the knife to act more by its pressure, thus avoiding injury to the inferior thyroid artery and inferior laryngeal nerve. Injury to the recurrent nerve is not much to be feared, as this passes upwards between the trachea and œsophagus, and is with the former organ drawn towards the right: it is only in question when a foreign body of large circumference thrusts the œsophagus far towards the left. The nearer an operation approaches important organs, the more must it assume the character of a delicate anatomical dissection; and in order to avoid injuring important vessels, it is highly desirable to separate the tissues as much as possible by means of the fingers or blunt instruments. When the foreign body does not project the œsophagus, and cannot be felt externally, the passage of an œsophageal sound by the mouth very much facilitates the operation. One circumstance may render access to the œsophagus exceedingly difficult, and is of the more importance, inasmuch as it is not noticed in any of the descriptions of the operation. This is the tumefaction of the thyroid gland. If a large foreign body be detained for several days opposite the cricoid cartilage, causing difficulty of respiration by pressure on the larynx, swelling of the thyroid due to a stasis of the blood in the veins is always present. The tumefied gland lies so much over the œsophagus that this may be entirely covered by it; and in order that the gland may be raised from the œsophagus its enveloping fascia must be divided.

Prof. v. Langenbeck terminates his communication by the narration of two cases in which he performed œsophagotomy with success for the removal of false teeth.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

January 19.

Election of Medical Officer of Health—Hospital Sunday Fund—Church of England Temperance Society.

On the 16th inst., the Liverpool Town Council, by a majority of votes, elected Dr. J. Stopford Taylor, Medical Officer of Health for the Borough and Port, in the room of Dr. Trench, deceased. The election was not made without a strong protest, and considerable, though ineffectual, opposition from a large section of the Council, who considered that such an appointment of so much importance should have been widely advertised in the medical and general papers, and the candidature of the ablest men throughout the country sought. There is no doubt, however competent for the performance of the duties Dr. Taylor may be, that the antecedent events which led up to his appointment were of such a nature as to justify those who protested against it. Briefly they were as follows:—For some years preceding Dr. Trench's retirement through ill-health he had been chairman of the Health Committee, and for a shorter period an alderman. When, in the summer of 1876, it became necessary, owing to the increasing severity of the disease which eventually proved fatal to the Medical Officer of Health, to relieve him of his duties, it was decided to appoint a deputy; and Dr. Taylor resigned his position as alderman and chairman of the Health Committee with the view of being so appointed. As the post was not advertised, and as Dr. Taylor did not then possess the full legal qualification which would enable him (except by special exemption from the Local Government Board) to fill the post of Medical Officer of Health, to which it was felt that that of deputy would naturally lead, much dissatisfaction was expressed, and an influential protest sent to the Local Government Board from a large number of medical men resident in Liverpool. The reply was, that the Board could not interfere with the decision of the Sanitary Authority in the appointment of a deputy as they could have done in that of a medical officer. Between the time of this protest and the death of Dr. Trench, rather more than twelve months later, Dr. Taylor had obtained from the University of Aberdeen, of which he was already M.D., the further degree of M.Ch., and had procured thus the qualification in surgery as well as medicine which the Public Health Act of 1875 requires. It was on the ground of these events, then, and of the manner in which they were designed to promote the election of a particular individual, and as well on account of the absence of such a wide advertisement as would secure the candidature of able men specially trained in sanitary science, and not from any distrust of Dr. Taylor's ability to perform the duties of Medical Officer of Health, that the protest by a section of the Council was made. For in fairness it should be said that there seemed to be a general admission that the duties had been well performed during the year that he had been Deputy Medical Officer; while one of the most prominent protesting members stated that

he did not desire it to be thought that he should necessarily have voted for anyone else if many others had applied.

Up to the last advertisement the amount sent to the Treasurer on account of Hospital Sunday collections was £7092. The total sum obtained is not likely, therefore, to fall much, if any, short of that obtained last year—£10,019. By the institution of this plan the participating Liverpool charities are enriched by a steady income of £10,000 a year.

On the 25th and 26th inst. the Chester Diocesan Branch of the Church of England Temperance Society intend holding here, in connexion with their annual meeting, a series of conferences on the social, legal (magisterial), and medical aspects of the temperance question. The one on the medical aspect will be addressed by Dr. Ransome, of Bowdon, Dr. Acland, F.R.S., President of the General Medical Council, James Hakes, Esq., Consulting Surgeon to the Liverpool Royal Infirmary, and other gentlemen not named. Invitations have been widely addressed to medical men, but it is probable that the very inconvenient hour fixed for the conference (11 a.m.) will preclude many from attending who would wish to be present.

MANCHESTER.

January 23.

PROPOSED CHANGES IN THE RESIDENT STAFF OF THE ROYAL INFIRMARY, ETC.—ANNUAL MEETING OF THE MEDICAL SOCIETY: CONSIDERATION OF THE NEW LAWS —THE CHARGE AGAINST A SURGEON OF ATTEMPTING TO PROCURE ABORTION: VERDICT AND SENTENCE—WARD *v.* SERGEANT: ACTION FOR ASSAULT AGAINST A POLICE-SURGEON.

THE question of the removal of the Royal Infirmary being now, for a time at least, in abeyance, the board is directing its energies towards a readjustment of the internal administration of the hospital. A sub-committee appointed some time ago to confer with a sub-committee of the medical staff upon the general internal management, has now presented a report on the subject. It is a lengthy document, and contains suggestions which involve very important and radical changes. The sub-committee expresses, at the outset, a decided opinion that lay matters should be in the hands of laymen, and medical and surgical matters in professional hands. Adopting this as a fundamental principle, it recommends that the general management of the Infirmary, except in regard to purely professional matters, be entrusted to a general superintendent and secretary, and a matron, the nurses remaining, as at present, under the control of the sister superintendent; and that in regard to the Monsall Fever Hospital and the Cheadle Convalescent Home, a matron be in each case appointed to take the whole of the general charge. Besides restricting the resident medical officer of the Infirmary to purely professional duties, the sub-committee further suggests that a separate resident medical officer be appointed both at the Fever Hospital and at the Convalescent Home, who shall act independently of the resident medical officer of the Infirmary. Another important change proposed is the abandonment of the existing system of Infirmary apprenticeships, and the substitution of a resident staff of clinical clerks and dressers at the Infirmary, and of assistant medical officers at the two associated institutions, these officers to be selected from amongst those students who have completed their curriculum of study, and to receive board and residence as an equivalent for their services, but no stipend. An appendix to the report contains a statement of what is believed would be an efficient residential staff, and in the case of some of the principal medical officers such a stipend is suggested as the sub-committee thinks would be appropriate in each case. Thus, for the Infirmary, the following staff is recommended:—One general superintendent and secretary, one matron, one superintendent of nurses; one resident medical officer, appointed for two years, at a salary of from £250 to £300 per annum; one resident surgical officer, for a term of at least a year, at a salary of from £100 to £150; one accident house-surgeon, for a term of at least six months, at a salary of from £80 to £100; one or more resident physician's assistants, with charge of home-patients, at a stipend of £60, three clinical clerks and four dressers without stipend. For the Fever Hospital and the Convalescent Home respectively—one resident medical officer, at a salary of about £150, one or more resident medical assistants without stipend, and one matron. This report, with its accompanying recommendations, has been approved and adopted by the managing board, and preliminary steps have been taken to carry out the alterations proposed.

The annual meeting of the Medical Society was held on January 9; it was unusually well attended, and its proceedings were exceedingly lively and protracted. The laws of the Society having been thoroughly revised by the Committee, were now submitted for the approval of the members at large; and as the new laws involve several important alterations, their consideration led to a good deal of friendly discussion; in fact, no truer criterion of the vitality of the Society could be had than the extreme and painstaking interest with which this debate on the laws was conducted. Amongst other changes it is proposed to establish a system of life-membership, by allowing members to compound for their annual subscriptions. It is thought that by adopting this plan the names of some of the older members will be retained on the roll of the Society longer than they otherwise would be. The Committee's report showed the Society to be in a flourishing condition; there are now 188 members. After lasting more than three hours the meeting was adjourned to January 23 (this evening), when the election of officers, etc., will take place for the year 1878.

The trial of John Campbell White, Senior House-Surgeon to the Ardwick and Ancoats Dispensary, for attempting to procure abortion, took place on January 15, before Mr. Justice Denman, and lasted the whole day. The facts elicited were substantially the same as were summarised in the *Medical Times and Gazette* for December 22, 1877, from the evidence given before the city justices. The prisoner was found guilty, and sentenced to five years' penal servitude. The girl's master, who was charged with aiding and abetting White, was also found guilty, and received the same sentence. It is intended, I believe, to set on foot a subscription for the wife and children of White, who are reported to be left entirely without the means of subsistence.

An action against a police-surgeon for assault and battery, instituted under the auspices of the Vigilance Society for Protecting the Personal Rights of Women, was tried before Mr. Justice Denman at the Manchester Assizes on January 21, and although the jury found a verdict for the defendant in this particular instance, owing to the plaintiff's evidence being disbelieved, certain points of law were involved which make the case one of extreme importance to the profession. The facts are briefly as follow:—Bridget Ward, a domestic servant, thirty years of age, and unmarried, was delivered of a living child, without assistance, in the water-closet at the back of her mistress's house, between the hours of ten and eleven on the evening of May 17, 1877. She left the child in the closet, and went to bed. The child was found, still alive, early in the morning of the 18th, and about 4 a.m. a police-officer apprehended the woman and charged her in the usual way. The female searcher was sent for, and she requested Ward to let her examine her. Ward refused to allow any examination, and was subsequently conveyed on foot to the detective office at the Town Hall, Bolton. After waiting there a little time, the police-surgeon, Mr. Sergeant, arrived, when the prisoner was taken by Mrs. Lomax, the female searcher, into an inner compartment, separated by a partition seven feet high from the main room. It was in this inner office that the assault is said to have been committed. According to the plaintiff's statement, the female searcher said to her, "Here is the doctor come to examine you," and she replied, "I shall not let the doctor meddle with me. The baby is mine, and there is no need for an examination." In spite of this protest the doctor proceeded to place his hand upon the abdomen, under the clothing, and kept it there fully five minutes, the prisoner meanwhile screaming as loudly as she could, and endeavouring in every possible way to free herself, while the female searcher held both her hands tightly. No examination of the external genital organs was proposed or attempted. On removing his hand from the abdomen, Mr. Sergeant said, "She is all right; put her to bed and see that a binder is put on to stop the flooding."

The account given by the defendant, Mr. Sergeant, of what took place is a very different one. He says that on arriving at the police-station he was told the circumstances which had led to the prisoner's arrest. He found her pale and excited, with a quick and feeble pulse, and he saw blood by the side of the chair on which she was sitting. He suspected

that some hæmorrhage was going on, and deemed it necessary to ascertain if the uterus was contracted. It was on this ground alone that he suggested her being taken into the inner office. In the presence of Mrs. Lomax, the female searcher, he said to the prisoner that it would be better for her to be examined, and that he would only do what was necessary. She made no reply and offered no resistance. He then lifted her dress and placed his hand upon the lower part of the abdomen, which was covered by the underclothing. The examination did not last above a minute. The uterus, though not firmly contracted, was sufficiently so to remove any apprehension of immediate danger. She made an exclamation of pain when he grasped the uterus, but beyond this she uttered no sound. She did not scream, or struggle, or complain in any way, but sat quietly. There was no question about her having given birth to a child—she admitted it; the examination was entirely for the purpose of ascertaining the condition of the uterus. It is true that Mrs. Lomax held her hands, but this was done with the idea of consoling her and calming her excitement, and not to prevent her struggling. In cross-examination Mr. Sergeant said he was aware that it was illegal to examine a woman against her will. On being then asked what precautions he had taken to let the woman know that she need not give consent unless she liked, he said he had not taken any beyond explaining that an examination was necessary. Dr. Thorburn, Professor of Obstetric Medicine at the Owens College, and Obstetric Physician to the Manchester Royal Infirmary, was called on behalf of the defendant, and said that having heard Mr. Sergeant's evidence, he considered that such an examination as had been described was not only justifiable, but was imperatively required for the safety of the patient. On being asked by the plaintiff's counsel whether the knowledge that the woman had been able to walk to the police-office would not tend to lessen any fear of hæmorrhage in the mind of a medical man, Dr. Thorburn replied that such knowledge would rather increase than lessen the apprehension of danger.

Mrs. Lomax, the female searcher, had affixed her mark to a document containing a number of statements which she had made to the solicitor for the prosecution, and which corroborated the evidence of the plaintiff; but when in the witness-box she denied ever having made many of these statements, and declared that the plaintiff offered no resistance to the doctor's examination, and made no complaint during the time she was in Mrs. Lomax's house—namely, from her arrest to her committal by the magistrates.

The Judge summed up at considerable length. He directed the jury that, as the law stood, for a medical man to examine a person without consent constituted an assault. It was for them to decide whether in this case the plaintiff did or did not give consent. He then entered very fully into the legal definition of consent. If the surgeon, in the opinion of the jury, made the examination under a mistaken impression that the woman consented, when she did not really do so, the verdict would nevertheless be for the plaintiff, although the question of damages would be affected thereby. Before the jury retired to consider their verdict, one of their number asked the Judge who would have been responsible in case the woman, after declining to be examined, had died from hæmorrhage without surgical assistance; to which his lordship replied, smiling, "Please do not put a more difficult question than the one you have to decide." After an hour and a half's deliberation, the jury returned a verdict for the defendant.

THE PARIS LUNATIC ASYLUMS.—The Budget of the Department of the Seine for 1878 presents the large sum of 4,100,000 francs for its lunatic asylums, being an increase of 100,000 francs upon that of 1877. This is calculated for the support of 7304 lunatics which are under the charge of the department. There are 2142 in the three asylums belonging to the department, the sexes being equal in number, and there are 600 men in Bicêtre, and 700 women in Salpêtrière. There are also 3862 lunatics sent to the asylums of other departments. The mean daily cost per head is 1 franc 55 centimes. The number of lunatics under the charge of the Department of the Seine has annually increased during the last twenty years, but in a somewhat smaller proportion during the last two or three years.—*Union Méd.*, January 10.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 11.

CHRISTOPHER HEATH, F.R.C.S., Vice-President, in the Chair.

(*Concluded from page 77.*)

SEVERE HÆMORRHAGE, FOLLOWING OPERATIONS FOR CLEFT PALATE, STOPPED BY PLUGGING THE POSTERIOR PALATINE CANAL.

MR. HOWARD MARSH read notes of the case. The patient, a young man aged twenty-three, was admitted into St. Bartholomew's Hospital, where the following operation was performed. The patient being under chloroform, and Mr. T. Smith's gag having been introduced, the edges of the fissure—which involved the soft and the posterior half of the hard palate—were pared. The posterior part of the soft palate and the uvula, there being no tension in these parts, were brought together; then the soft structures were detached from the bone at the sides and anterior extremity of the cleft of the hard palate, and brought together; lastly, lateral cuts, about three-quarters of an inch long, were made through the soft parts to relieve all tension on the sutures at the middle line. There was no undue bleeding at the time of the operation, but, three hours afterwards, hæmorrhage to the extent of about half an ounce occurred from the left nostril; this, however, ceased when the palate was syringed through the nose with iced-water. On the fourth day the palate had all united, and the patient was allowed to be up. The same evening, when he had, contrary to orders, eaten a thick crust of bread, blood was found to be dropping quickly from the left nostril and trickling down his fauces. Though arrested for a time by iced water, the hæmorrhage soon returned, and when Mr. Marsh was called to him, two hours later, he was in a very prostrate state, for he had just vomited fully a pint of blood from the stomach, and was still bleeding quickly from the nose. Imitating a practice followed by Mr. Willett some years since, in a similar case, of plugging the posterior palatine canal, as Mr. Smith had suggested—an experiment which Mr. Willett found completely successful—Mr. Marsh having, by means of a sharp-pointed probe passed through the lateral cut, found the orifice of the canal (which is situated about a third of an inch anterior to the lumbar process of the sphenoid, and about the same distance directly inward from the wisdom tooth), he passed into the canal a wooden peg, about as big as a common match, and straightened at its end. This was done by holding the peg in a pair of strong forceps, with its point directed upwards and somewhat backwards in relation to the roof of the mouth. The bleeding at once ceased; but it returned when the plug slipped out, two days later. It was, however, at once stopped when Mr. Schofield, the house-surgeon, re-introduced the peg. All went on well now; and three days later the plug again came out, and no bleeding ensued. But two days later still—that is, fourteen days after the operation, five days after the last bleeding, and forty hours after the plug had come away—the patient was suddenly awoke by renewal of the hæmorrhage. He now bled severely for nearly three hours, in spite of various attempts to arrest the trouble; and, when Mr. Marsh was called to see him, he was found to be in a most dangerous condition of prostration. While he was under chloroform, however, the plug was introduced into the canal, from which blood could be plainly seen to be flowing, and the hæmorrhage, as on the previous occasions, immediately ceased. From this time there was no return, and the patient soon recovered. The union of the palate remained sound and apparently unaffected by these repeated hæmorrhages. The author drew attention to the amount and very obstinate character, and repeated recurrences of the bleeding in this case, and strongly advised the plugging of the palatine canal in any case of serious hæmorrhage from the palate. The patient manifested severe pain when, by the introduction of the peg, the large posterior palatine nerve accompanying the artery was crushed; but no subsequent permanent trouble had ensued from this nerve-injury.

MR. MAUNDER said that, although the time of the meeting was short, he could not refrain from congratulating Mr.

Smith upon his suggestion, and Mr. Willett and Mr. Marsh upon their successful application of it. There was nothing to cause greater alarm to a patient, or more anxiety to a surgeon, than recurring hæmorrhage. On three occasions he (Mr. Maunder) had been called upon to consider the question of tying the common carotid artery for severe bleeding within the mouth. In one of these he had ligatured successfully the main artery to arrest dangerous hæmorrhage from the region of the internal maxillary artery. In the other two, milder measures had fortunately sufficed. Surgeons would certainly not forget the useful hint which had been just given them.

Mr. T. Smith said it was not so difficult to find the canal, as it is possible to feel the vessel pulsate, and then it might be easy to insert a sharp-pointed needle.

Mr. Gould asked the effect on the nerve of such pressure as to stop the bleeding.

Mr. Heath thought the incision indicated in Mr. Marsh's figure was too far back. He preferred to make his longitudinal incisions, and then to work backwards and forwards in them. If cut too near the orifice of the canal the vessel was in a measure bound down.

Mr. Barwell spoke of a child on whom he had attempted to operate, but was prevented by the hæmorrhage, and this went on for days. Again he tried, but the bleeding came on as before, so that he was obliged to desist. Some time after the child hurt her foot and bled to death. The whole family, as it turned out, were bleeders.

Mr. Marsh said he had used a sharp probe to discover the orifice of the canal. The bleeding was so bad that the man had serious fainting fits. In the operation it was often necessary to go near the orifice of the canal. The question of family bleeding ought to be carefully gone into.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Friday, January 18.

Dr. Stevenson, President, in the Chair.

In opening the proceedings, Dr. Vinen (Secretary) said that he had written to the Social Science Association, accepting their terms for the use of the library by this Society, and also to the Secretary of the Birmingham and Midland Association of Health Officers, informing him of the decision of the Council relative to the frequent prevalence of epidemic disease in public elementary schools.

It was decided to address a circular to the metropolitan members, recommending them to avail themselves of the offer of the School Board to supply through their visitors information as to the existence of epidemic disease in any house or district.

The Council having considered the proposals relative to the publication of the transactions of the Society, resolved that the terms proposed by the *Practitioner*, being inadmissible, cannot be accepted, and that in future the annual report be drawn up giving more details than heretofore.

Dr. Owen Coleman, Medical Officer of Health for Surbiton, was elected as an extra-metropolitan member. Dr. Browning was proposed as an associate.

On the Quality and Quantity of the Water supplied to London during the Year 1877.

Dr. Tidy did not submit a formal paper, but delivered an address upon the water-supply of London, from notes, of which we subjoin an extract. Time had not been given him for the preparation of an elaborate paper. He had been asked by the Secretary to fill up a gap occasioned by the failure of an author to complete his engagement for that evening. He would give a *résumé* of his experience derived from the examination and analysis of 1500 samples of London water made by himself and the late Dr. Letheby. The analytical tables, with comments upon them, will shortly be published and circulated among the officers of health. The only question for a medical officer to consider with reference to water-supply is that of wholesomeness and sufficiency. The more complicated questions of vested interests, rates and taxes, and engineering, must be solved by other authorities. The dual scheme of the Metropolitan Board of Works may or may not be desirable; it has yet to be inquired into. The *quantity* required for a town must be carefully estimated. In the year 1877 the metropolitan water companies supplied 32,000,000 gallons to 533,000 houses, giving 32·5 gallons per head—a great deal too much for *bonâ fide* use. The average supply of water to Paris, inclusive of that to the public fountains, is twenty-nine gallons per head. All the large continental towns have about this average or less. With regard to *constant supply*, the water companies are, for the most part, ready to make arrangements for this when called upon to do so. The West Middlesex Company have placed 2090 houses on the constant-service system. Much has been said about the *supply for fires*, but this is really a very trifling matter, and, in respect of quantity and quality, amply sufficient for the purpose, as the companies could double their supply if need be. We are better supplied in London than in any other town in the kingdom. Of the eight companies, five take their water entirely from the Thames, one from deep chalk wells, and another from the River Lea, with occasional intake from the Thames. The East London Company are supplied by springs and the Thames. The monthly analyses of the water companies show a remarkable uniformity: the variations are not more than three grains and a half of solid matter per gallon. There is scarcely any other river with so little variation. In the month of February there is an average of 21·4 grains per gallon, and in August the least quantity, 17·99 grains per gallon. Between these two months there is a gradually ascending and descending scale—*e.g.*, September, 18·74; November, 20·24; January, 20·68; March, 20·85; May, 19·88; July, 18·25. The same steady variation is found in the oxidation of organic matter, as measured by the permanganate test, which, if conducted properly, is the most reliable. Dr. Frankland's combustion process is good, but Dr. Wanklyn's test for "albuminoid ammonia," as he calls it, is liable to error. The smallest quantity of total solids in the River Lea is in September, when it averages 16·78 grains per gallon, rising to 23·4 in February; the variation is about seven grains. The test of *turbidity* is best measured by Dr. Letheby's tubes, two feet in length. The lime-light projected through the water casts a shadow upon white paper, according to the amount of turbidity. In this way three degrees of turbidity may be registered by the initials V.S.T., S.T., and T. In no case examined could the turbidity be recognised by a casual observer. This turbidity is due to the presence of a minute quantity of finely divided clay from the bed of the river, too small for estimation, amorphous mineral matter, occasionally animalcules of a diatomaceous character. These appearances are to be found in the sedimentary matter of all waters, whether they receive sewage or not. Dr. Letheby found the same in the waters of the Nile, hundreds of miles above Cairo. Filtration will entirely remove it, and the hardness is considerably reduced by passing through filter-beds. The amount of free chlorine in the water of the Thames is decreasing every year. *The Effects of Drinking this Water:* London is the healthiest city in the world. Some will tell us that it is because we drink less water than other people. Instead of finding a lower death-rate in the districts supplied by the Kent water, which is so much lauded at the present day, it is decidedly higher than in other parts, and diseases of the zymotic class are more prevalent—not that the Kent water is to be blamed for this increase. We learn from this to look for other causes of disease than to the wholesome Thames water. It is possible that diseases are propagated by a poison of a chemical nature rather than by hypothetical germs which no one has yet discovered. The extravagant statement about the water supplied to Millbank Prison is devoid of truth. In 1854, the cholera year, the Thames water was pumped into the prison without any previous filtration. From 1857 to 1874 the Orange-street well-water was used. Then the water from the Chelsea mains was used, and a decided improvement in the health of the prisoners set in, and has continued to the present time. Since the subsidence tanks have been enlarged, and the filter-beds well looked after, the water has much improved in quality. Various committees of the House of Commons have met to consider the question of water-supply, and they have all agreed that it was not desirable to disturb existing arrangements. Referring to the bulky volume drawn up by the Rivers' Pollution Commissioners, Dr. Tidy said that this was the work of two gentlemen, one a chemist and the other

an engineer. Though appointed to decide upon what was really a medical question, no medical referee was called in to give evidence. Dr. Tidy quoted a short paragraph from this Blue-book as follows:—"The supply of the Kent water to the metropolis would be a priceless boon, and would at once confer upon it absolute immunity from epidemics of cholera, etc."; and referred to other extravagant statements made by these gentlemen to show that we must be careful not to confound public enthusiasm with scientific facts.

In the debate following the address the PRESIDENT said that Major Bolton's reports gave seven or eight grains of solid matter per gallon, and not three and a half as stated by Dr. Tidy. It would be interesting to know the amount of accord between Professor Frankland's process and the permanganate test, and how Dr. Tidy had come to change his opinion as to the reliability of a process he found so faulty, and why Dr. Tidy returns the analyses for the Society according to Dr. Wanklyn's process, which he so much condemns.

Dr. BOND inquired how it happened that the maximum amount of solids was in February, when there is the largest amount of dilution. It is very important not to confound the solids in suspension with those in solution.

Dr. BATE feared that if the dual scheme of the Board of Work, was carried out there would be great neglect of filtration, and that careless servants, for instance, might often draw the drinking-water from the Thames service.

Dr. TRIPE, in criticising Dr. Tidy's observations, said that because no one had yet discovered the ultimate germs of disease, are we to say they do not exist? There is evidence that some bodies possessing powers of their own do multiply in water and produce zymotic disease. There is too little attention bestowed upon the microscopical examination of water. If there was more lime in the water it would perhaps be better.

Dr. BARTLETT said we ought to have at the present day more faith in the Nessler process, advocated by Wanklyn. It is not only a quantitative test, but it gives valuable indications, and is the most useful test of the wholesomeness of potable waters. There is great danger in estimating the quality of a water by the constancy of variation in the relative proportion of solids. He was sorry to say that his own personal experience was anything but favourable to one of the existing water companies. He had lately changed his residence to the district supplied by the Grand Junction Company, and more than twenty times he had to give up taking his bath on account of the muddiness of the water and its bad odour. He was very careful to empty each cistern, of which there are three in his house, daily. Such water cannot be good for drinking purposes. The Kent water he considered admirable for all purposes. In the New River Company's water he never found anything but a slight turbidity. It was a fairly potable water so long as they depended upon the springs for their supply; but when the Lea water was added, then it was often faulty. If the companies would pass all the water through the filter-beds, there would be less cause for complaint.

Dr. CORFIELD, replying to Dr. Bond, said that of course there are more solids during the rainy months than in summer, because the flood waters are more charged with *débris*.

Dr. DUDFIELD doubted whether the Thames supply is so reliable that as medical officers of health they could rely upon it as a potable water.

Mr. ANGELL asked Dr. Tidy did he think well that about a million people should live and discharge their sewage above the intake of the Thames water companies, and that the water should be so imperfectly filtered?

Dr. TIDY, in his reply, said that, with regard to the East London Water Company, the allegation that the outbreak of cholera was due to the accidental opening of a sluice was totally without foundation, as he had proved before a Select Committee of the House of Commons. As to Dr. Stevenson's remark about "three grains and a half" of solid matter: this calculation had reference to one table only, and not to the whole of the analyses. He employed Dr. Wanklyn's process not by preference, but at the request of the Society. He admitted that in using this process a certain aptitude is acquired, and he found it more advantageous than formerly. Incineration of the residue is not to be depended upon for accurate calculations. In reply to the inquiry, "Can you give any proof of oxidation of organic matter?" Dr. Tidy said he could and would prove it at the proper time. It is most unscientific to publish analyses giving proportion of "albuminoid ammonia," and on that to establish a theory of potability. Doubtless the Grand Junction water is more turbid than others, and might be better. With regard to Mr. Angell's inquiry, ought he to take a water because of a chance of contamination,—there are risks in everything, and we have to decide whether the risk is within the range of practical safety. If sewage matter were not oxidised by and through the action of flowing, towns built on rivers would not be so healthy as they are.

NEW INVENTIONS AND IMPROVEMENTS.

WORDSWORTH'S NEW PATENT WASHABLE RESPIRATOR.

THE framework of this Respirator, made of a non-absorbent material, consists of two portions, one of which fits into the other in such a way that the two can easily be separated and thoroughly cleansed. Between them is an inside layer of cotton-wool which can be changed as often as the wearer likes, and, if it should seem desirable, can be medicated, either with a disinfectant, or with iodine or other substances for inhalation. A respirator cannot, we suppose, be made a pretty or pleasant thing to wear—at any rate, those desirable objects have not yet been attained,—but it is very often of great service, and the washable respirator certainly possesses some points of excellence which ought to commend it to the favour of the public.—6, Sloane-street, S.W.

UMNEY'S FLUID EXTRACT OF CINCHONA.

MESSRS. WRIGHT, LAYMAN, and UMNEY, 50, Southwark-street, have brought out a Fluid Extract of Cinchona which deserves recommendation as an elegant preparation. One fluid ounce of it is the equivalent of one ounce of good bark. It affords a useful and handy means of administering that drug.

CALVERT'S NO. 5 CARBOLIC SOAP.

WE have received from Messrs. F. C. Calvert and Co., Manchester, some of their No. 5 Carbolic Soap, which we have found very serviceable for cleansing floors and walls, and for washing soiled cloths, towels, etc. The soap is guaranteed to contain 4 per cent. of Calvert's No. 5 carbolic acid, and has proved very useful and efficacious in laundries, hospitals, asylums, industrial schools, and like establishments. It seems well calculated, also, for use as a skin soap, and is said to have been proved to be serviceable against vermin, and in preventing some skin diseases.

SURGICAL TISSUE—SURGICAL WADDING.

MESSRS. A. F. HENRY AND SON, 64, Bartholomew-close, have sent us specimens of the above-named articles. The Surgical Tissue, which is intended to serve as a substitute for oiled silk, seems to consist of a thin, tough paper, so prepared with oil as to have very much the appearance and consistence of oiled silk; and the Surgical Wadding is the "tissue" with a light adherent lining of fine wadding. Both are good, it seems to us, and likely to serve well the purposes for which they are intended; and their comparative cheapness is a great recommendation. The surgical wadding may be used as a water-dressing, and will be found very handy for that purpose, and as a wrapping for parts affected with gout, rheumatism, or erysipelas. It can be used either wet or dry, and if required in the former state needs only dipping in water. Both articles are almost sure to become popular.

THE ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.—The annual general meeting for the election of officers for the year 1878 was held at the rooms of the Association in Chandos-street on Wednesday evening, January 16. The following is a list of the names of those proposed by the Council, who were duly elected:—*President*: S. J. A. Salter, Esq., M.B., F.R.S. *Vice-Presidents*: W. A. Cattlin, Esq., F.R.C.S.; Samuel Cartwright, Esq., F.R.C.S. *Treasurer*: A. Coleman, Esq., F.R.C.S. *Hon. Secretary*: J. Hamilton Craigie, Esq. *Council*: Hamilton Cartwright, Esq.; T. Edgelow, Esq.; F. Fox, Esq.; J. Fairbank, Esq.; G. Gregson, Esq.; W. D. Napier, Esq.; J. H. Parkinson, Esq.; and N. Stevenson, Esq.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 21st inst., viz.:—

Blackmore, Alfred, L.S.A., Manchester, student of the Manchester School.
Brumwell, Ernest, L.S.A., Kendal, Westmoreland, of the London Hospital.
Gaze, William H., L.S.A., Thames Ditton, of St. Bartholomew's Hospital.
Hinings, John William, L.R.C.P. Edin., Pudsey, near Leeds, of the Edinburgh School.
Latham, William, L.K. & Q.C.P. Ire., Ashton-in-Mackerfield, Lancashire, of the Liverpool School.
Lawson, Robert Lockhart, L.S.A., Dublin, of Guy's Hospital.
McGeagh, Thomas Edwin Foster, M.D. Brussels, and L.S.A., Tunbridge Wells, of University College Hospital.
Moore, George Richmond, Hartlepool, of the Newcastle School.
Murray, Charles Herbert, M.D. McGill, Richmond, Lanoford, Ireland, of St. Thomas's Hospital.
Pointon, James, L.R.C.P. Lond., Birkenhead, of the Liverpool School.
Pollard, Evelyn Richard Hugh, L.K. & Q.C.P. Ire., Oxford Terrace, Hyde-park, of the Dublin School.
Price, Arthur, L.S.A., Croydon, of St. Thomas's Hospital.
Revell, R. Carter, L.S.A., Saltash, Cornwall, of the Middlesex Hospital.
Salter, John Reynolds, Taunton, Somerset, of University College Hospital.
Scallon, E. Oliver, L.S.A., St. Martin's-lane, of King's College Hospital.
Smith, Arthur Lapthorn, M.D. Laval, Montreal, of Guy's Hospital.

The following gentlemen were admitted Members on the 22nd inst., viz.:—

Allinson, Henry Calthrop, King's Lynn, student of King's College.
Ayres, Alfred Reginald Aston, Brighton, of the London Hospital.
Blake, William Farewell, L.R.C.P. Lond., Grafton-street East, of University College Hospital.
Bailey, Robert Greenoak, Leeds, of the Leeds School.
Brown, Walter Henry, Leeds, of the Leeds School.
Culhane, Frederick William Slater, L.S.A., Brockley, Kent, of University College Hospital.
Deare, Edwin Walter, Malpas-road, New Cross, of Guy's Hospital.
Ellison, Fredk. Wm., L.S.A., Leytonstone, of St. Bartholomew's Hospital.
Fairland, Sydney Thomas, Chelsea, of Guy's Hospital.
Gamble, Ernest Langwith Gompertz, L.S.A., Grantham, of St. Thomas's Hospital.
Gofton, Joseph Edward, North Shields, of the Newcastle School.
Graham, Charles Robert, Wigan, of the Manchester School.
Green, Charles, Easton, near Middlesborough, of the Newcastle School.
Keen, Edward, King's-road, Chelsea, of St. George's Hospital.
Laudon, Arthur Jermyn, L.S.A., Margaret-street, W., of St. Bartholomew's Hospital.
Lambert, John Speare, L.S.A., Exeter, of St. Bartholomew's Hospital.
Newington, Theodore, Ticehurst, of St. Thomas's Hospital.
Reynolds, Lewis William, L.S.A., Exeter, of Guy's Hospital.
Sheppard, John, Newark, Notts, of King's College.
Silcock, Arthur Quarry, Dalston, of University College Hospital.
Thomas, David Edward, Cwmamman, Wales, of St. Thomas's Hospital.
Trewman, George Turner, L.S.A., Llanelly, South Wales, of the Westminster Hospital.
Waddington, Frank, L.R.C.P. Edin., York, of Guy's Hospital.
White, Octavius M., L.S.A., Blenheim-road, N.W., of St. Mary's Hospital.
Woolley, Saml. Pool, M.B. Glasg., Wood-green, of St. Thomas's Hospital.
Zimmermann, Benj. Frazier, Lauderdale-road, of St. George's Hospital.

The following gentlemen were admitted Members on the 23rd inst., viz.:—

Beale, Edwin Clifford, Dolgelly, Merionethshire, student of Guy's Hospital.
Burd, George Vanhouse, Okehampton, Devon, of St. Thomas's Hospital.
Burry, Henry Burry Pullen, Sompting, Worthing, of London Hospital.
Coates, George, B.A. Oxon., Oxford, of St. Bartholomew's Hospital.
Evans, Theodore Charles, Ealing, of St. Bartholomew's Hospital.
Le Crouier, Hardwick, Jersey, of St. George's Hospital.
Muskett, Joseph Herbert, Stoke Newington, of the London Hospital.
O'Connor, James, Cavan Town, co. Cavan, of University College Hospital.
Robertson, Frederick Freer Leslie, M.B. Aber., Cosham, Hants, of St. Bartholomew's Hospital.
Sykes, John Frederick Joseph, L.R.C.P. Lond., Fitzroy-square, of Guy's Hospital.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 17:—

Deakin, James, Sole, Manchester.
Lambert, John Speare, St. Leonard's-crescent, Exeter.
Pearce, John Puckey, Biscovy Par, Cornwall.
Thomas, David Edward, Cwmamman, Carmarthenshire.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BARR, JAMES, M.B., L.R.C.S. Edin.—Assistant-Physician to the Stanley Hospital, Liverpool.

NAVAL, MILITARY, &c., APPOINTMENTS.

WAR OFFICE.—Robert Francis Symmons, M.R.C.S.E., L.S.A., Assistant Visiting Surgeon for Colchester under the Contagious Diseases Acts, 1866 to 1869—Surgeon-Major Edward O'Connell retires on temporary half-pay—Surgeon-Major William Tydd Harding from half-pay to be Surgeon-Major—Surgeon-Major James Crerar retires on half-pay, with the honorary rank of Deputy Surgeon-General—Surgeon-Major Joseph Richard Kehoe, half-pay, Medical Department, has been permitted to commute his retired allowance.

BIRTHS.

COMERFORD.—On January 11, at Huntly, Aberdeenshire, the wife of J. T. Comerford, M.D., R.N., of a daughter.

CONSTABLE.—On January 16, at 174, Lambeth-road, the wife of Caffry Constable, M.D., of a daughter.

FARQUHARSON.—On January 18, at Coatbridge, N.B., the wife of J. Farquharson, M.D., of a son.

FOX.—On January 22, at Clarence-street, Victoria-park, Manchester, the wife of Dacre Fox, F.R.C.S.E., of a son.

GAIRDNER.—On January 20, at the College, Glasgow, the wife of Professor Gairdner, M.D., of a son.

HARVEY.—On January 21, at South Petherton, Somerset, the wife of Walter A. Harvey, M.B., of a son.

KING.—On January 18, at Ambleside, Westmoreland, the wife of William Moore King, M.R.C.S., of a daughter.

LIVINGSTONE.—On January 19, the wife of W. Oswell Livingstone, M.B., Trinidad, of a daughter.

THOMSON.—On January 19, at Westgate, Peterborough, the wife of W. Thomson, M.D., of a son.

MARRIAGES.

ANDERSON—ANGELL.—On January 17, at St. George's, Hanover-square, Joseph William Townsend Anderson, L.R.C.P., L.R.C.S.E., to Katherine Eugénie, fifth daughter of T. J. Angell, Esq., solicitor.

GIBBS—GRANSMORE.—On January 16, at Holy Trinity, Ilfracombe, Cuthbert Chapman Gibbes, M.D., of Surbiton, Surrey, to Mary Lucy, only daughter of Frederick Gransmore, Esq., R.N., of Ilfracombe.

HOBSON—JONES.—On January 17, at St. Pancras, Edwin Alick Hobson, to Helen Maude Hardman, youngest daughter of R. Jones, M.D., of Waterloo-place, Leamington.

MACDONALD—KELLY.—On January 22, at Clapham, Donald Stuart Macdonald, M.B., C.M., to Mary Priscilla, eldest daughter of Michael Kelly, Esq., of The Crescent, Clapham-common.

STEES—STAINS.—On January 16, at Marylebone Church, William Sykes, M.R.C.S., of Mexborough, Yorkshire, to Kate, youngest daughter of the late Richard Stains, of Harewood-square, London.

DEATHS.

BRISBANE, HELEN SHAAF, wife of J. Brisbane, M.D., at 21, Park-road, Regent's-park, N.W., on January 23.

EDWARDS, DAVID OWEN, M.R.C.P. Lond., F.R.C.S. Eng., at 20, St. Lawrence-road, Notting-hill, on January 18, in his 78th year.

FERRIER, CONSTANCE MABEL, daughter of David Ferrier, M.D., F.R.S., of 16, Upper Berkeley-street, W., on January 22, aged 2½ years.

HALL, WILLIAM, F.R.C.S., at 199, Richmond-road, Hackney, on January 14, in his 80th year.

LITTLE, ELIZA, wife of W. J. Little, M.D., at 18, Park-street, Grosvenor-square, on January 15.

NESBITT, ARABELLA, wife of P. R. Nesbitt, M.D., at Acton, Middlesex, on January 12, in her 69th year.

STEPHAN, FRANCIS JOSEPH, M.D., at Munich, on January 9.

TOWNSEND, EDWARD R., M.D., at The Cottage, near Queenstown, on January 6, in his 78th year.

WALLACE, SAMUEL, M.D., at Elderslie House, Cardiff, on January 21, aged 51.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

DURHAM COUNTY HOSPITAL.—House-Surgeon. Applications, with testimonials, to Mr. C. Rowlandson, Hon. Sec., The College, Durham, on or before January 26.

LOUGHBOROUGH DISPENSARY AND INFIRMARY.—Resident House-Surgeon. Candidates must have a medical and surgical registered qualification. Applications, with testimonials, to William Berridge, Secretary, on or before January 26.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

APPOINTMENTS.

Bakewell Union.—John M. Wheler, L.R.C.P. Edin., L.R.C.S., L.S.A., to the Matlock District.

Canterbury Incorporation.—Frank Wacher, M.R.C.S. Eng., L.S.A., to the Canterbury District and the Workhouse.

Thrapston Union.—John Crew, L.R.C.P., M.R.C.S., L.S.A., to the C District.

West Ward Union.—Alexander Lindsay, B.M. Glasg., L.R.C.S. Edin., to the Shap Workhouse.

DUBLIN HOSPITAL SUNDAY FUND, 1877.—The collection made for this Fund last November was most successful. The total amount collected was £4086 14s. 10d.,

compared with £3873 9s. 3d. in 1876, and £3619 12s. 4d. in 1875. This steady increase from year to year is very satisfactory, and is creditable to the management as well as to the people of Dublin and its vicinity. The Council propose to distribute £3900 amongst the participating institutions, compared with £3600 in 1876, £3450 in 1875, and £3300 in 1874.

Ovariotomy in Dublin.—On Saturday last, the 12th inst., Dr. George H. Kidd, Master of the Coombe Lying-in Hospital, Dublin, performed ovariotomy in that institution on a patient aged twenty-six years, for some time the subject of ovarian disease. The operation was performed under carbolic spray. Two distinct cysts were tapped, but the case was rendered unfavourable and the process of extirpation tedious by the presence of numerous adhesions. During the operation the patient was kept under the influence of bichloride of methylene, administered by Mr. Macnamara, of the Meath Hospital. We are glad to learn that the patient was making satisfactory progress up to the latest period of which we have heard.

Manchester Medical Society.—At the adjourned annual meeting of this Society, held on Wednesday evening, January 23, the following office-bearers and members of Committee were elected for the year 1878:—*President*: Mr. Fred. A. Heath, *Vice-Presidents*: Dr. Gumpert, Dr. Ransome, Dr. Lloyd Roberts, and Mr. Windsor. *Hon. Secretary*: Mr. Walter Whitehead. *Hon. Treasurer*: Dr. J. Thorburn. *Hon. Librarian*: Mr. C. J. Cullingworth. *Committee*: Dr. Borchardt, Mr. Boutflower, Mr. Broadbent, Dr. Dreschfeld, Mr. Ewart, Mr. Galt, Mr. Hardie, Mr. Jones, Dr. Leech, Dr. Little, Dr. Ross, and Dr. Simson. *Auditors*: Dr. Dixon Mann, Dr. J. A. Irwin.

The *Sheffield Telegraph* is responsible for the following anecdote, which is good enough to deserve to be true:—"A doctor was summoned to attend a poor woman at Sheffield who was lying dangerously ill. He found the case so grave, and his assistance solicited at such an apparently hopeless period, that he concluded nothing could be done for the patient, even if it were possible that she could get the necessary nourishment which her case demanded. On leaving, he was asked when he would call again, but he explained that there could be no further need for his professional services, and volunteered there and then to write the certificate for her burial, which he accordingly did. The woman, however, was evidently one of that peculiarly irritating class of patients who delight in controverting medical science and opinions, and after the doctor departed, obstinately declining to fulfil his prediction, she rallied, and eventually completely recovered. She now goes about carrying her burial certificate with her!"

Surgical Examinations.—The following were the questions on Surgical Anatomy and the Principles and Practice of Surgery submitted to the candidates at the pass examination for the diploma of Membership of the Royal College of Surgeons of England on Friday, the 18th inst., viz.:—1. What relations do the median nerve and its branches bear to the principal arteries of the arm, forearm, and hand? What muscles would be paralysed by an injury to this nerve in the arm? 2. Describe the operation of tracheotomy: first at the lowest, and secondly at the highest point at which the trachea proper can be opened, mentioning the landmarks which guide the surgeon in the various stages of the operation, and the dangers incidental to it.—3. Give the pathology of the disease which leads to angular curvature of the spine, and the treatment you would adopt for the earlier stages of it. 4. What is ectropion? Describe the inconveniences attending it, the causes producing it, and the modes of remedying it. 5. Give the diagnosis, treatment, and prognosis of fracture of the surgical neck of the humerus. 6. Describe, first, the symptoms which would lead you to suspect, without local examination, the existence of a strangulated rupture, and then the characters which such a tumour would present. Candidates were required to answer at least four (including one of the first two) out of the six questions. The following were the questions on the Principles and Practice of Medicine submitted to the candidates on Saturday, the 19th inst., viz.:—1. What are the various causes of ascites? what are the symptoms which it produces? How would you recognise its presence and distinguish it from cystic diseases within the abdomen? and how would you treat it? 2. Discuss the morbid anatomy, symptoms, and treatment of tubercular meningitis. 3. What are the several officinal preparations of the following drugs, and what their properties and doses?—Magnesia, arsenic, senna, rhubarb, colchicum, conium. Write out in full a prescription for an adult requiring a diuretic medicine.

NOTES, QUERIES, AND REPLIES.

"He that questioneth much shall learn much."—*Bacon.*

Mr. John Forster, Adelaide.—Received with thanks.

Corrigendum.—In the pass-list of the Royal College of Surgeons, in our issue of the 19th inst., *for* Henry J. Sequeira, "St. Thomas's Hospital," *read* "London Hospital."

A Poor-law Official.—The plan adopted by the Board of Guardians of Brighton, which has so far succeeded, is to issue orders for the casual ward at a police-station. During the past three months a decrease is shown, as compared with the corresponding period last year, of 838 in the admission of casual paupers to the workhouse. It is found that professional tramps exhibit considerable unwillingness to make, in the same locality, a second application.

Paterfamilias, Suffolk.—Service in the Medical Department in India splits itself into two branches. As an army official, the doctor draws for the medical charge of a native regiment. As a civil official, the doctor draws for the medical charge of first-class civil stations. These again lead up to the higher appointments of Inspector-General and Deputy Inspector-General. Besides these regular appointments there are many other special appointments, such as principalships of medical colleges, superintendentships of gaols, lunatic asylums, etc. Except in the case of officers holding special staff appointments, private practice is not forbidden, and in many civil stations this adds largely to the income of the doctor.

Basil J.—No doubt the burial in the ground in such manner that the body may touch and mingle with the earth is the most ancient method of disposal of the dead that we have on record. Such was, in a measure at least, the custom, as shown by ancient history, among the Jews, who, whenever practicable, enclosed their dead in tombs or sepulchres; but where such was neither convenient nor feasible, they adopted the analogous alternative of simple interment in the ground. Coffins, according to our signification, seem to have been but seldom employed among them. The corpse having been swathed with bandages, was laid on a bier or bed, and thus carried to the sepulchre or to the grave, as the case chanced to be. The system of cremation was universally practised throughout the Roman dominion during the Empire. But as Christianity prevailed it began to fall into desuetude, and the fourth century saw the system abolished. The early Christians followed the custom of the Jews, which, as already observed, was to bury, not to burn the dead. The word "cemetery," or "cæmeterium," is derived from the Greek, and means a "sleeping-room."

A Ten Years' Abstainer.—There are now twenty-eight coffee-houses in Liverpool. The takings of the houses belonging to the Company have amounted in a week to as much as nearly £800. Yes, coffee-carts seem to answer where coffee-houses have failed. It is said that at York some friends of temperance subscribed £15, bought a cart, handed it over to an active, sober man, and he is now selling 60,000 gallons a year at a halfpenny a cup, and is making a good profit. On the other hand, the Japanese Government introduced the brewing of beer into Japan about four years ago. They built and fitted up at Tokio a large brewery according to plans sent out from Germany for making lager-beer. The Government had sent previously a young Japanese to a firm of brewers at Berlin, as an apprentice, in order that he might be thoroughly instructed in the art of making lager-beer. On his return, after three years' apprenticeship, he was placed in charge of this brewery. The intention of the Government was that it should serve as a school for the practical training of young Japanese in this new branch of industrial learning.

Examinerships at the College.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I observe that there have been of late answers to certain queries anent the members of the Board. Will the gentleman who gives the information in such detail kindly tell us upon what principle the examiners are *elected*? Evidently not seniority. If we knew, candidates who are always coming forward might save themselves the chagrin of being constantly passed over, and the Board of Electors the trouble of determination. It seems to outsiders, at least, there is a good element of "*kismet*" in the whole affair. I am, &c., Olim Sperans.

Indian Jottings.

The rate of mortality in Bombay, for the week ending the 29th ult., was 40·83 per 1000. The total number of deaths during the week was 528, including 198 from remittent fever. A census was taken on the night of the 19th inst. in certain talukas of Madras and Mysore, as well as in the South of Bombay, with the view of ascertaining how far the numbers of the rural population have been affected by the famine.

Opium-Growing in China.

It would appear that the practice of opium-growing is largely on the increase in China, notwithstanding the Imperial edicts against it. Far away in the North, Mr. Consul Adkins, at Newchwang, reports that in most districts of the Manchurian province of Féng-tien, and in many parts of Kiria, and in a daily increasing area of Eastern Mongolia, the farmer is beginning to regard opium as the first and most important item in the year's crop. This is, after all, not surprising, for the poppy crop is a paying one, and it leaves the ground in time for a crop of cabbage or something else to succeed it.

COMMUNICATIONS

have been received from—

Dr. Herman, London; Mr. W. E. Poole, London; Dr. Thomas Barlow, London; Dr. F. Churchill, London; Mr. Glynn Whittle, Liverpool; Mr. C. J. Cullingworth, Manchester; Mr. J. Chatto, London; Mr. T. M. Stone, London; Dr. Sullivan, London; Mr. E. Bellamy, London; Mr. B. Walker, Spondon; Dr. Greenfield, London; Dr. Ross, Manchester; Dr. E. Sparks, Mentone; The Secretary of the Royal Institution, London; Mr. J. Rowell, London; Mr. Woodsworth, London; Mr. N. C. Walsh, London; Dr. Carter, Liverpool; Mr. W. F. Everett, London; The Secretary of the Association of Surgeons Practising Dental Surgery, London; Dr. J. W. Moore, Dublin; Dr. Semple, London; The Secretary of the National Hospital for Consumption, Ventnor; Mr. R. J. Godlee, London; The Secretary of the North-Western Association of Medical Officers of Health; The Secretary of the Yorkshire Association of Medical Officers of Health; The Registrar of the King and Queen's College of Physicians, Ireland; The Registrar of Apothecaries' Hall, London.

BOOKS AND PAMPHLETS RECEIVED—

M. Foster, M.A., M.D., F.R.S., A Text-Book of Physiology—W. de Wiveleslie Abney, F.R.S., A Treatise on Photography—The Holy Church Almanac, 1878—Report on Friendly Societies, Industrial and Provident Societies, and Trade Unions, 1876—V. P. Gibney, M.D., Spinal Irritation in Children as related to True and False Arthropathies—John Richardson and Co.'s Annual Price Current—Dr. Paul Bruns, Die Laryngotomie zur Entfernung Intralaryngealer Neubildungen—F. de Havilland Hall, M.D. Lond., Synopsis of the Diseases of the Larynx, Lungs, and Heart, comprising Dr. Edwards' Tables of the Examinations of the Chest, with Alterations and Additions—Transactions of the American Neurological Association for 1877—Charles R. Drysdale, M.D., Tobacco, and the Diseases it produces—J. J. Picot, Les Grands Processus Morbides—National Health Societies Almanac, 1878.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—La Province Médicale—Medical Enquirer—Chicago Medical Journal and Examiner—Indian Medical Gazette—Canada Lancet—Canada Medical and Surgical Journal.

APPOINTMENTS FOR THE WEEK.

January 26. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

Royal Institution, 3 p.m. Mr. R. Bosworth Smith, "Carthage and the Carthaginians."

28. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Dr. Leared, "Death in Typhoid Fever averted by the free use of Stimulants." Dr. Dowse, "On Hereditary Syphilis as it affects the Brain and Nervous System."

29. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

30. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

31. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

February 1. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Mr. W. H. Preece, "The Telephone."

VITAL STATISTICS OF LONDON.

Week ending Saturday, Jan. 19, 1878.

BIRTHS.

Births of Boys, 1274; Girls, 1289; Total, 2563.
Average of 10 corresponding years 1868-77, 2431·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	971	932	1903
Average of the ten years 1868-77	791·1	785·6	1577·7
Average corrected to increased population ...	...	...	1688
Deaths of people aged 80 and upwards ...	...	...	74

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	1	3	3	...	13	1	4	...	1
North	761729	31	13	12	3	15	...	5	1	2
Central ...	334369	...	3	4	1	2	1	1	...	..
East	639111	7	25	11	...	14	...	1	1	...
South	967692	12	33	5	1	50	2	4	...	5
Total	3254260	51	77	35	5	94	4	15	2	8

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·228 in.
Mean temperature	44·9°
Highest point of thermometer	51·2°
Lowest point of thermometer	28·0°
Mean dew-point temperature	38·1°
General direction of wind	W.S.W. & N.N.W.
Whole amount of rain in the week	0·02 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 19, 1878, in the following large Towns :—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Jan. 19.	Deaths Registered during the week ending Jan. 19.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2563	1903	51·2	28·0	42·9	6·08	0·02	0·05
Brighton	103923	44·1	78	46	52·2	33·0	42·0	5·56	0·02	0·05
Portsmouth ...	129461	28·9	63	46	52·8	31·6	44·5	6·95	0·06	0·15
Norwich	84620	11·3	59	33	52·0	34·8	43·5	6·39	0·04	0·10
Plymouth	73599	52·8	39	38	57·0	27·5	46·1	7·84	0·04	0·10
Bristol	206419	46·4	134	91	51·8	36·2	45·1	7·28	0·05	0·13
Wolverhampton ...	74240	21·9	55	32	51·5	32·0	43·4	6·33	0·25	0·63
Birmingham ...	383117	45·6	319	200	...	...	...	...	...	..
Leicester	121473	28·0	95	44	52·0	34·8	44·3	6·89	0·14	0·36
Nottingham ...	165287	16·6	108	66	54·3	25·1	41·9	5·50	0·34	0·85
Liverpool	532851	102·2	430	284	51·0	40·4	45·4	7·44	0·33	0·84
Manchester ...	360514	84·0	249	190	...	...	...	...	...	...
Salford	170251	32·9	138	90	50·5	33·2	43·3	6·28	0·95	2·41
Oldham	107366	23·0	81	52	...	...	...	...	...	...
Bradford	185088	25·6	133	90	49·8	32·9	43·3	6·28	0·63	1·60
Leeds	304948	14·1	223	137	52·0	32·0	44·3	6·84	0·27	0·69
Sheffield	289537	14·7	199	130	52·0	30·0	43·7	6·50	0·60	1·52
Hull	143139	39·4	116	60	52·0	27·0	41·7	5·39	0·46	1·17
Sunderland ...	112459	34·0	95	55	55·0	35·0	44·5	6·95	0·18	0·46
Newcastle-on-Tyne	144570	26·9	104	62	...	...	...	...	...	...
Edinburgh	222371	53·1	144	118	52·3	32·8	42·7	5·95	0·28	0·71
Glasgow	568940	94·0	379	316	50·5	39·2	44·9	7·17	0·52	1·32
Dublin	314666	31·3	197	168	53·0	37·3	46·5	8·06	0·10	0·25
Total of 23 Towns in United Kingdm	8373953	37·9	6001	4251	57·0	25·1	43·9	6·61	0·28	0·71

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·23 in. The highest reading was 30·47 in. at the beginning of the week, and the lowest 30·02 in. on Wednesday afternoon.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

"TENDON-REFLEX."

A CLINICAL LECTURE.

By T. GRAINGER STEWART, M.D.,
Professor of the Practice of Physic and of Clinical Medicine in the University of Edinburgh.

GENTLEMEN,—I purpose to bring under your notice to-day a series of cases illustrative of a phenomenon of much interest, and probably of very considerable clinical importance. The phenomenon is one which has been long known to schoolboys, but whose physiological and pathological import was first brought under the notice of the profession only three years ago. It was simultaneously described by two independent observers—Professor Erb of Heidelberg,(a) and Professor Westphal of Berlin.(b) The former applied to it the name "tendon-reflex," which, as the shorter and more satisfactory of the two names employed, we shall adopt; the latter described separately different manifestations of it under the names "foot phenomenon" and "knee phenomenon." It is best studied in the knee, and most of you will at once understand what it is when I recall to you a favourite trick of boys—viz., sharply tapping on the ligamentum patellæ, and thereby producing a jerking forwards of the foot. This jerk is best seen when the leg is bent at about a right angle, and the foot unsupported, as when one is sitting with one knee crossed over the other, or upon a high seat with the feet dangling. It is a result of sudden contraction of the quadriceps extensor femoris, manifestly produced by reflex action. Brief observation of the muscle and of the movement will convince you that it is not a mere mechanical result of a momentary indentation of the tendon, for the jerk follows the tap after an appreciable interval, and is always associated with contraction of the muscle. It is best produced by sharply tapping with the finger, or with a percussion hammer. All parts of the tendon are not equally sensitive, and it is necessary sometimes to try different parts before the result is obtained. It is invariably present in healthy people, but its intensity varies in different individuals. I shall show you, first, a patient in whom it exists to an ordinary extent, and second, one in whom it is very slightly manifested.

You see in this first patient that when I place him on the table with his feet dangling, and strike the ligamentum patellæ near its upper part, his foot jerks forward several inches, and then instantly falls back. You see that the movement is as readily produced in the one leg as in the other, and that the two legs are equally susceptible. This I present to you as a normal standard. In contrast with it, notice the phenomenon as exhibited by this soldier. His long legs dangle from the table, and you perceive that the stroke must be sharp and well planted in order to produce the movement, and that the movement at the best is slight. This deficiency may be due to the inordinate development of the inhibitory functions in the course of his military training, or, more probably, to innate nervous stolidity.

Having now witnessed the phenomenon, you are ready to consider the mechanism of its production. Admitting that the jerk is of reflex origin, the irritation might be propagated from the nerves of the skin, from the joint, or from the tendon. That it is not from the skin seems proved by the fact that only firm percussion induces it; no mere touching of the surface suffices, but this may be better demonstrated by the production of the phenomenon after the skin has been anæsthetised. That it is not from the articular structures is certain, because we may tap all round the joint without producing any movement excepting when we touch the sensitive part of the quadriceps tendon. By process of exclusion, then, as well as by direct observation, we must conclude that the tendon is the starting-point of the irritation; and as that structure is supplied with nerve-filaments, we can be at no loss to understand how the movements are brought about.

The first alteration of this function which I shall demonstrate to you is its absence in cases of locomotor ataxy. The patient whom I now introduce has that disease in a marked degree, and has suffered from it for years. He has, as you observe, spinal myosis, which indicates affection of the cilio-spinal region, and you perceive that when standing he plants his feet apart, so as to widen his base; that he walks with a peculiar ataxic gait; turns round awkwardly and with difficulty; and when his eyes are closed, sways about unsteadily and threatens to fall. When I place this man upon a table with his feet hanging over the edge, and tap on his ligamentum patellæ, as I did in the other cases, you perceive that there is no response. The legs remain absolutely quiescent as before; not the slightest quiver appears in the muscle, and this notwithstanding the fact that when I tickle his soles, the ordinary reflex movements are at once produced.

The next patient is also the subject of locomotor ataxia, probably associated with multiple sclerosis in the cord and base of brain. In him also you notice the characteristics of locomotor ataxia, and in him you perceive that tapping the tendon is followed by no result. I have not thought it desirable to bring into the theatre that very advanced case of locomotor ataxia of twelve years' duration, in which you have at the bedside studied many of the features of the disease, but I have satisfied myself that in him also there is complete abrogation of the "tendon-reflex."

All the cases that I have had an opportunity of examining corroborate the statement made by Westphal in his original paper, and by Erb and Berger, that in the fully-developed grey degeneration of the posterior columns of the cord the "tendon-reflex" is lost.

But in a lecture published in Berlin(c) in the beginning of the present month (January), Westphal has raised the important question whether the "tendon-reflex" does not disappear even before the development of the acknowledged symptoms of locomotor ataxia; and whether, therefore, its absence or presence may enable us to pronounce positively as to the nature of some spinal cases otherwise obscure. In connexion with neuralgic pains in the limbs, white atrophy of the optic nerves, and such-like conditions frequently but not exclusively associated with locomotor ataxia, he has found the presence or absence of the "tendon-reflex" afford valuable indications as to the nature of particular cases. I have not yet had any occasion to test this in my own practice, but I can recall cases in which it might have proved very helpful. I shall presently show you two patients whose symptoms in some degree resemble those of locomotor ataxia, and we shall see what light the "tendon-reflex" throws upon them. Before bringing in the first of them, I shall tell you a few facts as to his history. His case has been dwelt on repeatedly at the bedside, and has been selected as the subject of clinical studies(d) by several of the senior students. He is a joiner, twenty-three years of age, and he married before he was twenty-two. Five months after marriage he began to feel weakness in the right leg—numbness, a tendency to jerking of the muscles when at rest, and unsteadiness of gait, particularly in the dark. These symptoms gradually increased, and the left leg became affected. He never had any darting pains in the limbs, nor girdle pains, nor abnormality of micturition, nor squinting, ptosis, or other temporary paralysis; and thus, in respect of history, there was nothing excepting the staggering gait aggravated by darkness which could suggest locomotor ataxia. I now bring him under your notice, and you observe that he makes no complaint of abnormal sensations, for the headache which once troubled him has disappeared, and the burning feeling and numbness in the legs are not distressing. You perceive that he feels tickling of the soles, and that his sensibility to pain is unaffected, but that in both legs his sense of touch is impaired, and he fails to distinguish between a hot and a cold application. The muscular sense appears also diminished. The sight is rather dim; and while, as you see, there is no myosis, Dr. Argyll Robertson tells us that he finds distinct commencing atrophy of the right optic nerve. The sensory functions are otherwise natural. Reflex movements are, you see, readily produced by tickling the soles. There is a certain feebleness in the muscles of the legs, and as he walks his movements are abrupt and ill-regulated. He turns round in an awkward

(a) "Archiv für Psychiatrie und Nervenkrankheiten." Band v. 1875.
(b) *Eod. loc.*

(c) "Ueber ein frühes Symptom der Tabes Dorsalis" (*Berliner Klinische Wochenschrift*, January 7.)
(d) Clinical studies are short essays upon obscure or otherwise specially interesting cases, which the senior students attending in the wards are invited to write and submit to the Professor for inspection and criticism.

way; when he stands he plants his feet somewhat apart, and is even then unsteady, but as soon as his eyes are closed he begins to totter. The muscles of his legs are well nourished, but he suffers much from spasmodic cramp-like contractions when he is lying in bed or sitting. When I place him on the table and test the "tendon-reflex," you observe that the movements are exaggerated, that a slight tap produces a very marked jerk, and that that is followed by a sudden drawing backwards as if by contraction of the flexors.

In this case a diagnosis of locomotor ataxia is suggested by the mode of walking, the unsteadiness in the dark, and the white atrophy of the optic nerve. But certainly it is not established, for such a gait as this occurs in other spinal diseases; the unsteadiness in the dark is also not distinctive; and the white atrophy occurs in other spinal maladies as well as in cerebral affections, and independently. These considerations satisfied me that we were not entitled to diagnose locomotor ataxia, and the soundness of this opinion is attested by the application of Westphal's principle. I am inclined to think that here we have an irritative affection of the cord, not confined to the posterior columns, and manifesting itself by interference with the sensory and motor functions, and markedly by the jerking of the muscles and the exaggerated reflex irritability.

I shall now bring in another patient whose case closely resembles that just described. She is a healthy-looking young woman of twenty, a milliner, and has suffered from some degree of weakness of the limbs for two years. She has at times a good deal of pain in the legs, and the sensibility is diminished. As she walks, you notice that her gait is peculiar and her mode of turning vacillating. She stands unsteadily, and when she closes her eyes the unsteadiness is increased. Ordinary reflex movements are readily produced by tickling the soles, and I have in the ward tested the "tendon-reflex," and found it exaggerated in the same way as in the last patient. I incline to think that in this case also there is an abnormal irritability of the cord.

The last case that I have to bring before you to-day is that of a little boy who is suffering from hemiplegia. This hemiplegia has existed for about a year, and is attended by some degree of aphasia. In the left leg you perceive that the "tendon-reflex" is normal; in the right it is exaggerated, but in addition it is followed by a period of tonic contraction of the muscle, so that by repeating the tapping at short intervals we can keep the leg almost extended—a result which we cannot by any effort produce in the left leg. This is, moreover, associated with a condition which was pointed out to me by the House-Physician, Dr. Strang—a distinct resistance to sudden passive movement. Thus you observe that when I rapidly flex and extend the left arm or leg of this patient these movements are not resisted, but when I make corresponding movements of the right arm or leg there is a certain amount of resistance due to instantaneous contraction of the opposing muscle. Moreover, it appears that just as the boy is awaking from sleep his arm and leg are seen to move about more freely than they do when he makes a voluntary effort when fully awake.

It is obvious that the "tendon-reflex" function as manifested here is very different from what we have seen in any of the cases hitherto studied. In the first two abnormal cases it was completely lost; in the second two it was exaggerated; in this case it is also exaggerated, but it is followed by a degree of tonic contraction. There is no evidence of such irritation of the cord as existed in the second two cases, and I should think it not improbable that (as was suggested by one of my colleagues to whom I was showing these phenomena the other day) it may be best explained by a diminution or abrogation of the inhibitory influence of the brain. This hypothesis has the advantage that it would well accord with the obvious explanation of the comparative vigour of the automatic movements on awakening—viz., that the lesion inducing the hemiplegia interferes with conduction between the voluntary and the automatic centres.

You will then, gentlemen, remark that the "tendon-reflex" is quite independent of and distinct from the ordinary reflex movements produced by tickling the sole, for you have seen in one of our cases that "tendon-reflex" is entirely abolished, while "skin-reflex" is normal. Also that it is reasonable to conclude that the ordinary action of muscles is in some way promoted by sensory impressions derived from the tendons. I mean that, in all probability, the motor function of muscles is subserved by impressions derived from sensory structures situated in the tendons, as well as by those derived from the sensory structures in the muscles and the skin. I must confess that this interesting physiological consideration had not occurred to me before I read the papers of Westphal and Erb.

But you must not fall into the error of supposing that the awkward movements of ataxic patients are due to those changes in the muscular mechanism which produce the loss of "tendon-reflex," for on the one hand we have it on the authority of Westphal that he has seen the "tendon-reflex" absent in cases where there was no ataxia, and to-day you have seen that a gait like the ataxic may be present when the "tendon-reflex" is healthy or exaggerated.

ABSTRACT OF AN ADDRESS
ON THOUGHT IN MEDICINE.

DELIVERED AT THE MILITARY MEDICAL SCHOOL IN BERLIN.

By PROFESSOR H. HELMHOLTZ.

(*Concluded from page* 82.)

THE spirit and example of Müller told remarkably upon his pupils, the most distinguished of whom were Schwann, Henle, Reichert, Peters, Remak, Du Bois-Reymond, Virchow, Brücke, Ludwig, and Traube.

Under this powerful influence, microscopic and pathological anatomy, the study of organic types, physiology, experimental pathology and therapeutics, and ophthalmic medicine, quickly rose in Germany above their level in rival and neighbouring countries. Amongst Müller's contemporaries who contributed to this result, the three Leipzig brothers Weber take a first place.

An ardent spirit of inquiry was awakened, and, where any means were visible leading to a better comprehension of the processes of life, they were adopted. New and improved instruments of research were brought into use; and now the thermometer, ophthalmoscope, laryngoscope, ear speculum, and tests of nerve-sensibility, give the physician powers of minute and sure diagnosis where formerly all was obscure. The ever-increasing number of demonstrated parasitic organisms presents to us tangible objects instead of mystic disorder producing entities, and the surgeon is thus taught to ward off the terribly fatal diseases of decomposition.

"But do not suppose, gentlemen, that the contest is at an end. So long as there are people of sufficient presumption who imagine themselves able to perform, by a flash of genius, what man can only hope to effect by toilsome labour, so long will hypotheses be forthcoming, which, propounded as dogmas, promise a solution of all difficulties. And also, whilst there are those who, without criticism, readily assent to what they wish to be true, the hypotheses of the former will not lack believers. Neither class will become extinct, and the latter will always be the more numerous."

Metaphysical systems have supported two lines of argument. According to the spiritualist idea, man may regard himself as a being of higher quality, towering above the rest of nature. The Materialists consider him as unqualified master of the world, through the exercise of his mind upon the conceptions which he has formed.

But one who, like the physician, has to deal with the safety- or destruction-bringing powers of nature, has the duty, under heavy responsibility, of seeking a knowledge of the truth, and of the truth alone, regardless whether what he finds flatters one or other of these classes. His aim must be clear, and the actual result alone decisive. He must strive to ascertain what the consequences of his proceeding will be under given circumstances. To acquire this power of forecast we have no other means than seeking, by observation, a knowledge of the laws of things; and this we must acquire by careful search for, and study of, such cases as belong to them. If we suppose that we have discovered a law, then commences the work of deduction. We must endeavour to trace its effects; but also, and first, to test it by experience, so far as it can be tested, and ascertain when, and in what range, it holds good. This is a labour which should, properly, never cease. The true natural philosopher considers, on every strange appearance, whether the well-proved laws of action of long-known powers can have undergone any modification; naturally, however, there can only be question of such a change as does not contradict our

stores of accumulated experience. Thus he never arrives at absolute truth, but only at a high degree of probability, which, practically, is equivalent to certainty. Let the metaphysicians smile; we will take their derision to heart when they are able to do better, or even so much.

"But if I speak against the profitless making of hypotheses, do not suppose that I wish to depreciate the value of genuine original thought. The discovery of a new law is the discovery of hitherto concealed analogies in the course of natural processes. It is an expression of the power of the mind, which our ancestors, using the word in its original sense, called wit. It is of the same character as the highest efforts of artistic intuition in the invention of new types of expression. It is something which cannot be extorted or acquired by any known method. Therefore, all attempt to seize it who would assert themselves as the privileged children of genius. It appears so easy, by a sudden flash of intellect, to appropriate an otherwise unattainable superiority over one's fellow-men. But the true artist and the true inquirer know that great performances only result from great labour. The proof that a supposed discovery is not based on superficial resemblances, but that it has been produced by a deep insight into the connexion of the whole—this can only be effected by a complete investigation of the law, and of its agreement with facts."

"The discovery of superficial analogies is easy, entertaining in society, and sprightly thoughts procure for their author the repute of being a quick-witted man. Amongst a large number of such examples there must be some partially or wholly true. It would require the skill of a conjurer to be always wrong. In such fortunate instances, a man's priority of discovery may be loudly proclaimed, whilst a convenient forgetfulness covers the failures. And thus the partisans of such proceedings are fond of maintaining the value of a first idea. The conscientious worker, who avoids bringing his thoughts before the public until he has tested them on every side, removed all doubts, and established their soundness, is placed at an unmistakeable disadvantage. The present mode of deciding questions of precedence by the date of the first publication, without regard to the ripeness of the work, has tended to increase this confusion."

A further objection may be raised against the present overflowing literature of unproved and unsupported speculation, in which a few sound thoughts are overlaid by what is worthless; that he who brings out anything really new and matter-of-fact, is exposed to the risk of innumerable reclamations, unless he has previously wasted his time and powers in reading a multitude of profitless books, and unless he exhausts his readers' patience by numerous useless references.

Our generation has suffered under the pressure of spiritualistic metaphysics; the rising one will have to be on its guard against materialist philosophy.

Self-evident as the principle appears, and important as it is, although so often forgotten, the investigation of nature is simply an inquiry after the laws of things. And when a law has been found and recognised as governing the processes of nature, we deal with it objectively as a power; and a reference of individual cases to such power, acting under precise conditions and evoking a definite result, we name a causal explanation of the phenomena. But these stipulations must not be forgotten, otherwise the professed explanation is only a bashful confession of ignorance, and a frank acknowledgment of it is better.

If a vegetative process be at all referred to the powers of cells, without a close indication of the conditions under which, and of the direction towards which these act, then the expression at most implies that the more remote parts of the organism are in this respect without influence; and this can be surely established in very few cases. And in the same way, the originally well-defined sense which Müller attached to the notion of reflex movement has been gradually subtilised, so that if an impression has been produced upon any part of the nervous system, and if any influence be in action at any other part, the matter is supposed to be explained by saying that it is reflex.

It will be clearly gathered from what has gone before that what has been said against metaphysics ought not to be directed against philosophy. The metaphysicians, however, have at all times sought to assume the character of philosophers, and philosophical *dilettanti* have mostly interested themselves about the high-soaring speculations of the metaphysicians, fancying themselves thus able in a short time, and without much trouble, to gain the sum of all that is worth knowing. The relation of Metaphysics to Philosophy bears a close analogy to that of Astrology with Astronomy.

Philosophy separated from metaphysics—a knowledge of the laws governing the spiritual and intellectual part of man—remains a wide and most important field. And as the minute anatomist should be acquainted with the microscope, so should every scientific inquirer study the grand instrument with which he works—the human mind and its capabilities. If we want evidence of the bad results of erroneous views on these questions, we have it in the blind groping of the medical schools for two thousand years. And philosophy has suffered even more than medicine.

"And now a caution. I would not that you should suppose that my representation has been influenced by personal feeling. I need not say that the upholders of metaphysics and of *à priori* views cannot love one holding the opinions which I have professed and enforced upon my pupils—viz., 'that every metaphysical inference is either a fallacy or a disguised empirical conclusion.' And like all those who have no firm ground on which to meet their assailants, metaphysicians are not usually very courteous in their contests. And my own labours also have specially led me into disputed territory. But, to give my own opinions free play, two vouchers beyond suspicion, Socrates and Kant, will testify for me that all the metaphysical systems erected until their days were webs of empty fallacies.

"Let us not cast stones at our old medical ancestors, who in dark times, and with limited knowledge, fell into the same faults as the great intelligences of the professedly enlightened nineteenth century. Let us continue to work. And here physicians are called to play an important part. Their intellectual training and acquaintance with the most varied fields of natural inquiry give them great advantages.

"Lastly, and in accordance with form, to pronounce an opinion, and so conclude our consultation respecting Dame Medicine, I think that we all have reason to be satisfied with the success of the treatment which the natural philosophy school has prescribed for her, and we recommend its continuance by the rising generation of practitioners."

Petroleum in Pertussis.—Dr. Hildebrant (*Deutsche Med. Woch.*, January 12), observing that, in country practice the treatment of pertussis by inhaling apparatus is very inconvenient or impossible, while yet the disinfecting plan is the best that can be employed, recommends strongly that the child should be made to breathe air charged with petroleum in the following manner:—Small pieces of rag wetted with petroleum may be either laid on the pillow or put into wooden rings and suspended over the head of the bed. The cure would be expedited by placing during the day, in the room where the child is, a small cup containing petroleum.

The Fever Hospital, Cork-street, Dublin.—At a full meeting of the Managing Committee of the Fever Hospital and House of Recovery, Cork-street, Dublin, held on Thursday, January 24, the following were elected medical officers of the institution for the year commencing April 1, 1878: *Permanent Physicians:* Charles Fred. Moore, M.D., and John W. Moore, M.D. *Temporary Physicians:* Reuben J. Harvey, M.D., and William Stoker, L.K.Q.C.P. *Surgeon:* James H. Wharton, M.B., F.R.C.S.I. Dr. Grimshaw completes his full term of seven years as Permanent Physician, and in accordance with the rule retires on March 31 next. At the same meeting the Registrar reported that there were sixty-three patients remaining in the Hospital, including twenty cases of small-pox.

St. Mark's Ophthalmic Hospital, Dublin.—The Board of Governors of this institution held their ordinary monthly meeting on Monday, January 21. The routine business having been transacted, the Board proceeded to elect an Assistant and House-Surgeon. Arthur H. Benson, M.B. Dub., and Licentiate of the Royal College of Surgeons, Ireland, was unanimously elected for the period ending December 31, 1879. On Thursday and Friday, January 24 and 25, a bazaar, in aid of the funds of the Hospital, was held in the Exhibition Palace, Dublin. It was visited by her Grace the Duchess of Marlborough. The special object of the bazaar was to build an isolated wing for infectious cases—a project which the late Sir William Wilde, the founder of the institution, had in view for many years.

ORIGINAL COMMUNICATIONS.

VEGETATION AS A CAUSE OF THE PLAGUES.

By "MUCOR."

That English thought has taken an immense stride in the direction of the "germ-theory of disease" is evident from Dr. Roberts's Address in Medicine, which probably reflects the views of the germ-theorists in their highest and most perfect form. Few of them, perhaps, would go further than Dr. Roberts has gone, and few would lag far behind him. He may therefore be taken to have given an exposition of contemporaneous knowledge, and to have struck the key-note of the prevailing tone of thought. Looking at the Address in this light from my far-off point of view, I beg to offer a few suggestions on the present position of the question.

Dr. Roberts infers that the plagues are caused by vegetable organisms, and he gives two instances in which a bacterium is so intimately associated with the occurrence of a disease that it is impossible to disconnect the one from the other. Thus the *Spirillum Obermeieri* becomes the "pathophyte" of relapsing fever, and the *Bacillus anthracis* that of splenic fever. Assuming this inference to be sound, some obvious questions occur, although little or nothing has been said about them. Two of these are—Where do these disease-bacteria come from? and, How do they enter the organism? These questions relate to such cardinal points in this inquiry, that I can only suppose they have been kept in the back-ground because of the necessarily speculative character of any discussion of them. They must, however, come to the front, and must, indeed, be disposed of before any tangible result or practical good can come of the ingenious investigations of Obermeier and Koch. Until the *Bacillus Obermeieri* and the *Spirillum anthracis* shall be traced to their hosts, the prevention of the two fevers cannot be looked for.

It has been inferred that the bacteria of disease, or pathophytes, form a distinct class of fungi—a class existing only in the bacterial form; and further, Dr. Roberts conceives they may be variations or "sports" from the harmless bacteria or "saprophytes." Laying aside the latter view now, I would observe that as the inference that a bacterium is a perfect independent or self-contained plant, a permanent form, would seem to have been reached by Cohn and other phytologists, it is with some diffidence that I venture to question it. I must, however, express my conviction that this conclusion will not be sustained; that generalisation here has been on insufficient data; and that if a wider cast had been made, so as to have taken in every phenomenon that touches the question, it would have been perceived that a disease-bacterium is but a phase in the life-history, a segment of the sphere of the existence, of a plant. I take it that there is inferential proof that a bacterium and a micrococcus are the modified offshoots or altered progeny, or else the associates or dependants, of a mould or mildew that has been accidentally immersed in a fluid in which it will grow.

There can be no question that in fermentations caused by a ferment-plant bacteria appear, or that most ferment-plants have their aërial forms. If we can at will, as we certainly may, cause bacteria to appear in certain fluids by submerging a mildew in them, it is an inference that the two forms of vegetation are there related or associated, and that the appearance of the one is a consequence of the presence of the other. [There is the notion that a bacterium may be the parasite of a parasite—separating itself from its host, and entering on an independent career in a medium in which its nutrition is made easy; but it is sufficient to show here that these bacteria at all events accompany the fungus. The speculation whether the latter stands in the relation of parent or host to the former may be left.]

In given inorganic fluids, then, bacteria follow the introduction into them of mildews. Arguing from these fluids to the juices of living organisms, I submit—first, that there are no physical, chemical, or other reasons for the supposition that the spores or reproductive parts of a mildew are inhibited from vegetating in these juices in a like manner to that in which they vegetate in some fluids out of the body, but that, on the contrary, there are strong grounds for assuming that the vegetation is essentially the same in both cases; secondly, that, therefore, when bacteria are found in the animal fluids, it is a presumption that they are detached parts of some higher or more complex form existing in some part of the organism; thirdly, that if there is no other rational way of accounting for the presence of bacteria in such fluids, the presumption becomes a warrantable assumption.

With regard to the first of these propositions, it may be observed that many microscopists have cultivated what, rightly or wrongly, they have taken to be contagium particles, and have found that on suitable substrates the forms have developed into mildews. Letzerich transplanted the micrococci of diphtheria to bread-and-milk, on which they grew into a mildew. He raised a succession of crops of this mildew by transferring the spores from substrate to substrate, and by inoculating animals he succeeded in inducing the specific inflammations with spores from each crop. These observations of Letzerich have not been confirmed, it is true, and moreover, they have been questioned in regard of the inoculations; still, the conversion of the micrococci into the form of mildew, which is the point here, has not been challenged.

But if we throw over all the evidence of this nature; if we abandon the observations of every investigator who has cultivated into specific fungi the phytic forms he has found in diseased organisms; if we say that from first to last they are untrustworthy;—there yet remains a unique set of observations which show conclusively that a specific disease is caused by a specific mildew. There is no possibility of escape from the conclusion in this instance, for the mildew itself was sown in the human body. The method employed was the converse of that by which most inquirers have attempted to establish the fungoid nature of contagia, and it differed from that of all others in that the infective particles used in the experiments were not derived from a diseased organism, but were taken direct from a vegetable parasite growing on its host. [Here was furnished an instance of a *contagium vivum* independent of a previous case.] I refer to the well-known and well-neglected investigation into the cause of measles undertaken many years ago by Dr. Salisbury.

In this journal (April 28, 1877) appeared a paper "On the Prevention of Measles," in which I advanced some views tending to show that Dr. Salisbury had brought out the cause of the disease, and that, as a consequence, its prevention is simple. Although the time may not even yet be ripe for the full recognition, or for the thorough appreciation, of Dr. Salisbury's work in connexion with this subject, yet the day must come sooner or later when it will have to be acknowledged that the results of that work are of greater intrinsic value and of more moment than the results of the investigations of all other observers put together. It is strange that the first grand discovery in this field, and the largest in conception—the only one, in fact, that determines the precise external source of a pathophyte, and that points therefore to a ready means of stamping out a plague—should be utterly excluded from scientific consideration. For if it be granted that the experiments of Dr. Salisbury are wanting in finish and detail, that they are rough and incomplete, still they suffice to establish the one great fact, that by the inoculation of straw-mildews we may create a disease of a specific character—a disease marked by morbilloid symptoms so closely resembling morbillous manifestations that there is nothing to distinguish the one set of phenomena from the other. To ignore this fact on account of shortcomings is to refuse a brilliant because of the setting.

But it may possibly be contended by some that the experiments made in America are not trustworthy. If the statements made by Dr. Salisbury relating to matters of fact, which are the only statements material to this issue, are to be questioned, I may observe that even his own countrymen, who assailed his views and attacked his practice of inoculation, and had every opportunity of examining into his proceedings, never hinted at anything of this kind. The actual physical effects said to have been induced by the inoculations of straw-mildews have not been doubted. For my part, independently of the impress of truth on the published papers of Dr. Salisbury, I consider there is sufficient inferential proof that if the spores of straw-mildews are transplanted to the living substrate of man (unprotected by a recent attack of measles), a specific set of symptoms will as surely follow as if small-pox virus were inoculated. That is to say, there will be within two or three days a blush round the point of inocu-

lation, cough, sneezing, lachrymation, dry throat, headache, more or less blotchy eruption on the face and neck, slight fever, and, in short, all the characteristics of a mild attack of genuine measles.

And why not measles? What objection is there to this inference that does not apply with at least equal force to the inferences that other diseases are caused by vegetable organisms? If the diseases enumerated by Dr. Roberts are to a certainty caused by vegetable organisms, there would appear to be no sufficient reason why measles may not be caused by vegetable organisms. If, therefore, by means of certain of these organisms we may cause a specific affection exactly resembling measles; if there are substantial reasons for assuming that precisely similar organisms are concerned in the causation of ordinary measles; and if, moreover, it be shown that the artificially induced affection is a protection against a prevailing epidemic of this common complaint,—let me ask whether we have not a stronger case than any one made out in more recent days to show the relation of a certain form of vegetation to a given plague? Indeed, I must say I am at a loss to understand on what scientific principle the question of the cause of measles is left out of modern calculations; or why the one human parasite that has actually been tracked to its source—the one that of all parasites is the easiest to verify—is calmly disregarded, and allowed to do its work unheeded.

Passing, however, to the consideration of the changes the straw-mildew vegetation undergoes when planted in the human arm after Dr. Salisbury's mode: I conceive (*a*) that the submerged spores accommodate themselves to the artificial conditions under which they are placed, and maintain and reproduce themselves locally; (*b*) that the modes of growth and reproduction are of necessity modified to meet the requirements of life in a foreign medium—the vegetation taking an algoid form; (*c*) that the plant after a time propagates itself in a manner akin to that of the known vegetable ferments, and takes its nutriment from the surrounding fluids; (*d*) that in one segment of the sphere of its existence in the body, it developes, or degenerates, into a bacterium, a terminal stage probably, or a phase of fungoid life in which the spore disappears; (*e*) that in another segment it multiplies itself by some mode of reproduction by which it is insured that the seed is, potentially, carried on; (*f*) that whilst the bacterium link in this chain confines itself to the fluids, the sexual or propagating link, although it enters the fluid, soon invades and fixes on the mucous surfaces and the skin, attracted to them probably by some law of adaptation, or of what may be called unnatural selection, or rather perhaps because these surfaces offer less unfavourable conditions for growth than other parts of the body; (*g*) that the plant struggles for existence on these uncongenial substrates, and is able to vegetate for a limited period only; (*h*) that when it dies out the bacterium supply is cut off, and bacterial life soon ceases; (*i*) that the febrile and catarrhal symptoms occurring whilst the vegetation is going on are due to quasi-fermentation and to growth of the sporiferous portions of the fungus in the mucous membranes; (*j*) that during this period the discharges from these surfaces contain the algoid forms of the straw-mildew; (*k*) and that these forms, conveying as they do the propagating cells or seeds of the plant, revert at once, if exposed on a suitable substrate, to the aërial form of the fungus.

This rough pathophytological outline will serve to show the view I take of the botanical position of a disease-bacterium. It is but an imaginary and unfinished chapter in the life-history of a mildew. Yet I submit that it furnishes an interpretation of the principal phenomena connected with the presence of any one of this class of parasites in living organisms, no matter by what portal they find entrance.

It is established, I consider, that a morbilloid disease results from the inoculation of straw-mildews. We therefore have one instance in which a bacterium is not the primary cause of a disease due to vegetation, although it may be one of the accessories after the fact of infection. I need not insist on the importance of this one instance to the question whether the bacteria of disease are independent plants.

Almost all the bacteria are sporeless, or are inferred to be so by Cohn, who has not succeeded in finding reproductive cells in any of them except the *Bacilli*. Now, as the same observer has demonstrated that fluids swarming with bacteria do not give off any of these forms into the air, how is it possible to account for the presence of the *Spirillum Obermeieri* in the blood of patients in an epidemic of relapsing fever? The tenacity of life in the spores of the *Bacillus anthracis* of course points to a way by which they may be efficiently disseminated. They may no doubt enter the air in a dry state, and may be imbibed by cattle or human beings. Not that I conceive that this is the chief mode by which the plague is communicated. I infer that, although sporiferous, these forms are only parts of a plant which has other forms and other modes of growth and propagation when not confined to the living organism or to fluids. I hazard the suggestion that this *Bacillus* will eventually be found by Koch or some one else growing on the dung of infected cattle in the shape of a mould or mildew. Hitherto, so far as I can learn, the *Bacillus anthracis* has been cultivated and observed only in fluids, in some of which it seems to grow with facility. I suspect, however, that if either the fresh or green spores, or the old or ripe spores, be sown on the free surface of a suitable substrate—cow-dung, for instance—it will be found that they develope with even greater facility into aërial plants.

For as I cannot suppose that living organisms are the natural or only habitats of the *Bacillus*, I must regard this bacterium as a transitional, or provisional, and not as a permanent form—an abnormal phase of life thrust upon the plant by accident. Without delaying, however, over what is, after all, mere speculation, I will content myself with saying that the phytologist will not find the view out of accord with what is known of the laws of vegetation, and that the epidemiologist will be enabled by its means to square all the known phenomena of causation and propagation—a matter that is extremely difficult on the assumption that the disease is spread by the agency of a bacterium only.

By the supposition that the spores of the *Bacillus* are contained in the excreta of the animals, that they revert on the surface of the dung to the mildew form, and that they overrun a vast extent of the surface of this substrate under favouring conditions, one may understand how the air may be poisoned far and wide by the green spores from these crops, and therefore how a large number of cattle may be simultaneously attacked with the spleen pest. Water-poisoning will, no doubt, suffice to account for some epidemics, but the history of splenic fever shows that extensive air-poisoning must be assumed in others. And the difficulty of getting the bacteria out of fluids in sufficiently large numbers to create efficient air-poisoning is an almost insurmountable objection to the view that they only are concerned in the spread of the infection.

But to return to the *Spirillum*, even if it be conceded that the *Bacilli* may, being sporiferous, account for every case of splenic fever without any necessity for assuming the intervention of other forms of vegetation, how can these sporeless, fugitive bacteria be supposed, of themselves, to have caused all the epidemics of relapsing fever?

Ephemeral, without issue, how is this class of vegetation carried on? Existing for a brief period in fluids from which they cannot escape, how can these *Spirilla* travel from body to body, so as to cause the disease? In short, neither the phytologist nor the epidemiologist can, after reflection, be satisfied with the notion of an unfertile and yet permanent form, and recourse must be had to the supposition that a *Spirillum* is the bacterium of a ferment plant, co-existent with it in the organism.

As I cannot enter upon further details, let me give briefly a few of the principal conclusions I came to some years since on this subject—conclusions I have endeavoured, unsuccessfully, to bring into notice, but which I perceive are now in a fair way of being confirmed in all important particulars within the next decade.

I conceive that most of the diseases that may become epidemic (and some that do not become epidemic)—those known as zymotic diseases, or the plagues—both of men and the lower animals, are caused by low vegetable organisms; that, for the most part, these organisms derive from, or are portions of, moulds or mildews growing on their hosts in the countries where the diseases occur; that they grow on such a limited scale on their natural habitats that the atmosphere, under ordinary conditions, is not invaded by their spores or reproductive parts in sufficient quantities to constitute efficient air-poisoning; that, therefore, certain conditions must come together before a concentration of the

spores, to the requisite extent to cause infection, will be brought about; that the chief conditions required are the accumulations, near the haunts of animals, of substrates on which stray spores of the noxious mildews will germinate, and the degree of light, temperature, moisture, etc., necessary to induce the parasites to overrun the surface of the substrates; that the most common of these substrates, and the most largely concerned in the production of epidemics, are the solid excreta of animals; that whilst mildews, innocuous to an animal, occur on its excreta, mildews will sooner or later overspread collections of them, the spores of which, taken up into the air and inhaled by the animal, will cause specific diseases in the animal; that fæcal matter, by reason that its composition is more varied than that of any kind of dung, and because of the great variety of conditions under which it is placed by different peoples, will not only support a greater amount of mildew-growth than any other substance, bulk for bulk, but is affected by a larger number of species of mildews in the aggregate than any material known; that, as a consequence, man is affected by more distinct specific plagues than any other animal; that the number and amount of mildews grown on fæcal matter in a country will be determined by the flora of the country, and by the excreta-disposal system of the inhabitants; that the sum of the plagues in a country, therefore, will be in a direct ratio to the extent of the surface of fæcal matter exposed in it.

Leaving these conceptions to be worked out to all their results by those who have a mind to the study, I would now add my small tribute to swell the sum of praise fairly earned by Dr. Roberts. Whilst I accept some of his views with qualification, I regard them as giving a large instalment of the truth on this question, and I cannot but felicitate him upon his lucid and most masterly Address. As a whole, it is a splendid contribution to the literature of the "germ-theory," and it will hereafter be an era in its history.

Melbourne, Victoria.

EFFECT OF TOBACCO ON THE HEART.

By GLYNN WHITTLE, B.A., M.B. Cantab.

A young man consulted me for palpitation of the heart. His pulse was 48; cardiac sounds normal. I inquired if he smoked tobacco, and found he had lately commenced the habit. I gave him no prescription, but recommended him to discontinue the practice. He followed my advice, and the palpitation left him. On my seeing him shortly afterwards, he said there had been no reappearance of his symptoms, and his pulse was never under 60. I have observed that tobacco, although commonly called a cardiac sedative, frequently produces quickness of the pulse with palpitation, followed by diminished frequency of the heart's action with a continuance of the palpitation. As these irregularities in the heart's action and rhythm cannot but be injurious to the organ, I think tobacco should be forbidden in chronic cardiac disease, or, if the patient will not consent to abandon his pipe altogether, the effects of smoking on his circulation should be carefully watched.

Liverpool.

Fijian Surgery.—At the Medical Society of Victoria, the following note was read from the Rev. L. Fison:—"*Thoka-losi* is a surgical operation in which a bougie is passed into the urethra of males, to make it firm. An incision is then made into the root of the penis to obtain blood; and a cord is passed through the meatus and out at the incision, and continued there in order to keep up a discharge of blood. The string is pulled every now and then. The bougie is called *losi* from the tree of which it is made, and *thoka* means to pierce. I am not aware whether this operation is performed for any specific disease, but have reason to believe that it is considered to be useful in general when the ordinary remedies fail. Fijians have quite a *penchant* for surgical operations. They cut and hack each other for very slight ailments. Their way of blood-letting is very simple, being the infliction of a great gash on any fleshy part. They often castrate as a useful operation; and I have known cases in which the patient has performed this interesting operation upon himself."—*Australian Med. Jour.*, June.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

CASES OF DISSEMINATED SCLEROSIS IN CHILDREN.

(Under the care of Dr. DICKINSON.)

Notes by Dr. George Garlick, Registrar.]

Case 1.—J. M., a boy, aged four years and eight months; admitted July 26, 1877, under the care of Dr. Dickinson. No history of phthisis or of syphilis in the parents. The father has deserted his wife for three years. There was one other child, who died of consumption; no miscarriages. This child walked at fourteen months, had no fits whilst teething, and appears to have enjoyed good health. When two years old he fell down about ten stairs, his neck being bent under him, and a slight bruise was noticed on his forehead. For about three weeks after the fall he used to complain of headache; ever since has frequently said he had pain in the left arm and neck, but continued to use them well. Nothing fresh was seen till two years later, when he trembled in the left hand on picking up things, but did not drop them. In this state he remained about a week. Trembling ceased, but soon returned, since which it has been getting slowly worse. For the last three months the boy has walked awkwardly on the heels and raised the left leg much, but no twitching has been observed in legs. Talks always clearly and sensibly. Has always been clean in habits. Is stated to have squinted slightly from the onset.

State on Admission.—Nothing special about the shape of the head; no scar present. Is an intelligent boy, and talks clearly. There is no tremor or palsy of face; an internal squint of left eye; pupils equal and natural; no nystagmus; sight and hearing good. Left arm flabby and a little wasted; muscular power deficient, but no paralysis; sensation natural. On attempted movement of left arm a coarse shaking motion commences immediately, and so strongly as to prevent his grasping; thus, he cannot pick up the stethoscope when placed upright before him, but knocks it over. These tremors start almost entirely from the shoulder, and consist of flexion, extension, abduction, and adduction. If the shoulder be held he performs movements fairly with the elbows, wrists, and fingers. In the fingers there is no tremor, in the wrist a very little, in the elbow more, and in the shoulder most of all. The movements of the right arm are natural. There is no shaking of the head and neck, the boy sitting up in bed quite quietly. In the left leg, when this is raised from the bed, there is a little of the coarse tremor present—movements of flexion and extension of the hip. When put on his feet he stands and walks alone; there is no swaying of the body; he raises the left leg high, brings the foot down flat, but it trembles, especially just before reaching the ground, the leg moving up and down; can support his weight well on it. Shutting the eyes makes him a little more unsteady. The muscles of the left arm react well to faradism. In the optic discs there is a slight general obscuration of the margins; no changes in the vessels. The urine contains a decided trace of albumen. A faint systolic murmur is audible over the heart's apex, but there is no evidence of hypertrophy. Lungs natural. Child is clean in his habits.

August 10.—Trembling movement in the left leg a little increased. Temperature normal.

23rd.—A slight feverish attack to-day; temperature 101° Fahr. Boy is drowsy, and complains of frontal headache and of pain in the left leg. The tremor is much more pronounced in the arm and leg. In the evening he bled from the nose about an ounce, and appeared much relieved.

28th.—Another attack similar to that on the 23rd. Now there is headache, also pain localised at the dorsum of left hand and in the sole of the left foot; no tenderness on pressure, and nothing to be seen. More tremor.

October 5.—Since the feverish attack there has been more tremor in the left lower limb, which now affects both the hip and knee, and to a less extent the ankle. He walks very badly; raises the left foot quite five inches from the ground each step, and brings it down with a stamp and

shaking movement; still muscular power good, and no wasting. Little change in his condition otherwise. The urine contains constantly a trace of albumen. There is nothing fresh in the optic discs. Discharged to-day *in statu quo*.

Treatment.—Two grains of iodide of potassium and one minim of liq. strychniæ thrice daily for a fortnight. One-sixth of a grain of nitrate of silver thrice daily for another fortnight without obvious result.

Case 2.—Mary J. B., aged five years and four months; admitted January 11, 1877, under Dr. Dickinson. The child's father has drunk to excess for many years, commencing before the birth of this child. There is no distinct specific history, but after the birth of the third child the mother states that her own hair fell off, and she came out in a rash, followed by staining, for which she took mercury. She has been married for twelve years, and has two other children who have had no specific symptoms. She has had no miscarriages. This child is the youngest. She snuffled when born, walked at fifteen months without any trembling, and was considered intelligent. The commencement of her present illness dates from about two years ago, when she was three years old. She was observed to drag the right leg, and to shake a good deal in walking. This lasted about four months, after which the child improved somewhat, but commenced to suffer from falling fits, in which, apparently, there was no twitching or loss of consciousness, but the child was unable to rise from the ground; always slept after them. They came on mostly when she was excited; yet the child walked about fairly till July, 1876, when she became weaker on the legs, falling especially on the right side. About the end of November trembling commenced, and rapidly affected the body and all the limbs, so that she became quite unable to stand or feed herself. Clean in her habits always. Speech indistinct lately.

State on Admission.—Child has a large head, with a high prominent forehead, and a large face, with rather a foolish expression. She is not very bright, but it cannot be said that she is an idiot. She has no squint, no nystagmus, and no facial palsy. Hearing acute; nothing abnormal ophthalmoscopically; vision difficult to test, as she cannot read or count. She speaks in a monotone, but can, if she tries, pronounce well. When she becomes excited her head shakes in abrupt jerks from above down. As she lies on her back she is quite at rest; but when she sits up, at first the trunk jerks to and fro, and there is a coarse tremor of both arms. When she attempts to grasp, the tremor increases, but it is not excessive, and does not prevent her from getting hold of anything. Grasp with the two hands is equal. When she is put on her feet, the trunk, arms, and head begin to jerk; her knees frequently give under her. She lifts her feet rather high, and brings them down with a stamp. Body and arms are fat. The thighs are also fat, but the legs are a little deficient in the calves. Sensation natural. She was ordered one-twelfth of a grain of nitrate of silver three times a day.

February 20.—Child exceedingly good-tempered. She sits in a chair all day long, talking in a nasal monotone; laughs readily and for a long time when once she has begun. Frequently sings hymns, with certainly some idea of the tune, but is very shaky in the upper notes. Talks about what she did at home. The movements of the arms are not improved. She cannot cut her food. She feeds herself with a spoon held in one hand and steadied by the other, and often fails to put the spoon to her mouth. She is unable to stand without leaning against something. When she attempts to stand alone her whole trunk shakes violently to and fro.

23rd.—The nitrate of silver not having done any good was omitted, and one grain of valerianate of zinc given thrice daily instead. This was replaced on March 14 by fifteen minims of liquid extract of ergot thrice daily, increased to thirty minims on the 16th, and afterwards to twenty minims on the 20th.

March 23.—The note made is that the child frequently vomits one hour after her medicine, and complains of headache every day. She often falls from the chair on which she sits, especially if trying to get hold of anything. Does not feed herself as well as she did; grasp of hands weaker than before. There are now marked irregular movements of the legs on any effort. The right leg is weaker than the left. She is still very fat and heavy, especially the trunk, arms, and thighs. The ergot omitted, and one-fiftieth of a grain of phosphorus given three times daily.

April 3.—No improvement, but no reason to think that phosphorus has done harm. R. Liq. strychniæ ♏j. ter die.

17th.—Irregular movements more marked. Cannot feed herself at all. Seems more "daft" than she was. Laughs at everything. Still very fat.

On the 20th she was again put on the nitrate of silver treatment—one-eighth of a grain thrice daily. After this she had five grains of iodide of potassium thrice daily for ten days, without improvement; and on May 25 was ordered a quarter of a grain of the green iodide of mercury twice, and subsequently thrice, daily.

June 5.—For the last ten days the child has passed her urine and fæces under her without telling the nurse. She is more stupid; it is difficult for her to sit up, and even with support to stand, and she cannot now take a step. Sensation natural. Still fat. As the gums have become spongy and the tongue sore, the green iodide is now to be given only twice daily. On June 17 mercury omitted.

July 8.—Discharged, not improved. Her temperature in the armpits had generally been below normal. When she had slight ptyalism, for one day only it rose to 101° in the morning and 100° in the evening.

LONDON HOSPITAL.

FRACTURE OF LEG—MAL-UNION—OSTEOTOMY WITH CHISEL AND MALLET—NO SUPPURATION.

(Under the care of Mr. MAUNDER.)

[We are indebted to Mr. Witham Whitford for the report of this case.]

H. D., aged twenty-nine, a vigorous, healthy man, received, when abroad, some sixteen months ago, a simple fracture of tibia and fibula slightly below the middle of the leg.

The patient presented himself to Mr. Maunder six weeks ago, complaining of his limb being useless to him, so that in consequence he could not attend to his employment as an engineer. The limb, on examination, was found to be greatly deformed, the lower end of the upper fragment of the tibia projecting inwards, and being firmly joined to the upper end of the lower fragment. There was also some antero-posterior deformity.

At the patient's request, Mr. Maunder decided to operate. On November 28, 1877, the operation of osteotomy of the tibia and fibula was performed. It consisted essentially in making small linear incisions over the tibia and fibula, carrying the knife down to the bone. Before withdrawing the knife, the chisel (which is employed in the subsequent part of the operation) was glided along its surface, so that the former was used as a director. The section of each bone was effected by chisel and mallet. The chisel, which has been designed by Mr. Maunder, is of special construction.

A precaution against subsequent suppuration, on which the operator laid considerable stress, was employed. This consists in drawing the integument aside laterally as much as possible previous to making the first incision, so that the skin-wound and the section of the bone may not correspond. From anatomical considerations, this could be very imperfectly carried out in the case of the tibia. A further risk to suppuration in this bone was pointed out—viz., the comparatively superficial position of its divided ends.

In the case of H. D. the bones were divided slightly below the old seat of fracture, on account of the thickening which had been produced by the permanent callus. The mode of dividing a bone with a chisel, as introduced into English practice by Mr. Maunder, has one important advantage over the method by the saw—viz., that of leaving no *débris* between the surfaces of divided bone,—and hence removes a potent cause of subsequent suppuration. No antiseptic treatment was employed at the operation. Over the two small wounds pads of dry lint were fixed by strapping. The limb was placed in a McIntyre's splint, with two side-splints provided with foot-pieces, all three suitably padded, and the limb suspended from a cradle. An ice-bag was applied over the seat of the wounds. The temperature on the evening of operation was 99°; on the morning of the first day after, 99·6° (max.); second day, 99·2°; third day, 98°. The subsequent temperature varied little from 98°, and never exceeded normal. The pulse never exceeded 80. For the first two nights after the operation the patient complained of inability to sleep from pain about his toes. Morphia was given, and the splints were slightly readjusted. Afterwards

he felt quite comfortable, slept well, had a good appetite, and in every respect appeared to be in excellent health.

On January 3, 1878 (five weeks after the operation), the splints and strapping were removed. The limb was found to be firmly united in a good position, and the wounds perfectly healed. The fact that the lint over the wounds did not require removal during the five weeks points even more strongly than the range of temperature to the entire absence of suppuration. The limb has since been put up in a gum and chalk bandage.

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SATURDAY, FEBRUARY 2, 1878.

MEDICAL SOCIETIES AND MEDICAL WOMEN.

A letter which we publish to-day from Dr. Wilson Fox brings into immediate prominence one of the difficulties attendant on the entrance of women into the medical profession. The question which Dr. Wilson Fox raises for the consideration of the profession is not a new one, for it has more than once been brought before some of our medical societies; but it is a very important question, and as now raised affects the largest and most powerful of our associations. The question, as put by Dr. Fox, is this: "How far public discussion on medical topics at which men and women are present, and on which no restrictions are placed, are consistent with the rules of propriety and delicacy, which have hitherto been generally held to obtain in the relations between the sexes?" Dr. Fox holds that such discussions are inconsistent with the rules to which he refers, and therefore objects to being a member of any society where medical topics are debated in public between men and women; and finding that this may happen, and has happened, at meetings of the British Medical Association, he has, as a logical consequence, resigned his membership of that body. It was somewhat unfortunate, we think, that he inquired of the Council of the Association whether "women are to be permitted in the future to attend the meetings of the Association," and to take part in the discussions, as the reply, almost necessarily, was that the Council, or the Committee of Council, "have no power to prevent ladies who are members of the Association from attending the meetings of the Association," about which there was not, and could not have been, any doubt; while the real question is, Are women to be admitted members of the Association? To this, we suppose, the reply would be, that any legally qualified member of the profession is eligible as a member of the Association; and that, therefore, ladies who are legally qualified medical practitioners may become members of the Association, though their election as such is dependent on the votes of the Committee of Council, or of the members of the Association, or of each branch of it. And thus the matter is, as Dr. Fox says, one for individual opinion. So lately as in 1876 papers were issued to all the members of the Association, asking them to reply Yes or No to the query whether women should be admitted to the membership; and of the answers received, a very large majority—3000 out of 4000—were in the negative. A very large proportion of the members were too indifferent or too careless to reply at all; and some, perhaps, unlike Dr. Fox, had not the courage of their opinions: at any rate, only about two-thirds of the papers sent out were returned; but the result was that, though by the laws of the Association every legally qualified medical practitioner is eligible to the membership, three out of four of the members objected to the election of female practitioners. No alteration was made, however, in the laws in accordance with this vote, and consequently legally qualified female practitioners *may* be elected into the Association, and subsequently to any office in it, by the votes of any of its branches, or—which is more important—by the action of the Committee of Council.

Now, to admit women to the profession is one thing; but to admit them to our societies is quite another thing. And a man may hold that women ought to be allowed to enter the profession, or may no longer resist their doing so if they can, though he thinks they are making a great mistake; and yet may refuse their entrance into our societies and associations, without being inconsistent. To refuse the latter does not prevent or interfere with their adopting a career for which they think they are especially fitted; and many men may very strongly object to women being present at or taking part in discussions on medical topics. It may be replied, and has been, that "To the pure all things are pure"; and so they are, or ought to be, so long as their discussion is a matter of necessity. But it is no matter of necessity that medical women—or ladies, as the Committee of Council prefer to call them—should assist at the public discussion of all medical topics with medical men; and it has ever and always been the custom in civilised society for men to scrupulously avoid the mention of, much more discussions on, certain functions, diseases, and parts of the body in the presence of the other sex. This, it is said, is a prejudice, an outcome from habit and education. We do not think so. We should rather say that it is an instinct that becomes developed in proportion as nations become civilised, and we cannot but regard any effort or tendency to repress or suspend it as an unmixed evil.

Looking at the votes given in 1876 as to "the admission of female practitioners to the membership," the question arises, Will many of the 3000 members who voted against it follow Dr. Fox's example and withdraw from the Association? It would be a grievous thing were such a dispute to imperil the prosperity of the British Medical Association, and we are inclined to doubt whether it will cause the resignation of any number of members. Attendance at meetings of the Association forms but a small part of the advantages of its membership, and men may consider that it is worth while to belong to it and yet to determine not to attend its meetings; and further, it may be expected that after the general vote

of 1876 no more female practitioners will be elected members, and that therefore the possibility of the presence at meetings of the one or two now having that honour may be regarded with equanimity.

"A YEAR'S WORKING OF A PROVIDENT DISPENSARY."

Such is the heading given to the following note, forwarded to us by (we suppose) the authorities of the Dispensary themselves:—

"At the meeting of the Committee of the Royal Victoria Dispensary at Northampton, held on January 25, Mr. Becke, the honorary secretary, reported that the net amount due to the three medical officers for their year's services was upwards of £1800, after payment of drugs and all other expenses. The sum payable to the senior medical officer was nearly £1000. Mr. Becke believes this is the largest sum ever paid by any provident or charitable institution to a medical officer for a year's services."

To this remarkable institution we have had more than once occasion to call attention. We do not, however, desire to hold it up as a thing to be imitated; it is rather as a warning that we again bring it under the notice of the profession. It has been spoken of as the greatest example of what the provident system can do. We doubt if anywhere more evil could be done, as far as our profession is concerned, by any system, provident or improvident. As in all provident systems, the Royal Victoria Dispensary purports to be founded on the principle of securing medical attendance during illness on the regular payment of a small sum. Besides this, there is, we believe, some kind of subscription from the public for the expenses of buildings, and so on, not met by this fund. It is, moreover, commonly supposed that to make up for this eleemosynary character the medical aid is afforded to poor people who deserve help the better to help themselves; and that on this account the medical men attending on behalf of the provident institution are content with receiving very small fees.

Northampton is a borough containing about 45,000 inhabitants, but within the municipal boundary not many more than 41,000. It contains, according to the "Medical Directory," twenty-five or twenty-six professional men in active practice. Out of these, three have, by some process of selection, been made the sole medical attendants at the Royal Victoria Dispensary. Their names are Dr. Barr, Mr. Moxon, and Mr. Evans. In the year 1872 it was reported that the payments made to the Dispensary during 1871 represented 12,820 persons. Since that time the numbers paying must have increased, for in 1871 £1619 13s. 5d. was divided among these gentlemen—in very different proportions, it must be confessed,—whereas on the present occasion "upwards of £1800, after payment of drugs and all other expenses," was distributed among them; "nearly £1000" going to the senior medical officer, who, we presume, is Dr. Barr. On certain matters the present abstract of report is more reticent than it was in 1872. This year we are told that the sum of £1800 "was available after paying drugs and all other expenses"; then it was said that out of the total subscriptions (no longer mentioned in the note of this year) "a *portion* had been applied towards the general expenses, as provided by the rules, and £267 4s. 10d. had been paid for drugs and corks." The two statements are somewhat different, but that may be unintentional. At all events, it must be confessed that drugs and corks representing 13,000 people were cheap at £267.

We have indicated that the numbers belonging to this Society are gradually increasing, but it is clear that the limit is not nearly reached, for it is said that, according to the rules of the Royal Victoria Dispensary, 30,000 out of the 40,000 or 45,000 inhabitants of Northampton are eligible for admission to its privileges.

Thus, in the year 1873 the numbers had increased so that £1641 5s. 5d. was distributed, Dr. Barr, as usual, getting the lion's share of £819 10s. 6d., Mr. Moxon £496 16s. 1d., and Mr. Evans £324 18s. 10d. For this year (1873) the numbers are not stated, but the fact that the sum payable by members is only a penny per week, and that more than £1750 in all was so paid, is suggestive. In 1873, too, there were twenty-eight members of our profession practising in Northampton; now there are, we believe, only twenty-five. Again we would say that this is suggestive in more ways than one; for if 30,000 of the inhabitants of Northampton are eligible to the benefits of the penny dispensary, it is quite clear that the medical men not connected with it must charge correspondingly low fees to keep any patients at all. Such a system is pauperising to our profession, even if professional philanthropists claim the same system as a regenerating agent in the case of the poor. How this can be we do not well see. If a man has to pay a fair price for every other commodity, we cannot see anything ennobling in enabling one medical man to undersell another by accepting only a penny a week for advice and medicine when the patient ought, and can afford, to pay more. We do not envy the position of these Dispensary practitioners in this respect. Did they come forward boldly and establish a shilling dispensary, or something of that kind, we could understand their *locus standi*; but here they are officers to an institution which pretends to be both charitable and self-supporting—a combination which we do not well understand. It is quite plain that these gentlemen cannot attend to all cases themselves, and it is currently reported that the greater part of the work is done by assistants. This system we consider altogether wrong. In a town like Northampton, where the average income is not great, a provident dispensary, or rather a sick club, could well be conducted with advantage to all concerned; but then all the practitioners in the place ought to have an option of joining in its working; and no system can succeed satisfactorily except this principle be embodied in it.

There are still two points on which we much desire to be enlightened. The one is, what is the prevalent custom on the part of the Dispensary medical officers when called upon to attend a case of long and serious illness? We have been informed (and the statement has never been contradicted) that the ordinary practice is to send such patients to the Infirmary, there to be maintained and treated, even though they have regularly paid their penny a week. Perhaps this is unavoidable, but it shows the folly of any self-supporting system of medical relief which does not also include a scheme for the maintenance of a man and his family during sickness.

The next point does not directly concern the medical officers,—it concerns the lay authorities. We would ask whether it be true or not that this organisation is used for political purposes—whether, in point of fact, this pauperising of men, by allowing them to pay the inadequate sum of a penny a week for medical attendance and medicine, when they can well afford more, is not a political engine to hold them under control when voting time comes? This too we have heard, and it too remains uncontradicted. At all events, many of the penny subscribers belong to the more enlightened class of our rulers.

UNSUCCESSFUL CASES.

Were any layman entirely ignorant, either personally or vicariously through relatives or friends, of thing surgical, innocent of hospital-visiting, and never having been

on a hospital committee,—or were even any ingenuous young medical student to consult the various professional journals with the view of thereby learning what amount of success had attended the practice of surgery in any given year,—he would doubtless be charmed to find what a number of brilliant triumphs had been published; and would also, depending on the records he had consulted, draw the comforting conclusion that failures and unsuccessful cases were extremely rare. But would the inference be a true one? We trow not.

We are well convinced that on the whole the surgery of to-day is successful, and deserves all praise for the good it does, and the amount of suffering it relieves and cures; but we are equally convinced that but a very small proportion of unsuccessful cases is published, at any rate as compared with the successful cases which find their way into the journals. Why is this the case? Why do not men bring before the profession cases which do not succeed in attaining the object sought, or which terminate fatally for the patient?

There are two main reasons, we suspect, for this—first, the fear that their reputation and success in life will suffer from the association of their names with "unsuccessful cases." This cause *should* operate chiefly with younger surgeons who are fighting for name, and it may be for very existence, though we believe it is a mistake even in their position. It is, however, by no means these younger men alone who shrink from publishing their failures. Men who have already made their mark with the profession and the world are often quite as much afraid of confessing to want of success. The second reason—and one which we hope is comparatively very rare—is that operations are sometimes undertaken and carried out without that full and careful planning and consideration which every surgical procedure, however small, demands. The smallest surgical operation endangers life to some extent, and every possible contingency should be weighed before it is undertaken. We feel convinced, however, that all really good surgeons will admit that there are cases hidden away in their remembrances or their case-books which failed from the above causes, and which remain so hidden away because of a consciousness that their publication would lead to the detection of the cause of failure. Admitting, then, that for such reasons more "unsuccessful cases" do not see the light, let us examine the question from other aspects, and ask—Is it just to the profession at large and to the public to publish successes and keep back failures? The answer to this comes readily to the tongue of everyone—Certainly not! Yet many of those who so answer continue to do what they condemn.

Is it good for the individual surgeon as a man, or is it good for his reputation, to act thus? To this we answer most unhesitatingly, No! And we would endeavour to impress this answer upon surgeons in general, appealing more especially to those who have already attained name and fame, with the advantages they bring, to publish all their cases, or if they cannot do this, then rather to select the unsuccessful for publication than the successful, publishing these with clear explanations as to the cause of failure; for by so doing they will not only teach their less experienced and influential brethren more, but they will make it much easier for younger men to publish failures. As things stand at present, the brilliant successes of some great surgeons are so much not only before the profession, but the public, that the latter seem to think failure is unknown to them; and therefore if younger men publish "unsuccessful cases" they do so with tremendous risk to their reputation and success in life. But let it once become the custom, as it is undoubtedly the duty, of all to publish faithfully "unsuccessful cases," and the opportunity which will be afforded for seeing and avoiding sources of error and danger will soon render "unsuccessful cases" rarer—for we all learn more from our failures than we do from our most brilliant successes; and so we shall learn more from a careful study of the failures of others than from that of their successes.

While thus pointing out the duty which is more especially incumbent upon the leaders of the profession, we would insist that it is a mistake for the younger men to publish only their successes. And thus we would urge, on the lower ground of self-interest, as well as on the higher one of public duty, a more free publication of "unsuccessful cases." A man may spread his name and fame much by publishing successful cases, and may doubtless do much good by the diffusion of useful knowledge as to the causes of success: but once let it be noted that anyone publishes only successful cases, or these out of all proportion to the unsuccessful cases, and the profession soon become suspicious that there is something hidden. It is needless to point out that such a feeling once started is very difficult to destroy. Confidence is gone among the professional brethren of the individual; and that want of confidence inevitably spreads sooner or later to the public. And as with the individual, so with the profession at large. Just as the man who fearlessly publishes everything becomes a nobler and a better man, and gains by the consciousness of this himself, so the profession, as a whole, would benefit by increased confidence as between man and man and with the public. That our scientific knowledge would grow more rapidly, no one will dispute; and we trust that we have shown good cause why, for our own sakes, as well as for that of others, the publication of our "unsuccessful cases" should be regarded more as a binding duty which we owe to society than it is at present.

The dissecting-room is invaluable to the surgical student: but when his anatomy is once learned, and as he grows from the student into the practitioner, he forsakes the dissecting-room for the pathological theatre; and if he be a wise and good practitioner he never forsakes the latter to the end. The profession has studied long enough the anatomy of success; and while keeping its knowledge in this respect bright by occasional repetition, it can well afford to devote itself with special earnestness to the pathology of failure.

THE WEEK.

TOPICS OF THE DAY.

In the Exchequer division of the High Court of Justice, last week, a somewhat remarkable case was decided, involving a question of importance to employers and servants. An action was brought by a clerk against his employers for balance of wages, and he was nonsuited, leave being given to appeal, and this appeal was now heard. The plaintiff entered the defendant's service as a clerk at a salary of £120 a year, with a month's notice. At the end of the first month symptoms of a "certain disease" developed themselves, which rendered an operation necessary, and the plaintiff was sent by his doctors to the seaside. Before he returned the defendants dismissed him and engaged another clerk. It was contended for the defendants that, in every contract of hiring and service, capacity to serve is a condition precedent to the right to sue, unless the plaintiff was excused by something not his own default—*e.g.*, accident, or the act of God. The defendants were entitled to dismiss the plaintiff from the moment he absented himself. This was equivalent to an intentional absence, and, coupled with the moral delinquency, amounted to such misconduct as to justify dismissal. The disease was contracted before the bargain was made. Without hearing counsel for the plaintiff, Baron Cleasby delivered judgment, observing that there was nothing to show that

plaintiff concealed anything that he ought to have disclosed, whereby he would be prevented from performing a service of this kind. Illness supervened, which is *primâ facie* regarded as the act of God, over which the plaintiff had no control. As to how the disease arose, there might be all sorts of difference of opinion, and the utmost uncertainty might prevail as to the original matter that had brought it about. Mr. Justice Hawkins also concurred, remarking that he based his opinion on the fact that there was no evidence to show that at the time the plaintiff entered the service he did not believe he would have been able to fulfil his contract. The rule was therefore made absolute to enter a verdict for the plaintiff for the sum claimed, and leave to appeal from this decision was refused.

Another of those diabolical crimes, where the victims are sacrificed to obtain the money for which their lives are insured, is reported from Warrington. A labourer named Heeson, and Ellen Johnson with whom he cohabited, have been committed to Chester Assizes for the wilful murder of Sarah Heeson, their child, and Lydia Sykes, the female prisoner's mother. Witnesses were called to prove that insurances were effected by the prisoners in the Prudential Assurance Company on the lives of the deceased, and that the premiums were paid by the female prisoner, although both prisoners immediately after the deaths came to draw the amounts of the insurance. The county analyst deposed to the fact that there was enough arsenic in the stomach of Lydia Sykes to kill three people, and that the child also was poisoned with arsenic. An order has been received for the exhumation of the body of another child of the prisoners, but it has not yet been carried out.

Last week Mr. Payne, the City Coroner, presided for the first time in the new court which has been recently erected by the City Commissioners of Sewers in Golden-lane, Barbican. A commodious range of buildings has been provided in connexion with the City Mortuary there, consisting of a handsome court-room fitted with every convenience for coroner, jury, counsel, witnesses, and the public; also a mortuary chapel, post-mortem room, and retiring room for consultation.

The following story comes from America, and from a non-professional journal, and must therefore be taken "with all reserve"; but the medical question and the conflict of evidence are not unknown on this side of the Atlantic. A certain Ira Melendy, residing in Vermont, sustained an injury through something defective in the highway, and he brought an action against the town of Bradford, recovering $5000 as compensation. In support of his claim he asserted that his legs had become perfectly paralysed. The defence stoutly maintained that he was shamming, and medical experts were called to prove this. They proceeded to stick pins into his legs and make incisions in them, into which they introduced ammonia; yet he never winced, and his muscles never contracted. Some of the physicians testified that such a paralysis as was claimed to exist was an impossibility; but the jury, who were practical men, did not believe that anybody could have nerve enough to stand such tests if there were any feeling in the parts experimented upon. The defendants have appealed, so that Mr. Melendy will probably have to submit to similar tests again.

A Bill before the House of Commons, promoted by Mr. Pease, Mr. Walter James, Mr. Mundella, and Mr. Leeman, recently printed, proposes to amend the law relating to vaccination so far as accumulating penalties are concerned. The Bill runs thus:—"After the passing of this Act no parent of a child shall be liable to be convicted for neglecting to take, or to cause to be taken, such child to be vaccinated, if either he has been previously adjudged to pay the full penalty of 20s. for any of such offences with respect to such child, or he has been previously twice adjudged to pay any penalty for any of such offences in respect of such child." This Bill is appointed to be read a second time on April 3 next.

The National Health Society held its annual meeting last week, upon which occasion the Duke of Westminster was elected President, and it was announced that the Princess Louise had expressed her willingness to become a patroness. A communication from the London School Board was read, on the subject of utilising the playgrounds of the Board Schools in London, by fitting up in some of them suitable gymnastic apparatus. The annual report of the Society showed an extensive series of operations, by lectures to mothers' meetings and working men's clubs, the circulation of tracts on health, papers, and sanitary directions, etc. It was stated that the Society was prepared to organise sanitary teaching among the poor on a much more extended scale, on application from the clergy and others.

In expounding the difficulties which beset the proper carrying out of the Sale of Food and Drugs Act, Dr. Dupré, the President of the Society of Public Analysts, at the annual meeting recently held at Burlington House, called attention to the fact that the Glasgow magistrates had positively refused to convict tradesmen selling adulterated food, on the evidence of inspectors, because they (the inspectors) were not prejudiced by the purchase. Dr. Dupré explained that if such a decision were allowed to stand, the Act would soon become useless, and it would therefore be well if Scotch magistrates could be induced to interpret the Act after the fashion adopted in this country. The Act, he further stated, had suffered from the mistakes made by the officers of the Inland Revenue, but this difficulty will, no doubt, be obviated as the experience of its working increases. It is not, however, satisfactory to learn, on the testimony of the President, "that the practice of adulterating food has now grown to such an extent that journals devoted to trade interests are even obliged to admit it"; and such being the fact, we are bound to concur with him, that it is the duty of all analysts, and the authorities generally, to endeavour, as far as possible, to stop such a state of things.

The serious outbreak of fever at Whitehaven has not yet been checked; last week a special meeting of the local authorities was held to consider what measures should be adopted by the Board to stamp out the disease. It was resolved that notices be sent to all owners of property in infected districts to disinfect their houses, and, when medical officers consider it necessary, to order the destruction of bedding, etc. The medical officer reported that there were twenty-six fever patients in the hospitals.

It is with much regret that we have to notice the recent annual meeting of the subscribers to the Portsmouth, Portsea, and Gosport Hospital, on account of the unseemly proceedings which took place thereat, which it is quite impossible to ignore. A resolution was proposed, recognising the exertions of all parties connected with the Hospital Sunday and Saturday collections, and this was taken as a signal by a certain party, headed by several of the local clergy, to commence an attack on the religious tendencies of the present Chaplain to the Hospital. It was in vain that several of those most intimately connected with the institution explained to the meeting that there was not the slightest accusation to be made against the chaplain for the manner in which his duties were performed; the religious section had come there to "do its duty," and the interests of the Hospital were, to them, only a secondary consideration. After wasting nearly the whole day, and by their conduct undoubtedly doing much to injure the prosperity of the

charity, the amendment was withdrawn and the original resolutions were put and carried. We will not say more than this: the Church unquestionably has many zealous servants, but their common sense is often in an adverse ratio to their zeal.

Last Sunday, at Sheffield, was appointed for making the usual collections in the churches and chapels of the town on behalf of the Infirmary, Dispensary, and Women's Hospital. In the face of the present depressed state of trade it was expected that there would be a falling off in the total sum realised this year, and these anticipations were unfortunately correct, the amount at first ascertained to have been realised (about £2000) being less than that obtained last year; and though several collections have yet to be paid in, it is feared the result will not be much affected.

The Victoria wing of the Royal Free Hospital, Gray's-inn-road, consisting of three new wards and a spacious out-patient department, was opened to the public last week without any public ceremony. Each ward is 105 feet long and twenty-two feet wide, and contains sixteen beds. The new wing has been erected at a cost of about £13,000, and the proposed new additional buildings, which are to provide accommodation for the nurses, as well as isolated wards for the reception of contagious and infectious cases, are estimated to cost another £8000. The opening of the Victoria ward thus places fifty additional beds at the disposal of the committee. Two ladies have kindly presented two handsome drinking-fountains—one for each of the out-patients' waiting-rooms.

A public meeting was held at Cambridge, on Monday last, under the presidency of the Vice-Chancellor of the University, the Rev. Dr. Atkinson, of Clare, in aid of the completion of the permanent building of the Hunstanton Convalescent Home. Some of the principal members of the University and inhabitants of the town were present. It was shown that more than 1000 patients have been admitted since the opening of the temporary building in 1872. There is still a sum of £800 required to provide the Home for forty patients, and it was determined to make a vigorous effort to obtain this amount, a subscription being commenced upon the spot.

HEALTH OF THE ROYAL NAVY FOR THE YEAR 1876.

Although not published quite within a year of the period to which it refers, the Statistical Report on the Health of the Navy for 1876 has been issued very little after that time; not that we imagine its blue cover is anxiously looked for in many circles, nor can we go so far as to say that it contains profitable reading for the general bulk of the profession. To those, however, whose peculiar tastes or necessities include a study of the subjects to which its pages refer, it will be interesting to learn that on the Home Station there was a greater prevalence of eruptive fevers than in the preceding year. Outbreaks both of scarlet fever and measles occurred in the boys' training-ships at Portsmouth, Plymouth, and Portland, and the latter disease was introduced into the training-ship for naval cadets at Dartmouth. The death-rate on the Home Station was also considerably higher than in the previous year; the principal causes of the increase being the explosion of a boiler on board her Majesty's ship *Thunderer*, and an exceptionally large number of cases of accidental drowning. Forty-five persons lost their lives by the explosion, and of those no fewer than two officers and thirty-three men belonged to the service afloat. The number of officers and men invalided during the year was 703, and the number of deaths 197—the former being in the ratio of 33·79 per 1000, and the latter in that of 9·47 per 1000. These ratios show an increase, as compared with the previous year, of invalidings to the extent of 3·79, and of deaths to that of 2·07 per 1000. The increase of invalidings appears chiefly under the heads of phthisis, rheumatism, epilepsy, diseases of the ear, and varicocele. It may be mentioned that the loss of life by drowning is double that in the preceding year.

In commenting on the health of the service on Foreign Stations during the year under notice, the Report proceeds to state that on the Mediterranean Station the fleet was remarkably healthy, and the ratio of deaths was 3·89 per 1000 less than in the preceding year. Scarlet fever broke out in the *Hercules* at Malta in the early part of the year, and forty-six cases were placed on the sick-list between January 24 and April 3; the type was mild, and several of the cases were so slight that they would not have attracted notice if the disease had not been prevalent. Some interesting topographical remarks on Besika Bay, where the British Fleet has been for some time lying, are given by Staff Surgeon W. Connolly, M.D., and he considers that the decrease in remittent and intermittent fevers from what has been formerly experienced by our squadrons using this anchorage is mainly attributable to the fact that early recourse was had to the use of condensed water in all the ships, instead of procuring supplies from the shore, where the water, although marked in the Admiralty chart as "good," is of doubtful quality. The standard of health on the North America and West India Station was not quite equal to that in the previous year. Three cases of yellow fever occurred in the *Rover* at Barbadoes, and one in the *Aboukir* at Port Royal, all terminating fatally. The cases in the *Rover* are considered singular, as Barbadoes enjoys the reputation of being the most healthy island in the West Indies, with a complete immunity from the disease for many years. There was also a large increase in cases of remittent fever on this station during the year.

The South-East Coast of America Station showed an unusually low sick-rate, and a still further reduced death-rate; yellow fever, which caused much mortality in 1874, and was also present in 1875, having entirely disappeared. On the Pacific Station there was an increase in the amount of sickness, though not of a generally serious character; and in the *Repulse*, whilst lying at Coquimbo, influenza was epidemic, no less than fifty-eight cases occurring, but fortunately unattended with serious bronchitis or pulmonary mischief. The medical officer, Fleet-Surgeon W. Hoggan, states that the weather was hazy, chilly, and damp in the mornings and evenings, but warm and pleasant during the day. Remittent fever caused a considerable addition to the sick- and death-rates of the force employed in the Niger Expedition, but the total death-rate on the West Coast of Africa and Cape of Good Hope Station nevertheless shows a reduction when compared with that of the previous year. In speaking of the attacks of remittent fever which occurred in the Niger Expedition, Fleet Surgeon Henry Fegan, C.B., M.D., observes that "in the severest of these cases the most anxious application of remedial measures availed little either for the saving or prolonging of life. Diffusible stimuli and acid effervescing wines were given to establish reaction and allay thirst, the body was frequently sponged to lessen the intense pungent heat of the skin, and cold affusions applied to the head, but the patients gradually sank as if struck down by a poison."

There was a remarkable decrease observable in the amount of sickness and mortality on the East India Station, notwithstanding the trying nature of the service on which some of the ships were employed, and the existence of an epidemic of small-pox at Bombay. This disease was, as a matter of course, imported into several of her Majesty's ships from the shore, but its extension was checked by well-directed preventive measures. On the China Station the ratio of deaths from all causes was below that of the previous year;

dysentery prevailed towards the end of the operations in the naval force employed in the Perak River, and this disease was the cause of rather more than one-fourth of the total number of deaths on the station. The medical officer considers the causes of this outbreak of dysentery to have been the exposure to the sun by day, and to wet by night; the use of the dirty water of the Perak for drinking purposes, and the consumption of raw fruit; and he accounts for the outbreak not having occurred earlier in the expeditionary force by the accumulative action of the bad drinking-water, and the constant exposure to chills and wet weather. The last of the Foreign Stations—viz., the Australian—was healthy, and the total death-rate was 6·21 per 1000 less than that of the preceding year.

It will be seen that, notwithstanding the increased sick-rate, the death-rate of the total force for 1876 from disease alone was nearly 1 per 1000 less than in the preceding year.

The operations of the Contagious Diseases Acts are further highly spoken of, and they are satisfactorily shown to conduce to a maintenance of a reduced sick-rate from these diseases. A very important table is published in the Appendix of this volume, which shows the extent to which these diseases prevailed in her Majesty's ships at five ports protected by the Acts, and also at five ports in which the Acts were not in force, from the year 1860 to the year 1876. In the Appendix will also be found, amongst other communications, a "Continuation of an Inquiry into the Reputed Poisonous Nature of the Arrows of the South Sea Islanders," contributed by Fleet Surgeon A. B. Messer, M.D., of her Majesty's ship *Pearl*.

TRACHEOTOMY IN DIPHTHERIA.

In an article in von Langenbeck's *Archiv*, Bd. xxi., Dr. R. A. Krönlein gives some most valuable statistical data as to the value of tracheotomy in diphtheria, and as to other points connected with this disease, founded on the enormous number of 567 cases, which were admitted into Professor von Langenbeck's Clinic at Berlin from January 1, 1870, to July 31, 1876.

Tracheotomy was performed 504 times, the sole indication for the operation being the presence of laryngeal stenosis, without reference to the patient's age or the other features of the disease. Of these, 357, or 70·8 per cent., died. Eighty-five operations were performed on children under two years, the youngest child being only seven months old, and of these eleven recovered.

Krönlein finds, from the statistics of 241 carefully recorded cases, in 210 of which tracheotomy was performed, that it is a bad prognostic sign if the breathing does not become perfectly free after the operation. Forty-two out of forty-six children, whom it thus failed to relieve, died. The cause of the failure is either the presence of lobular pneumonia or of croupous exudation extending far into the bronchi; but even if branching casts of the bronchi are expelled during the operation, and the respiration becomes apparently quite free, the prognosis is still unfavourable. Out of 210 children on whom tracheotomy was performed, 154 died; and of these deaths 100 were due to asphyxia, and the remainder either to a gradual loss of strength or to sudden collapse. Gradual loss of strength is largely induced by disturbances of the mechanism of deglutition, which Dr. Krönlein divides into two classes.

By far the larger number of cases belong to the first, in which swallowing is impaired at a time when distinct diphtheritic exudation is still present in the larynx, the functions of the muscles being interfered with by diphtheritic infiltration and exudation into their substance.

In the cases in the second class deglutition is affected much later, after the local disease has completely healed, by secondary diphtheritic paralysis of the laryngeal and pharyngeal muscles.

Returning to the general statistics of the whole 567 cases included in the report, we may say that 377, or 66·4 per cent., ended fatally, but that though the number of individual cases has increased year by year, the proportion of deaths has diminished instead of increasing. Season affects the prevalence of diphtheria at Berlin very decidedly, the largest number of cases occurring in October, and the smallest in June.

The period of life when diphtheria is most frequent is early childhood. The number of cases steadily rises from one month up to three years old, when the maximum frequency is reached; from that time until the end of the fourth year there is little variation, but in the fifth year the numbers gradually decline until the fifteenth or sixteenth year is reached, after which time cases become extremely rare. Out of the 567 cases in Krönlein's report only eight occurred between the ages of eighteen and forty-one years.

Various local remedies, which were tried with a view to arrest the spread of the diphtheritic exudation, all failed to give a satisfactory result.

PATHOLOGICAL SOCIETY OF DUBLIN.

At the meeting of Saturday, January 26, Mr. Jolliffe Tufnell in the chair, Dr. J. W. Moore showed a set of specimens illustrative of the pathology of mechanical hyperæmia of organs. The patient from whose body the specimens were taken was seventy-three years of age, long the subject of gouty eczema of both legs. Extensive atheromatous degeneration of the aorta and its main branches had led to dilatation of the ascending thoracic aorta, hypertrophy, and subsequent dilatation of the left ventricle of the heart; dilatation of the mitral orifice and of the left auricle; passive hyperæmia of the lungs; remarkable dilatation of the pulmonary artery, right chambers of the heart, and tricuspid orifice. The liver was in a condition of red atrophy (nutmeg liver), and the kidneys were the seat of a chronic passive congestion with interstitial nephritis. There was some anasarca and ascites. Dr. Head exhibited a cured aneurism of the arteria innominata from the body of a gentleman aged fifty-six, who unhappily committed suicide while labouring under mental depression. The aneurism had been recognised last July, and the patient was treated by Mr. Tufnell's method of rest in a horizontal position and limited diet for more than two months. After death the aorta was found throughout in an advanced stage of atheromatous degeneration; it was dilated into pouches forming true aneurisms in several places. A solid tumour in the anterior mediastinum, adherent to the under surface of the sternum, proved to be a *cured* aneurism of the arteria innominata. Firm laminæ of fibrin were deposited in the sac so as to fill it, leaving only a channel for the blood posteriorly. The Chairman detailed the method of treatment followed in the case, and which had so often proved successful in his hands. There were three essentials for success:—1. The aneurism must spring from the *front* of the vessel. 2. The sac, no matter how formed, must be perfect. 3. There must be a fibrinating power in the blood. Dr. Hayden presented an enormous aneurism, which sprang from the left and anterior aspect of the abdominal aorta, at the origin of the cœliac axis, the superior mesenteric artery arising from its inferior surface. It was the largest aneurism he had ever seen, being eleven inches in its antero-posterior diameter. The subject of the disease was a thin, spare man, aged forty-two, of intemperate habits, who was attacked two years ago with shooting pains in the back. A swelling then appeared in the left loin, and afterwards in the epigastrium. At first there was no murmur, but subsequently a blowing systolic bruit became audible.

There was no alteration in the pulsation on change of position, and the tumour moved with every act of respiration. Limited diet, solid food, rest in bed, and twenty-grain doses of iodide of potassium thrice daily, seemed after a week to have brought about consolidation in a part of the sac. But after an apparent improvement, sudden death took place. It was then found that a rent had occurred in the posterior wall of the aneurism, and that large quantities of blood had escaped, forming a vast false aneurism with firm clots. The iliacus and psoas muscles were infiltrated. Death was caused by a second great irruption of blood into the pleura. The two last dorsal vertebræ and first lumbar vertebra were slightly eroded on the left side. There was no hypertrophy of the left ventricle of the heart. The extensive attachment of the sac to the diaphragm had caused the mobility of the tumour during respiration.

CLINICAL SOCIETY OF LONDON: COMMITTEE ON INCUBATION AND CONTAGION.

THE Clinical Society of London has appointed a Committee, consisting of Sir William Jenner, Dr. Murchison, Dr. Buchanan, Dr. Broadbent, Mr. Shirley Murphy, and Dr. Cayley, to investigate the periods of *incubation* and of *contagiousness* of scarlatina, diphtheria, erysipelas, typhoid fever, mumps, varicella, variola, and allied diseases. The Committee is desirous of obtaining the co-operation of medical officers of health, medical officers to schools and other institutions, and practitioners of medicine throughout the country, especially those practising at a distance from the large centres of population. These gentlemen, it is believed, have especial opportunities of observing facts bearing on the subjects of the present inquiry. The Committee, therefore, invites all to assist it by furnishing the particulars of any cases which may have come under observation, in which any of the points mentioned above appear to be settled. In giving the details of such cases, all possible sources of fallacy which might vitiate the conclusion should be taken into account; and, in particular, the possibility of the poison being conveyed by articles of clothing, etc., rather than by infected persons. The object of the investigation, which is of the greatest practical importance, can only be obtained by the collection of a large number of facts; the Committee, therefore, hopes that all who have it in their power will contribute their aid. A single case, in which the dates of exposure to infection and the appearance of the first symptoms can be accurately fixed, will be considered of importance by the Committee. All communications should be addressed to the Hon. Sec., Dr. Cayley, 58, Welbeck-street, W.

CHAIR OF DERMATOLOGY, ROYAL COLLEGE OF SURGEONS.

MR. ERASMUS WILSON, F.R.S., the Professor of Dermatology at the Royal College of Surgeons, commenced his annual lectures in the theatre of the College on Monday last, and will conclude the course on the 8th inst. Mr. Wilson's name will always be most honourably connected with the chair of Dermatology, not only as having been the first to hold it, but also because the chair owes its existence to his liberality, having been founded by him in 1870. Shortly afterwards he presented to the College his valuable and extensive collection of models of diseases of the skin, and we believe that it has been his intention to hold the Professorship only long enough to enable him to fully demonstrate in his courses of lectures the diseases illustrated by that collection. We understand that his purpose will have been fulfilled at the end of the present course, and that he will consequently after its conclusion resign the chair he has so well filled, or, as the French would say, "illustrated." There are already various rumours as to who is likely to have the honour of succeeding him; but at present they are, of course, rumours only. We do not suppose that the occupant of the chair must be a Fellow or Member of the College, and if the Council like to go outside the College they will have no difficulty in finding an eminent dermatologist among the physicians of London; but perhaps such a step as that is scarcely probable on the present occasion, when there is among the Fellows of the College a man so eminently fitted in every way to fill the chair as Mr. Jonathan Hutchinson, who will, we hear, be a candidate for it.

PASTEUR ON FERMENTATION.

THE following *résumé* of M. Pasteur's theory of fermentation is given in "Revue des Deux Mondes," vol. xviii., p. 452, 1877:—"According to M. Pasteur, fermentation is a very common phenomenon—it is life without air, without free oxygen; and ferments, properly so-called, are organisms which easily accommodate themselves to this mode of life—they are organisms independent of air, which grow at the expense of oxygen in combination with sugar. But moulds, generally living in the air, can themselves become ferments if they are compelled to vegetate without air. That is not all; it suffices to immerse saccharine fruits in carbonic acid gas, to produce a spontaneous alcoholic fermentation, by a kind of perversion of the chemical process of nutrition, which is afterwards kept up by means of the oxygen of the sugar. The vegetable cellule, instead of elaborating sugar, lives upon that which exists in the fruit and transforms it into alcohol. Grapes, melons, oranges, if confined under a bell-full of carbonic acid, ferment at once, though no trace of yeast can be discovered in the pulp of these fruits. Whilst plums exposed to the air become very soft and sugary, the same plums in carbonic acid gas become firm, hard, lose much sugar, and, if distilled, supply alcohol. Thus there is every reason to believe that fermentation is nothing more than an example of nutrition by means of combined oxygen; but it must be added that free oxygen is necessary for commencing the fermentation by awakening the vital activity of the ferment."

THE NORMAL TEMPERATURE OF THE BODY IN THE TROPICS.

IT has generally been assumed that the normal temperature of the body in tropical climates exceeds in some measure the standard body-heat in temperate regions. It has even been attempted to determine the ratio of this increase. Dr. Parkes ("Practical Hygiene," 4th ed., page 401), quotes certain observations made by Dr. Becher, which seemed to show that for every degree (Fahr.) of increase in the mean temperature of the atmosphere there was a corresponding rise of half a degree (Fahr.) in the normal body-temperature. Surgeon-Major Johnston has made a series of observations bearing on this question, at Bellary, India, and the results are given in the Appendix to the Report of the Army Medical Department, just published. As the result of one series of observations, Dr. Johnston found that the mean axillary temperature, instead of showing a rise, stood at 97·63°. In a second and more extensive series of observations, conducted with the greatest care, Dr. Johnston found an almost identical result, viz., a mean axillary temperature of 97·74°. So far as they go, then, these observations indicate a diminished rather than an increased ratio of temperature in inter-tropical life, the readings yielding an average of more than three-quarters of a degree below the standard of temperate climates.

MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.

AT a meeting of the Medical Board of this institution, held on Thursday, January 24, the following resolution was proposed by Mr. P. C. Smyly, seconded by Dr. J. W. Moore, and unanimously adopted:—"Resolved: That the Medical

Staff of the Meath Hospital and County Dublin Infirmary take this—the earliest opportunity afforded them since the lamented death of Dr. Stokes—to give expression to their deep sympathy with his family in their bereavement. They desire also to record their sense of the loss sustained by the profession of medicine at home and abroad in the death of their late friend and colleague—that honoured and beloved physician, who for a period of nearly fifty years laboured in the cause of humanity in the wards of this Hospital, which owed so much to him, and upon which his many noble qualities of heart and mind—his genius, intellect, and fame, shed such lustre and renown."

MEDICAL MICROSCOPICAL SOCIETY.

In accordance with the resolution passed at the special meeting of this Society on December 21, 1877, the final meeting for winding up the Society's affairs was held on January 18, 1878, H. Power, President, in the chair. The Committee's report was read by Mr. Groves, one of the Secretaries, and the Treasurer, Mr. T. C. White, presented the balance-sheet. The balance, which was but a small one, and to which were added the proceeds of the sale of the property of the Society, was unanimously voted to be equally divided between the two Secretaries and the Treasurer in the form of a testimonial to each of these officers. The President then left the chair, and the Society ceased to exist.

THE CHECK OF HYDROPHOBIA.

An order was obtained on the 21st inst. for the confinement of all dogs for the present within the Kirkdale division of the county of Lancaster, owing to the reputed prevalence of hydrophobia. In support of the application, evidence was given by the police of a boy, a number of sheep, a pig, and a large number of dogs having been bitten by several dogs within a few weeks previously. Many of the animals bitten had been examined by Mr. Welsby, veterinary surgeon, and had been considered by him to be suffering from hydrophobia.

MEDICAL PARLIAMENTARY AFFAIRS.

Public Health (Ireland) Bill.—On Thursday, January 24, Sir M. H. Beach having introduced the Public Health Bill for Ireland, it was read a second time without debate.

Small-pox in the Isle of Man.—On Monday, the 28th, Mr. Cross, in reply to Sir J. Lawrence and Mr. Ritchie, said that anybody who knew the character of the Governor of the Isle of Man would not think for a moment that he was capable of deserting his post at a time of danger. It was quite true that there had been a violent outbreak of small-pox in the island, owing to the vaccination law not being in force there. The local legislature had now passed a Bill, which would receive the Royal assent very shortly. Papers connected with the question of vaccination in the Isle of Man would soon be laid before Parliament. On the following day, Mr. Cross, in replying to Mr. Adams, said that the Isle of Man is now practically free from small-pox, the disease being limited to two or three convalescent cases.

The Universities of Scotland.—Replying to Sir A. Gordon, Mr. Cross said that the report of the Royal Commission on the Universities of Scotland was not quite ready.

Metropolitan Water Companies.—Colonel Beresford asked the Home Secretary whether he would use his influence to postpone the consideration of the Bill promoted by the Metropolitan Board of Works for the purchase of the London water companies until that Board has, in accordance with the spirit of his recent reply, taken the necessary steps to prevent the recurrence of floods on the Surrey side of the water. Mr. Cross replied in the negative. He hoped the arrangements the Board intended to make would be satisfactory.

The Conjoint Scheme.—Viscount Sandon said he was not at present able to inform Mr. Mills whether the Government was prepared to bring in a Bill to provide a uniform test of admission to the medical profession in England, Scotland, and Ireland.

County Boards.—Mr. Sclater-Booth introduced his County Government Bill, commenting upon the previous fruitless efforts in this direction, and the importance of the Bill as occupying a prominent place in the Speech from the Throne. The Bill is not intended to interfere with the existing local machinery under the Sanitary Acts, but it creates boards which will be identical with quarter sessions in their power of levying taxes. Boroughs under 20,000 inhabitants are to be treated as part of the county, and other boroughs are to be represented each by four members elected by the town council. Powers will be given to manage turnpike-roads and highways, also for the conservancy of rivers and the prevention of pollution, and the boards so constituted will be entrusted for the future with the election of coroners, and powers would be given to the county board to provide for the education of imbecile children and the general management of pauper asylums. Under the powers of this Bill the various district boards of guardians would, through their representatives, have certain matters of county interest decided by the larger central authority. Mr. Read objected that the magistrates would exercise too great a preponderating influence on these boards. Mr. Whitbread referred to the frequent cause of conflict and obstruction between the local and sanitary authorities, and expressed a hope that some satisfactory arrangement would be made for defining the jurisdiction of these various county boards.

The Public Baths and Washhouses Bill was read a second time on Wednesday, the 30th; and Sir J. Lubbock brought in a Bill to amend the law relating to dental practitioners.

THE SICK AND WOUNDED IN THE RUSSO-TURKISH WAR.

(*Continued from page* 97.)

We have again been favoured by the Stafford House Committee with several very interesting reports from their surgeons, and regret that we cannot find room for more than the following:—

Extracts from Dr. Ryan's Report, dated Erzeroum, December 27 and 30, 1877.

I take advantage of Dr. Fetherstonhaugh's leaving to send you a few lines. We have been very busy for the last few days, owing to an influx of wounded sent by the Russians from Kars. Mukhtar Pasha told me that of 2000 who left, only 317 arrived; but I cannot help fancying that such a statement was a little too highly coloured. At the same time, the mortality has been very great. I have about fifty of them in hospital at present; and one told me to-day that he left with a party of thirty, and only ten arrived here, the remainder having died on the way. Out of the ten who arrived, seven of them lost all their toes from frost-bites. I am very happy to state that we have very nearly stamped out hospital gangrene from our wards, and both typhus and typhoid fever are on the decrease; but I believe that in the town generally and in the other hospitals the rate of mortality from these diseases is on the increase. Three days ago we sent out from hospital sixty-six who started to march to Baiburt. They were the slightly wounded, and those whom we considered able and fit to march, chiefly those wounded in the hands or arms. We were able to give the poor fellows warm jerseys, drawers, long stockings, and comforters, thanks to the generosity and philanthropy of Lord Blantyre. To-day we sent out another thirty, and, in addition to giving them clothes, gave each man 10 piastres from Lord Blantyre's fund here. The town has been overcrowded, and so these men have been sent out both to lessen the chances of epidemic and to diminish the work of the doctors here. No less than seventeen of the latter are ill in bed (more than 50 per cent.), and four have died during the past month. The number in hospital to-day is 281—four days ago it was 345; but we have sent out a great many since; probably by to-morrow morning all our beds will be filled up. Our mortality is becoming smaller every day. Our new cases are nearly all frost-bites; we have about sixty where the men have lost all their toes, but, as a rule, they do very well. Our Turkish surgeon has been ill in bed for three weeks past, and one of our dressers,

so that just at present our hands are very full—not more, however, than we can manage. Williams has been very ill with "Erzeroum fever" (I know no other name for it)—it appears to be an endemic fever of a malignant type; but I am happy to say he is up and about, and in another week I intend sending him to Constantinople, when he will be strong enough. M. Morisot has been ill, but I hope he will soon be all right again. Dr. Denniston tells me that he has a case of small-pox in his wards, the first that has come under our notice in Erzeroum; but, judging from my experience in Plevna, it is not likely to spread rapidly. Dr. Pinkerton is laid up with the same fever that Williams had, but to-night he seems much better; he says as soon as he is well that he thinks he will leave, and probably Morisot will leave with him, so that we shall send Williams, Morisot, and Pinkerton off together. Dr. Denniston is working the English hospital, and I am working the Stafford House. I have a great deal to do, but manage it all right. Nearly everybody is ill here—more than half of the doctors; a surgeon (Turk) was buried yesterday, and great sickness prevails among the poor people, chiefly typhus.

Copy of Dr. Denniston's Report to W. L. Stoney, Esq., Assistant-Commissioner, Stafford House Committee, dated Erzeroum, December 27, 1877.

Dr. Fetherstonhaugh, unfortunately having been compelled by illness to give up work and return to England, I am now in charge of the English Hospital here, and, in accordance with Mr. Barrington Kennett's request, intend to report the progress of affairs at regular intervals. The average number of cases is 160, and I have two Turkish dressers, who work very well and are extremely intelligent. Most of the cases were slight, and no freshly wounded men came in till the arrival of wounded from Kars about a week ago. Their wounds were for the most part slight and confined to the upper extremities, but the hardships of the journey and the intense cold aggravated their condition very much. As you have heard, many of the wounded sent from Kars died on the road, but those who arrived here gave a very favourable account of the way in which they had been treated by the Russians. Each man got bread and thirty piastres from the Russian commander, and they seem to have been treated with great kindness on passing through the lines at Deve-bounon. On the 24th inst. I was able to discharge fifty-six men; they were all nearly well, their wounds being in a healing condition, and confined to their bodies and arms, so that they were able to walk; they were to be sent to Erzinghian, a town about six days' march from this, so I provided each man with a little charpie and a bandage, so that if required they could dress their wounds on the way. To each man I gave a thick comforter, a flannel jersey, a pair of drawers, and a large pair of stockings, besides ten piastres. All who left our hospital, or the Stafford House hospital, would in all probability stand the journey well. I happened to see a considerable number who had been sent from the Turkish hospitals, and many of them were in a very miserable state, and seemed to suffer terribly. I saw one man die on the road before he had reached the gate of the town. The next day about fifty fresh patients were sent in. By far the greater number of these cases were frost-bites, some very serious, involving the great part of both feet. Several occurred on the foot here, while others occurred in men coming from Kars. I have had about six cases of typhoid fever, and one or two of typhus. There have been also several cases of hospital gangrene, and it has been very fatal. This morning an undoubted case of small-pox turned up in one of the wards; the patient had been in for some days with a wound in his chest, and was doing well; where he got small-pox I cannot say, as on inquiry I can hear of no other in Erzeroum. I have taken measures to prevent its spreading by removing all the other wounded from the ward, and allowing no one to go near him but the ward servant. There is every prospect of our being surrounded, I believe, and I only hope that there will be no epidemic, as it would certainly go very hard with both soldiers and civilians. Williams has been rather ill with fever, but is now quite convalescent. All the others are well, and will, I hope, continue so.

Dr. Denniston's Report, dated Erzeroum, January 2, 1878.

I write a hurried line to let you know the state of matters here. Morisot, Pinkerton, and Williams are all seriously ill with what seems to be typhus fever; all three are very bad indeed, and cause me great anxiety, but I hope the issues in all three cases will be favourable. Last night Ryan took ill with feverish symptoms and remained at home to-day. To-night he is worse and the fever has increased, and I very much fear that he is going to have fever of some kind, though the symptoms are mild so far. As you may imagine, I have my hands full. Williams and Pinkerton are delirious, and Morisot is very irritable. Ryan will make a good patient, I think. I shall try and work both hospitals as well as I can. The Stafford House hospital has plenty of good Turkish dressers, so that a general superintendence will be all that is required. I hope to be able to keep both going till Ryan gets well. The others will go off as soon as they are able, but Ryan will, I hope, stay. The Russians are expected to cut us off to-morrow or next day, so that will increase our troubles. Thank God, I am strong and well, and fit for any amount of work—and God knows I have it now.

Report from Mr. Stoney, Assistant-Commissioner, dated Constantinople, January 18, 1878.

No information from Erzeroum since December 31 until last night, when a letter dated 2nd inst. was received from Dr. Denniston. Dr. Stoker, who happened to be here, at once volunteered to go up to the assistance of his friend Dr. Ryan, and as I can spare Dr. Stivens for a time he will go too. They sail this afternoon for Trebizonde, taking with them medical comforts and such stores as they consider may be useful. Mr. Layard will give them letters to Sir Arnold Kemball, who can perhaps facilitate their movements. I cannot obtain information about any of our sections in Roumelia, with the exception of Adrianople, where the hospitals have all been evacuated to make room for fresh cases in the event of further fighting.

DR. WEIR MITCHELL ON THE TROPHIC EFFECTS OF INJURY OF NERVES.

It is to America that we are indebted for a large portion of our knowledge concerning the effects of injury of nerves on the nutrition of the parts to which they are distributed. In a paper read before the College of Physicians of Philadelphia (given in the *Transactions* of the College, vol. ii. 1876), Dr. Weir Mitchell gives an account of eight cases of injury to different nerves, which are all of great interest.

Case 1.—J. G. was wounded by a pistol-shot on January 29, 1871. Profuse hæmorrhage followed, and was controlled by pressure, but returned from time to time, till, on February 14, an incision was made at the point of entrance of the ball, and a false aneurism of the brachial artery was found. This was emptied, and the vessel tied above and below. Slight numbness of the forearm and hand were noticed soon after the injury, and increased as the case went on. The pain at the seat of injury, which was not at first severe, gradually became very intense. Suppurative inflammation invaded the entire limb, pyæmia set in, and the patient died on March 19. At the post-mortem examination the tied ends of the artery had closed. Collateral circulation had been very imperfectly established. The humerus was denuded of periosteum for an inch or more in extent, and a portion of bone had been detached. There were no appearances of repair. A longitudinal spiculum of bone was found attached to the sheath of the median nerve, close to the seat of the original wound. On microscopic examination the fragment of bone was seen to be in process of growth, from the fact that the canaliculi on the surface were larger than those in the centre. This case adds a third to the two already reported by Dr. Verneuil and Dr. Weir Mitchell, of detached portions of periosteum becoming attached to nerves and developing bone.

Case 2.—A child, aged nine, met with a compound fracture of the forearm close to the elbow in August, 1873. On February 27, 1874, there was a cicatrix four inches long down the middle of the forearm, extension of forearm was limited, pronation and supination were lost, wrist-motions lessened. The fingers were set in the form of a claw. Sensation as to touch was lost in the median territories, and was modified in other parts of the forearm, the front of the

lower half was hyperalgesic, the hand-muscles were wasted, and the thumb rotated outwards. The whole hand was dusky red, swollen, smooth, and glossy. The nails were curved like turtle-shells, roughened, dark, and elevated. The matrix in all was separated from the nail and ulcerated. There was deficiency of pigment on the back of the hand. *Treatment:* Numerous blisters were applied to the hand and fingers. Under this treatment the sensitiveness disappeared in three months. Then the hand and arm were faradised every day, and the joints moved. Within a year the boy had regained every movement, and all the lost sensation and motion. "This case," says Dr. Weir Mitchell, "shows well what can be done when we have youth on our side and the revolutionary aid of growth. Causalgia, neuro-arthritis, excess of callus, tendons tied down and fixed in their inflamed sheaths, atrophy and ulcerated nails, would make in the mature adult a case to be amended possibly, but not cured." This case, too, is of extra interest, as exhibiting the same local changes which follow the nerve lesion in leprosy.

Case 3.—A man, aged forty-seven, received a cut across the anterior surface of the wrist, which divided the flexor tendon of the forefinger and the median nerve. Ten days afterwards, when the dressing and splint were removed, the patient found that he could not bend the forefinger, and that there was loss of feeling in this finger and in the thumb and middle finger, but no pain. Two months afterwards a bulla appeared on the forefinger, and when the contents were evacuated an ulcer remained, which healed in about a week. Other bullæ appeared on the middle and fore fingers, which ran the same course. March 1, 1876: There is anæsthesia in the thumb and in the fore and middle fingers. A cicatrix extends across the front of the wrist, elevated in the middle, but not tender. On the middle finger is a deep, dry ulceration, where a bulla had been a week ago. Several scars on the fore and middle fingers show where ulcers have been. There is no glazing of the skin. The patient can bend the first phalanx of the forefinger, but not the last two. Electro-muscular contractility good in the muscles of the forearm, but absent in the median muscles of the thumb. April 26th: He has been using the hand, but there is no improvement. The middle finger is much enlarged, and the skin thickened and hard. Ulcers have continued to form; there are three at present upon the hand, They begin suddenly as bullæ, which in a short time rupture, leaving deep ulcers. They discharge but little. This case gives an instance of lesions following entire division of a nerve, but not affecting the parts to which that nerve is distributed, but those of neighbouring nerves with which the injured nerve is connected by anastomosis.

Case 4.—A girl, aged seventeen, fell down and cut the palm of her right hand with broken glass. The wound was attended with some numbness, but healed without further trouble. It was accompanied by anæsthesia of the thumb, forefinger, and radial side of the middle finger, and by loss of flexion of the forefinger. A week afterwards the forefinger was almost covered by a bulla, which, when the cuticle was removed, was very slow to heal. The cicatrix became exceedingly sensitive, and this has increased. On the seventieth day after the injury, when she was examined by Dr. Mitchell, there was a very sensitive cicatrix nine lines long in the palm of the hand; the skin of the forefinger was shiny and mottled, and the nail shortened. The skin on the radial side of the middle finger was in the same condition. Flexion of the last two phalanges of the forefinger was impossible; the thumb was drawn across the palm, and its motion was painful. Slight pressure over the median nerve at the wrist, or at the bend of the elbow, caused pain in, but not beyond, the cicatrix. Deep pressure at the wrist caused pain to be felt as far as the first joint of the forefinger. Loss of sensation is complete in the forefinger. On the radial side of the middle finger and ulnar side of the thumb there was no analgesia, and only loss of sense of feather touch. This case, as well as Case 3, shows that the trophic changes were not due to the injury of the nerve alone, but that time was required for some morbid (probably Wallerian) change of the nerve-tubes. The fact that some morbid changes had taken place either in the nerve-trunk itself or in the sensorium seems to be shown by the tenderness of the nerve-trunk above the cicatrix.

Case 5.—A woman, aged fifty, having leaned heavily with the palm of her right hand on the back of a knife, was seized with violent pain in the thumb. This was followed by pain and swelling of the whole arm, together with a numbness of the thumb and forefinger, and shortly afterwards there was loss of motion in the hand. The swelling subsided, and the fingers were found to be much contracted. Bullæ then appeared on the forefinger, leaving ulcers slow of healing. When examined by Dr. Mitchell, the flexor tendons were contracted, the skin glossy, and the nails ridged. There was loss of sensation in the thumb, middle, and forefingers. This case was probably one of incomplete loss of power in the median nerve.

Case 6.—A man was wounded in the forearm with broken glass. This was followed in eight days by numbness of the fingers. The thumb and three outer fingers were œdematous, livid, and cold, and the epidermis on these fingers and a corresponding part of the palm was thickened. There was complete anæsthesia over the same region, but sensation gradually returned in the borders. At first, probably, the median area was in this case cut off by nearly complete division of the nerve, together with inflammatory changes in the uncut portion. Possibly the nerve section was complete, and the median territory smaller than usual.

Case 7 is given to illustrate the varying amount of surface supplied by the median nerve.

Case 8.—A man, aged thirty-seven, had an abscess in the axilla; there was much swelling of the arm and hand, and pain down the nerves to the fingers. Then followed temporary loss of sensation. There was no œdema; the swelling was hard, and the skin was dry and yellow; the nails were curved and ridged. No nerve lesion was discoverable in the arm, and there was no tenderness of nerves save in the axilla. This is the second recorded case of areolar hyperplasia from nerve-injury. "These two cases well illustrate the difficulty of explaining the pathogenesis of tissue-change from nerve-lesions. We may have, from injuries seemingly similar, joint diseases, or glossy skin, or herpetic eruptions, or circumscribed bullæ, or deep ulcers, or altered nails, œdema, atrophy, or hypertrophy. The circumstances which regulate the production of these several pathological states are as yet unknown to us. At present we can only confess our ignorance."

FROM ABROAD.

Gonorrhœal Rheumatism.

Prof. Hardy, in a recent lecture at La Charité (*Gaz. des Hop.*, No. 149), made some interesting observations on gonorrhœal rheumatism. The subject of the lecture, a cook aged thirty-two, having contracted a gonorrhœa four months since, was a fortnight afterwards seized with violent pains in the ankle, and metatarsus of both feet, and so intense were they that for two months he was unable to walk. They then ceased, and the discharge, which during their presence disappeared, returned again. He was able to resume his occupation, when, under the influence of a chill, the pains returned, and he came to the hospital. He was pale and anæmic, and had somewhat of a cachectic appearance. In both feet, but especially on the left side, the ankle and metatarsus were the seat of marked swelling, which was accompanied by excessive pain. There was no fever, and the pulse and digestion were quite normal. In fact there was no other symptom of anything amiss than slight albuminuria. This was evidently an example of what has been termed blenorrhagic rheumatism, and the albuminuria and complete anæmia which were also present indicated the existence of nephritis, which, and especially in its parenchymatous form, is a pretty frequent complication of gonorrhœa—resulting from a propagation of the urethral inflammation to the kidney. For the treatment of this case the salicylate of soda, now so much in vogue for articular diseases, was prescribed, and under its influence the spontaneous pains have diminished, but those felt in walking are just as severe. The relief, indeed, is probably due rather to repose than to the salicylate, which does not seem to exert the same beneficial effect as in ordinary articular rheumatism.

It is only since 1781 that the relation between certain articular pains and gonorrhœa was observed; first John Hunter, and then Ricord, Rollet, and Fournier, having most

contributed to stamp this affection as a special nosological entity. The pains are sometimes very slight, and only manifested on moving; but in other cases they are extremely severe, and persist even during repose. There is a marked doughy tumefaction of the joints invaded, the amount of effusion being sometimes enormous, occasionally simulating a true hydrarthrosis. The erythematous redness of ordinary acute rheumatism is rare in this variety. It seems to have an especial predilection for the knee, after which come in order of frequency the wrist, ankle, shoulder, the fingers and toes, and especially the tarsus and metatarsus. But it is not always confined to the articulations, and for that reason it is preferable that it should be called rheumatism rather than arthritis, which has been proposed. Sometimes it is developed in the sheaths of tendons, at others in the tendinous bursæ, and more rarely in the sciatic nerve. Sometimes it occurs on one side and then on the other, and at others on both sides at once. While it is occupying these parts various accidents are often met with in the eye, as intense conjunctivitis with suppuration, or keratitis accompanied by iritis—phenomena analogous to those observed in this organ during ordinary rheumatism. The number of joints affected differs from what is observed in febrile rheumatism; for while this last has a great tendency to invade several joints, and sometimes the whole of them, it is rare in gonorrhœal rheumatism for more than one or two and sometimes three or four joints to suffer, and especially to find one after the other becoming affected, as is the rule in acute rheumatism. It is usually also apyretic, and if there is a little fever at first this only lasts two or three days. So, also, the secretion of sweat is either absent or insignificant, and the changes in the urine, due to the preponderance of the urates and urea, met with in ordinary rheumatism, are absent. Finally, in this variety there are not the complications of heart disease; while, as a general rule, after lasting weeks or months, a cure results; but it sometimes gives rise to a true hydrarthrosis or a white swelling, with anchylosis. For the production of this affection not only is the existence of gonorrhœa essential, but there must also be a special predisposition which is not a tendency to the rheumatic diathesis. If the subjects of this disease be interrogated, it will be found that, independently of the blenorrhagia, their joints remain perfectly free, and they are nowise liable to contract muscular or articular pains on exposure to cold. Sometimes this rheumatism will appear at the very commencement of the urethral discharge, and sometimes only one, two, or three days later; and the rule which has been laid down, that the pains are severe in proportion to the abundance of the discharge, rests upon no foundation, for they are met with in the acute and subacute form of gonorrhœa, as in that which is manifested only by a slight discharge. It is not rare, when the articular pains appear, to find the gonorrhœa suddenly stopping, to return when they have been relieved. It would seem that a true metastasis takes place, the morbific material being transported from one place to another. But this phenomenon is far from being constant, and what is usually observed is that on the occurrence of the rheumatism there is only a certain amount of diminution of the discharge. Blenorrhagic rheumatism being, in fact, a local affection, and not being accompanied by general symptoms, measures which are purely local are those which alone succeed. Thus, at the onset we should have recourse to application of leeches, dry cupping, and cataplasms, and, if the affection threatens to be prolonged, to blisters. At a later period, if it tends to a chronic condition, we may employ baths, douches, and mineral springs—the different means, in fact, that are used to combat chronic rheumatism.

THE JACKSONIAN PRIZE.—The subject for this prize, to be awarded by the Council of the Royal College of Surgeons in December next, is "Glaucoma, its Causes, Symptoms, Pathology, and Treatment." The money value of the prize is between £11 and £12, received from the Trust.

ELECTRO-PUNCTURE IN ANEURISM OF THE ARCH OF THE AORTA.—In the *Gazzetta Med. Lombardia*, January 19, there is an abstract of an interesting case treated in the Bologna Hospital. A woman, forty-six years of age, the subject of a large aneurism of the arch of the aorta, was treated with complete success by five applications of electro-puncture.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

January 26.

CONFERENCE ON TEMPERANCE—COCOA-HOUSES.

THE medical portion of the Conferences on Temperance, held in Liverpool on January 25 under the auspices of the Chester Diocesan branch of the Church of England Temperance Society, was hardly so successful as might have been anticipated. This was, no doubt, partly due to the extremely inconvenient hour at which it was held. Eleven o'clock in the forenoon generally finds the majority of medical men busily engaged at their own homes, which they are unable to leave for the purpose of attending a public meeting, however interesting its object may be; and I know that some few, who much desired to be present, were prevented by this circumstance alone. The scanty attendance of medical men at the Conference cannot, therefore, be taken to argue any indifference on their part to the subjects discussed. The President of the General Medical Council, Dr. Acland, though advertised to take part in the proceedings, was not present. Papers were read or speeches made by Mr. Hakes, Consulting Surgeon to the Royal Infirmary, who presided; Dr. Boyd Mushet, of New Brighton; Mr. Robert Hamilton, Honorary Surgeon to the Royal Southern Hospital; Dr. C. H. Leet, F.R.C.S., late of the Royal Engineers; Dr. Ransome, of Bowdon; Dr. Muir Howie; and Mr. Townson, Surgeon to the Liverpool Post-office. The great preponderance of medical opinion, as expressed at this Conference, seemed to be that the cautious administration of alcohol was an absolute necessity in some states of disease; that its daily and very moderate employment as a beverage, though not a necessity to the great majority of healthy individuals, yet rarely, if ever, did harm, while a small minority were absolutely benefited by it; but that anything beyond such a moderate employment proved positively injurious.

In the afternoon Conference, on the legal or magisterial aspect of the question, some very striking facts were mentioned, and not a few practical suggestions made for alterations in the law which at present regulates the sale of intoxicating drinks and controls public-houses and licences. In a letter which he addressed to the Conference, Mr. L. S. Raffles, the Liverpool stipendiary magistrate, expressed his opinion on the desirability of a consolidation of the law on licensing matters, which has now to be culled out of various statutes. He thought, also, that there should be greater stringency in recording a conviction for an offence against the premises, instead of or in addition to that against the licensed manager, who, under present circumstances, so soon as a conviction takes place against him, is removed to make way for somebody else, the house, for the most part, going on just as before. Lastly, Mr. Raffles regretted very much the additional hour granted in the morning by Mr. Cross's Act, and stated—what is pretty generally known—that the change in the time of commencing business, from seven to six o'clock, was made in opposition to the opinion of many large employers of labour.

As bearing on the advantage of restricting the hours for the sale of intoxicating liquors, I may say that soon after the compulsory closure of public-houses at 11 p.m. came into operation, a return was obtained from the chief hospitals and dispensaries of Liverpool of the number of cases of accident and injury owing to drunkenness during two periods of equal duration and at corresponding times of the year, the one before and the other after the limitation of the hours of sale, and that this return told in the most striking manner in favour of the earlier hour of closing.

The granting of grocers' licences, the power of appeal by the publicans from the decision of the borough magistrates to quarter sessions, the varied and often very lax interpretation put upon the term "*bonâ fide* traveller," as well as other matters, were condemned by the various speakers. Mr. George Melly, late M.P. for Stoke, spoke strongly against licensing offences being tried by lay magistrates. To quote his words, "These intricate cases, upon which so largely depend the good order, the crime, nay, the death-rate of the town, were heard Friday after Friday by different merchants and bankers, and brokers, and solicitors. These magistrates had different ways of viewing matters which came before them. They (*i.e.*, the audience) were all convinced that

the most important matter in all criminal legislation was certainty of punishment and uniformity of decision; but it was impossible to arrive at uniformity when they had a different set of magistrates sitting Friday after Friday, with so few precedents to guide them. If they wanted perfect uniformity of decision and certainty of punishment they should encourage the Legislature to remove from the lay magistrates the trial of such cases, and place them in the hands of skilled stipendiary magistrates." A striking and painful fact illustrating the need of a change in the law relating to the granting of removals was mentioned by Mr. Melly. "In Toxteth-park," he remarked, "there would within the next three or four years be a district containing 50,000 inhabitants, in which, to all intents and purposes, according to agreement, there would not be one single public-house among the new dwellings which were being built. These houses were inhabited by the most sober, the most industrious, and most religious portion of the working classes, who had withdrawn to these districts because they hated the noise, misery, wretchedness, and crime of Scotland-road and the lower parts of the town, infested with public-houses. But how were the magistrates treating these districts and their inhabitants? They were deliberately forcing public-houses on little plots of ground which had been accidentally left out at the purchase. And they did that under the guise of removals. When the majority of the borough magistrates refused to grant these removals, then the applicants went to the bench at Kirkdale, and they, without the smallest knowledge of the circumstances of the cases, took upon themselves to reverse the decision of the borough magistrates, and thus forced public-houses upon a district which was practically debarred by deeds between occupier and owner from having a public-house upon it at all, and forced public-houses upon a district the inhabitants of which, by going to live there, had distinctly shown that they did not want them."

Language such as this, from a gentleman of so much moderation and intelligence as Mr. Melly, himself a magistrate of eighteen years' standing, and language almost equally strong from Mr. Alderman Samuelson, also a magistrate of long experience, and formerly Mayor of Liverpool—who remarked that unless the provisions bearing upon appeals against the decision of the borough justices were modified or repealed, the time was probably not far distant when magistrates, out of self-respect, would find it inconvenient to attend transfer sessions at all—prove how great are the anomalies in the present law.

The connexion between the death-rate of Liverpool and the habits of dissipation, which unfortunately distinguish a large proportion of its population, and more especially of its labouring population, is so intimate, that I have thought it not inappropriate to allude rather largely to these Conferences.

As it was probably felt that a Town Hall dinner, with its usual plentiful supply of wine, would be scarcely appropriate for the representatives of a temperance society, the Mayor invited a large number of the gentlemen who attended the Conferences, including three bishops, to a tea, at which the speeches were fully as lively and the toasts as good as though the intelligences of those who gave them had been quickened by champagne.

Perhaps Liverpool will have the distinction of stimulating other towns by the novel but wholesome example which its Mayor has thus set them, as it already has by its most useful institution of cocoa-houses. Of these houses there are now nearly thirty scattered throughout the town, the majority of them being situated next door to public-houses, with which they successfully compete in the attractiveness of their windows, the brightness of their gas-light and the cheerfulness and comfort of the accommodation which they afford. Commercially they are proving a success—which is the best evidence that they supply a real want. It is common enough now to see hard-fisted, sweat-begrimed dock and other labourers making their way into them, or sitting on their settles sipping the hot coffee or cocoa, and eating the rolls, supplied at very cheap yet (as results prove) remunerative rates. For a large cup of cocoa, coffee, or tea, with sugar and milk, the charge is a penny, and the same amount is paid for any one of the various kinds of roll, scone, or other bread, of which a plentiful stock is kept. The system is becoming rapidly extended under a body of earnest and philanthropic directors, and it is with much reason believed that, as the minds of the great masses of working-men become familiarised with its working, and by degrees recognise its advantages to themselves, it will do a good deal to remove the reproach which is thought to attach to Liverpool, of being at once the most drunken and the most unhealthy town in the kingdom. Already they, together with the plan of building dwellings for the working classes on tracts of land from which by deed all public-houses are designed to be excluded, are beginning to give a practical answer to the questions almost despairingly asked by Drs. Parkes and Sanderson in the valuable report on the health of the town, which they drew up a few years ago at the request of the Corporation—"How can a disorderly and drunken people be made to understand the injury that they inflict on themselves, on those dependent on them, and indirectly on all living near them? How can drunkenness be lessened, labour regulated, and habits of care and forethought made to take the place of the reckless and barbarous life which runs through a brief career in the crowded courts of Liverpool? With such habits and such a reckless disregard of the commonest rules of health," they add, "it would be marvellous indeed if the death-rate were not high."

GENERAL CORRESPONDENCE.

MEDICAL SOCIETIES AND MEDICAL WOMEN.

LETTER FROM DR. WILSON FOX.

[To the Editor of the Medical Times and Gazette.]

SIR,—I have to ask that you will kindly insert in the *Medical Times and Gazette* the following letter, addressed by me to the Secretary of the British Medical Association, together with the resolution forwarded to me in reply from the Committee of Council of the Association:—

"December 21, 1877.

"My dear Sir,—After some consideration, I have resolved to ask you to bring the following question before the Council of the British Medical Association, and to favour me with a reply. The question which I desire to put is this:—'Are women to be permitted in the future to attend the meetings of the Medical, Surgical, and other sections of the Association, and to take part in the discussions at such meetings?'

"I had believed that this question was answered in the negative, by a large majority of the Association, a few years ago.

"At the last meeting, held at Manchester, a lady was present, and spoke in a discussion in the Section of Medicine.

"As I do not intend to be a member of any society where medical topics are debated in public between men and women, I shall be glad to learn the decision of the Council on the matter, reserving to myself the right to publish this inquiry and the reply which I may receive.

"(Signed) WILSON FOX.

"To Francis Fowke, Esq."

In reply, I have received from Mr. Fowke the following resolution:—

"That Dr. Wilson Fox be informed that the Committee of Council have no power to prevent ladies who are members of the Association from attending the meetings of the Association."

I have to add that on the receipt of this resolution I have written to the Secretary of the Association, stating that the decision of the Committee of Council has left me no option but to request that my name be removed from the list of the members of the Association.

The matter is one for individual opinion, but I think it right to call the attention of the profession to a question which appears to me of considerable importance—viz., how far public discussions on medical topics at which men and women are present, and on which no restrictions are placed, are consistent with the rules of propriety and delicacy, which have hitherto been generally held to obtain in the relations between the sexes? I am, &c.,

WILSON FOX.

REJECTIONS AT THE COLLEGE OF SURGEONS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I read with interest your remarks on the large percentage of rejections at the last primary examination of the

Royal College of Surgeons; and though there can be little doubt that some of the candidates have mistaken their vocation, I cannot help thinking that the written examination is hardly a fair test, inasmuch as after two sessions' dissecting only four questions in anatomy and two in physiology are asked, which makes it quite possible for a candidate who may know his work really well to do a bad paper. Whereas, if two papers were given—one with six questions in anatomy, and one with six in physiology,—examiners would have a better chance of judging, and students of displaying their knowledge of the subjects; and I firmly believe, in this case, a larger number of candidates would prove successful.

Jesus College, Cambridge. I am, &c., DELTOID.

[The complaint is surely a reasonable one—why the examinations on anatomy and physiology should not be separated is hard to understand. As has been pointed out, the teachers of physiology are almost always physicians, and the selection of good examiners from among pure surgeons may constitute a difficulty; but that should easily be overcome. We must say that it is unfair, when a man has been rejected for a want of knowledge of physiology, that he should not be told so, instead of being sent back to the dissecting-room for three or six months, as the case may be. Such a separation of subjects would, moreover, greatly strengthen the hands of the teachers of physiology; but the whole matter requires more consideration than can be here given to it.—ED. *Med. Times and Gaz.*]

THE TELEPHONE AND AUSCULTATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—Each day seems to bring some new application or discovery of additional phenomenon connected with the telephone. It occurs to me that some ingenious medico with brains and learned leisure might adapt the telephone to teaching auscultation in a class. In certain interesting cases much worry and annoyance might be saved to the patient if the sounds of the chest could be conveyed to a listener, or series of listeners, by one application only of the instrument to the chest, the distal end being taken in succession by the listeners. I here suppose that the sounds are not of sufficient intensity to be given to a class at once, but to the members of the class successively. If such an idea can be worked out, it will be an advantage to both patients and students. I am, &c.,

Plymouth. S. C.

THE LECTURES AT THE COLLEGE OF SURGEONS.—On the conclusion of Prof. Erasmus Wilson's course of lectures on Dermatology he will be succeeded by Professor Parker, F.R.S., who will deliver nine lectures on the Morphology of the Batrachia. On the 4th prox., Professor Flower, F.R.S., will commence his course of nine lectures on the Comparative Anatomy of Man, in continuation of his course of last year; and some time in June, Professors Spencer Wells and B. T. Lowne will bring the College lectures to a close.

A NEW CHLORODYNE.—Dr. Gilman, of Lowell, states in the *Boston Journal* (December 13) that he has bestowed much pains in devising a better formula for chlorodyne than any of those which have hitherto been published, in all of which the ingredients are so unscientifically combined with the treacle that they separate in standing. He has, by the aid of glycerine, succeeded in producing a perfectly clear solution, each dose of which contains a definite quantity of each active ingredient. His *elixir chloroformi comp.*, or *chlorodyne*, is composed as follows:—℞. Chloroformi, ʒ ij.; glycerinæ, sp. vini rect., āā ʒ ij.; sp. menth. pip., acid. hydrocyanic dil., tinct. capsici, āā ʒ ij.; morphiæ muriatis, gr. viij.; syrupi (treacle) ʒ iij. Dose for an adult a teaspoonful, and for a child three to five drops, diluted in water, and repeated if required. A fluid drachm contains two minims of chloroform and of dilute hydrocyanic acid, and one-eighth of a grain of morphia. The treacle employed should be the best molasses (golden syrup), so that the chlorodyne will have a fine appearance. It requires no special skill in compounding, and is equal to any chlorodyne in the relief of pain, vomiting, cholera, etc. The dose, it is to be remembered, is larger than that of Brown's chlorodyne

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, JANUARY 15.

CHARLES MURCHISON, M.D., LL.D., F.R.S., President, in the Chair.

DERMOID CYSTS ALONG BRANCHIAL FISSURES.

MR. WAGSTAFFE exhibited three specimens of dermoid cysts, possibly related in position to branchial fissures. The first was from the inner angle of the orbit, the second and third from the outer angle of the orbit. All were adherent to the bone beneath the orbicular muscle; and, while the first corresponded to the suture between the lachrymal and frontal, the second and third were situated over the junction of the frontal and malar. Mr. Wagstaffe had removed the cysts by operation, and now showed the specimens in connexion with the theory of Verneuil, that dermoid cysts of the face and neck occur along the line of the embryonic fissures, with which they are connected. Mr. Wagstaffe had found that twenty out of twenty-five cases of dermoid cyst in peculiar situations grew along the line of the first branchial fissure; but in other cases there was no such connexion. The depth of these cysts and their attachment to the bone were characteristic features.

MR. HULKE said that he had difficulty in believing Verneuil's theory. The depth and attachments of these growths were characteristic; the bone from which they sprang might even be perforated. As for sublingual cysts, they never contained hair.

Mr. DORAN said that the cysts that occurred at the outer angle of the orbit lay in front of the malar and frontal bones, not in the line of the clefts; and that these bones were formed in membrane during the obliteration of the fissures.

Mr. BRYANT said that he had seen many examples of these cysts. The evidence for Verneuil's theory was insufficient, for beyond the external angle of the orbit the cysts had no special site.

PARALYSIS AGITANS.

Dr. DOWSE exhibited microscopical specimens and drawings illustrative of the changes found in a case of paralysis agitans. The patient, a female, and an inmate of the Central Sick Asylum, had begun to suffer with tremors of the head; these spread to the arms and legs, and were rhythmical and unaffected by volition or emotion. The patient could stand, the body being rigid and inclined forwards, the neck stiff, the face expressionless, and the eyes turned out. On attempting to walk she fell backwards. Sensibility was normal, but there was a subjective feeling of intense heat, which did not affect the thermometer. Paralysis finally became complete and general; the intellect also failed before death. Post-mortem, the brain weighed fifty-three ounces; the arteries at the base were atheromatous, the nerves were firm, and the grey matter appeared normal. The spinal cord weighed ten drachms, and was very firm. Microscopical examination revealed pigmented granular degeneration of the nerve-cells at the decussation of the pyramids, in the olivary body, in the nucleus of the ninth nerve, in the laminæ and corpus dentatum of the cerebellum, and in the anterior cornua of the spinal cord. There were also sclerosis of the right lateral column of the cord, with miliary and colloid degeneration, as well as miliary changes in the white matter of the corpus striatum and hemispheres. A collection of colloid bodies occupied a cavity in the nucleus of the fifth nerve. The minute vessels of the nervous centres were thickened.

The PRESIDENT mentioned a case which had come under his observation, and where Dr. Cayley had found very similar microscopical appearances to those described by Dr. Dowse, namely, sclerosis, local aggregations of leucocytes, and changes in the central canal of the cord.

COLLOID CANCER.

Mr. LYELL showed a fresh specimen of colloid cancer of the rectum and buttock, from a patient of Mr. Hulke's. A woman had noticed a swelling at the side of the anus for five years; this grew, and was accompanied by discharge from the bowel. After a fall, the growth, discharge, and pain

increased rapidly, and the general health became impaired. Colotomy was performed, with great relief; and the patient died eighteen months after of exhaustion. Post-mortem it was found that the rectum was infiltrated with colloid cancer in the two lower inches, the channel being almost closed; that the growth filled the ischio-rectal fossæ, and had spread to the buttocks; and that the skin presented large, irregular ulcers with tremulous contents, with which the edges were generally not adherent or infiltrated. A similar case, as regarded the original site and mode of spreading, was recorded in the *Transactions*. The relief afforded by colotomy was remarkable.

Mr. Butlin inquired respecting secondary growths.

Mr. Lyell replied that two of the inguinal glands were infiltrated with colloid cancer, but these were the only secondary deposits.

Mr. Bryant described a very similar case. A lady had been suffering for about three years with stricture of the rectum, and presented both cancer of that situation and a mass on the left side above the brim of the pelvis. Right colotomy was performed, and the patient did not die for eighteen months, while she remained free from pain. Meanwhile the mass in the pelvis had grown rapidly, and burst through the skin of the left loin in nine months, discharging a small quantity of fæces. In such cases the advantage of colotomy was very great.

Dr. Wiltshire remarked that the invasion of the inguinal glands, and not of the lumbar glands, was remarkable.

Dr. Mahomed described a case of stricture of the œsophagus, complicated with tumour of the spermatic cord, of nineteen years' standing. The disease spread into the peritoneum and opposite cord, and proved to be colloid cancer.

Mr. Hulke said that he had observed that colloid cancer of the rectum was of slower growth and longer duration than other forms of malignant disease. Lately he had seen a case in a man who had suffered from growth in the rectum for nearly four years, and for five years before that date trouble in connexion with the rectum. In colloid cancer, also, the skin seemed to ulcerate from distension rather than from infiltration.

Diaphragmatic Hernia.

Dr. Garlick exhibited this specimen, which was one of true hernia. The subject was a child of two years and a half, which had suffered from a fall at three months, from a cough at six months, and from severe vomiting with constipation and retraction of the belly at eighteen months. Thereafter the child had complained frequently of feeling sick. It was admitted into the Children's Hospital, under the care of Dr. Cheadle, with severe vomiting, thirst, constipation, and retraction of the abdomen. It died after collapse; and, post-mortem, the following appearances were found:—The chest was deformed, being markedly pigeon-breasted, with comparative prominence of the left side. Projecting upwards into the right pleura, and filling a hollow in the base of the lung, was a tumour, which consisted of the pyloric end of the stomach covered by a sac formed by the attenuated right lobe of the diaphragm and its pleural and peritoneal linings. The mouth of the hernial sac, which was situated close to the œsophagus, admitted the thumb and three fingers. There were no adhesions in the sac. The right lung was smaller than the left; the heart was not displaced. Dr. Garlick inquired whether this hernia had been congenital or not. It had manifestly existed at the time of the previous attack of symptoms of obstruction, twelve months before death. The marked pigeon-breast seemed to indicate that negative pressure had been powerful within the pleural cavity, and such disturbance of pressure had been believed to be an important factor in the production of diaphragmatic hernia.

Phosphatic Diabetes.

Dr. Ralfe brought forward two cases of this disease, and showed specimens of the urine from the first case. A man of twenty was admitted into the Seamen's Hospital with great general debility, pains in the muscles, a few râles in the chest, a weak pulse, and no pyrexia. He was strumous, but had been well until three weeks before, since which time, however, he had lost eighteen pounds in weight. The urine was clear, acid, and without sugar or albumen. At the end of a week the prostration was still unaccountable, while the râles had disappeared from the chest. The urine of twenty-four hours was now found to amount to 4600 cubic centimetres, of specific gravity 1010 (instead of the normal mean of 1500 cubic centimetres, of specific gravity 1020). The average amount of urine passed per diem for a month was found to be 3263 cubic centimetres, of specific gravity 1017; and on four occasions the urea amounted to 67, 116, 103, and 61 grammes, and the phosphoric acid to 5·3, 9·1, 7, and 4·28 grammes. Dr. Ralfe's own analysis yielded the following result:—Quantity of urine, 2700 cubic centimetres; total solids, 108 grammes; urea, 89 grammes; phosphoric acid combined with lime and magnesia, 1·8 grammes; phosphoric acid combined with the alkaline oxides, 3·7 grammes; total phosphoric acid, 5·5 grammes. The urine remained unaltered during the patient's stay in hospital; but, notwithstanding this, he improved in general health, and gained fifteen pounds in weight. Dr. Prout and Dr. Roberts had first described diuresis with increased elimination of urea, and Dr. Dickinson first noticed the excess of phosphates, and suggested the importance of the fact. Tessier of Lyons, in describing this disease under the name of "*diabète phosphatique*," had contended that the urea, instead of being always in excess, was sometimes deficient; and that the disease was different from the azoturia of Prout. But if the phosphates were due to nervous disintegration, urea ought to be also constantly in excess. Dr. Ralfe said that, for the present, the name "polyuria" should be applied to these cases. Dr. Tessier had described three groups of his cases—First, where nervous symptoms predominate; secondly, where pulmonary affections follow or accompany the urinary disorder; and thirdly, where saccharine diabetes follows or alternates with it. In Dr. Ralfe's second case, 2200 cubic centimetres of urine were passed; the specific gravity was 1010; the earthy phosphoric acid amounted to 2·3 grammes, and the alkaline phosphoric acid to 2·9 grammes, while the urea was 52 grammes.

The President said that he had not observed such cases in his practice; he asked what their usual termination was.

Dr. Ralfe had not been able to follow the cases to the end. Tessier's cases had been complicated, as he had already stated. The condition might exist without any symptom of disease.

Aneurism of Cerebral and other Arteries.

Dr. Greenfield showed three specimens of aneurism, apparently dependent on embolism. The first specimen involved the bifurcation of the basilar artery, filled up the interpeduncular space, and bulged the floor of the third ventricle; it was three-quarters of an inch in diameter, but did not involve the vessels of the circle of Willis, nor the neighbouring nerves. The sac was one-twelfth of an inch in thickness, and was lined by a firm coagulum. There had been no symptoms due to the aneurism. The mitral and aortic valves presented many vegetations, and ecchymoses and infarcts were found in various organs. Aneurism was rare in this situation. The second specimen involved a small branch of the carotid artery close to the pituitary fossa in the cavernous sinus; it was as large as a pea, and had undergone spontaneous cure. The heart was diseased, and arterial embolism and infarcts were found. The patient had suffered from hemiplegia two years before. The third specimen of aneurism involved the brachial artery at its bifurcation. The patient was suffering from severe aortic disease, when he was seized with severe pain and rapid swelling at the bend of the elbow. The brachial artery was ligatured. Post-mortem a large clot of blood occupied the space in front of the elbow, and extended amongst the muscles; a slit was discovered in the brachial artery, passing into both radial and ulnar arteries, and involving both the outer and the middle coats. There were evident traces of an aneurism. The aortic valves were extensively diseased; a mass of clot half an inch in length hanging down against the mitral valve, which was ulcerated and aneurismal at the point of contact. There was a history of rheumatism in the third case, but none in the other two.—Two other specimens of cerebral aneurism were exhibited by Dr. Greenfield, to illustrate the connexion of such aneurisms with cerebral hæmorrhage—a subject previously discussed by the Society this session. In the first case, which was one of fatal cerebral hæmorrhage, the lateral ventricles were found full of blood; the clot could be traced through the lenticular nucleus of the left corpus striatum, backwards and upwards, to the surface of the convolutions behind the fissure of

Rolando. Here a small hard nodule was found in the pia mater, which proved to be an aneurism on a small branch of the middle cerebral artery; on its deep surface this presented a ruptnre, and on the opposite aspect a layer of organised clot and inflammatory material. Nothing could be more distinct than the track of the blood from the aneurism to the ventricle. The second specimen was a miliary aneurism in the left corpus striatum. The patient had granular kidneys, and an old hæmorrhage in the right corpus striatum.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JANUARY 22.

CHARLES WEST, M.D., President, in the Chair.

RODENT ULCER.

MR. C. HIGGENS read this paper. The patient was a married woman, aged forty-five; her health had always been good. The rodent commenced thirteen years before admission to Guy's Hospital (at the remarkably early age of thirty-two), as a pimple on the left side of the nose, which, however, showed but little tendency to ulcerate until five years after its first appearance. During the progress of ulceration, a second pimple, of apparently the same nature as the first, made its appearance in the angle between the right side of nose and cheek: it did not, however, ulcerate. The eyeball, which was quite healthy, was excised, and the ulcerated surface destroyed with a paste of chloride of zinc and starch, applied on strips of lint; after separation of sloughs some cicatrisation took place. The disease soon commenced again; and eighteen months later the surface of the ulcer and adjoining infiltrated tissue were destroyed with the galvanic cautery, and chloride of zinc paste applied; the second pimple, which was enlarging, was also burnt out. After separation of sloughs, cicatrisation again took place to a great extent; but four months later the disease was again spreading rather rapidly. The whole of the thickened margin and base of the ulcer, together with a large amount of adjoining healthy structures, including skin, mucous membrane, muscles, and bone, were cut away with a scalpel, the bleeding stopped with a "thermo-cautery," and chloride of zinc paste applied all over the cavity left. The wound finally healed entirely, but subsequently some recurrence of the ulceration took place, and the diseased tissues were again removed with knife, cautery, and caustic. Cicatrisation again took place, and with the exception of a small part of its outer margin, the wound has since remained firmly healed.

Mr. GASKOIN showed a patient, aged fifty-seven, who, he believed, showed rodent ulcer in a rare situation. This was on the left of the vertex, the size of the ulcer being about four by three inches. Its margins were hard, its base uneven. There was a copious discharge, with some bleeding. Some attempts at healing had been made.

Mr. HULKE exhibited from the Middlesex Hospital several of Mr. Moore's specimens of rodent ulcer, as well as photographs of his own and Mr. G. Lawson's cases. In all the method of treatment was the same—free excision with the knife, and then the use of the actual cautery (this did not affect the bone very deeply), and finally the free application of chloride of zinc paste. He no longer used the galvano-cautery, owing to the flexibility of the platinum knife when heated, and it was also difficult to tell the amount of induration with the charred tissues. These cases had to be dealt with sharply at first, or the progress of the disease might only be hastened. The ulcer in Mr. Gaskoin's case had not the characters of rodent ulcer, and the situation of such an ulcer on the hairy scalp was extremely rare.

Mr. GASKOIN was not quite sure of the nature of the ulcer in his case, but Colles had said that the disease might occur on the hairy scalp. Lupus was not limited to early life, he had seen it beyond middle age; and he thought rodent cancer might occur at an earlier period than usual. The early stage of rodent cancer was very indefinite.

Mr. NETTLESHIP thought the disease almost always began as a papule, not as a flattened nodule beneath the skin, as described by Mr. Higgens. He remembered one case where the disease seemed to originate subcutaneously. That consisted of tubes lined by epithelium.

Mr. MORRANT BAKER believed the patient shown by Mr. Gaskoin had been under his care some years ago. If so, he was certain the disease was then rodent ulcer of the vertex, and it had been removed accordingly. If it were not rodent ulcer, what was it?

Mr. BARWELL thought the term "rodent cancer" better than "rodent ulcer." There was a great distinction between such a disease as this and lupus, where simple scarification might effect a cure. He used Paquelin's thermo-cautery instead of the ordinary galvano-cautery. Recently he had used it for rodent cancer of the face, and this had been followed by some exfoliation of bone.

Mr. HULKE could not say more than that Mr. Gaskoin's case had not the characters of rodent cancer, but it might have been modified in treatment. Rodent cancer was always epidermal in its origin, and never began beneath the skin. Mr. Gaskoin was only employing expectant treatment.

Mr. HIGGENS agreed in the free use of caustics, but only after free excision. The patient had been to another hospital, where it had been determined to let the growth alone. He thought Mr. Moore described rodent ulcer as beginning as a flattened induration in and beneath the skin.

THE BLOOD IN SKIN DISEASES.

Dr. GEORGE THIN read a paper on the proportion of red corpuscles in the blood in some skin diseases. The investigations here recorded were made by the method introduced by M. Malassez, of Paris, which consists in diluting the blood to a known degree by artificial serum, and in counting the number of corpuscles contained in a given quantity of the diluted blood. The latter part of the operation is done by counting the corpuscles seen in a measured length of a capillary tube of known capacity. Absolute accuracy is not obtainable by this method, but comparative results show that the range of error is not so wide as to invalidate for general purposes the data which it affords. M. Malassez has found that in Paris the number of red corpuscles in a millimetre cube of blood varies in healthy men between 4,000,000 and 5,000,000; in females the number is less. The number varies in the same person within certain limits, being affected by place of residence, exercise, and quantity of fluids drunk. The same observer found that the number diminishes greatly in wasting diseases. In cancer he counted in a man as low a number as 2,500,000, and in a woman 1,500,000. In phthisis his lowest numbers were, in a male 2,500,000, and in a female slightly under 1,000,000. In selecting persons suffering from skin diseases for examination, only those were chosen in whom there was no reason to believe that the condition of the blood was affected by medicinal treatment or the existence of other maladies. The selection was made from cases kindly given by Mr. Morrant Baker, Dr. Tilbury Fox, and Dr. Payne, and from patients under the author's care, and in every instance the symptoms pointed to a genuine idiopathic outbreak of disease. In order to provide data for comparison, the numbers found in healthy persons and in some cases of severe organic disease are first given, the latter being placed at the author's disposal through the courtesy of Dr. Cayley, Physician to the Middlesex Hospital:—*Healthy Males:* There were found in a butcher, aged twenty-two, 4,760,000 red corpuscles per cubic millimetre of blood; in a greengrocer, aged twenty-eight, 4,700,000; in a baker, aged twenty-two, 4,600,000; in a medical practitioner, aged twenty-six, 4,400,000. *Healthy Females:* In a domestic servant, aged twenty-nine, 3,880,000 red corpuscles per cubic millimetre of blood; ditto, aged thirty-one, 4,090,000; ditto, aged twenty-four, 4,200,000; ditto, aged nineteen, 4,020,000; in a girl, aged thirteen, 3,940,000; in a married woman, aged twenty-five, 4,210,000. *Diseased Persons:* In a man, aged fifty-eight, suffering from stricture of the œsophagus, and unable to swallow solid food, 3,500,000 red corpuscles per cubic millimetre of blood; in a young woman, with extremely anæmic appearance, 3,110,000; in a man, aged twenty-nine, in very advanced stage of phthisis, 2,160,000. The following numbers were found in cases of skin disease:—Psoriasis—In a man, aged twenty-five, 5,250,000 red corpuscles per cubic millimetre of blood; in a man, aged twenty-five, 4,820,000; in a woman, aged twenty-seven, 4,330,000; in a woman, aged eighteen, 4,448,000. Eczema—In a man, aged sixty, 3,750,000; in a man, aged nineteen, 4,200,000; in a girl, aged twelve, 4,420,000; in a woman, aged twenty-six, 4,350,000; in a woman, aged twenty, 3,880,000; in a woman, aged twenty-

five, 5,050,000. Pemphigus (chronic)—In a man, aged between thirty and forty, 3,580,000. Acne sebacea—In a woman, aged sixteen, 4,050,000. Prurigo (Hebra)—In a boy, aged thirteen, 3,420,000: counted in same case after an interval of a month, 3,550.000. Acne rosacea (second stage)—In a man, aged forty-seven, 4,140,000. The following numbers were found in the case of a boy aged seventeen, a patient of Dr. Tilbury Fox, suffering from anæsthetic leprosy. He was born in Bombay, of European parents. The disease was not in an advanced stage:—On March 1, 1877, 4,320,000 red corpuscles per cubic millimetre of blood; 26th, 4,470,000; May 26, 4,830,000. It is seen from these figures that an outbreak of psoriasis is compatible with a high proportion of blood corpuscles. In eczema the number is about normal. The case of the man aged sixty was a severe one, and had lasted many months, and the hygienic conditions were bad. In the man aged nineteen the disease had invaded in a scaly infiltrated form nearly the whole surface of the body, and had lasted for a number of years, the case being one of great severity. That in such a case the number should have exceeded 4,000,000—the enumeration having been repeated several times with great care—shows that a diminution in the number of red corpuscles is not a necessary condition of eczema. During the time that the leper was under the author's observation he was taking, by Dr. Fox's prescription, iron and mineral acids. There was no improvement in the disease during that period. On one occasion the proportion of white corpuscles to red was estimated, and was found as high as one white to fifty red. The only cases in which the number of red corpuscles was deficient were the case of prurigo and that of chronic pemphigus. In the case of prurigo the effect of broken sleep on the general health since the first year of life is to be taken into account.

Mr. Gaskoin thought the old treatment of psoriasis by venesection was rather borne out by what Dr. Thin had just stated.

Mr. Morrant Baker remarked on the extreme care taken in the observations. He understood Dr. Thin to say that these did not confirm the notion of certain skin diseases being dependent on morbid states of the blood; but that other things besides the number of corpuscles had to be taken into account.

Dr. Thin said his observations were aimed at the notion that all skin diseases were connected with a profound blood-change. His observations showed that, in one respect at least, there was no important change.

Simple Atrophic Sclerema.

Dr. John Harley made a second communication on simple atrophic sclerema. The author described the condition of a patient, a well-developed woman (Louisa M.), twenty years of age, in whom the hands are affected with sclerema, causing such impediment to the circulation that the members are cold and frequently dusky. The movements of the wrists, and to a slight extent those of the elbows and hips, are diminished, and stiff, and painful. The adipose tissue has completely disappeared from the neck and upper part of the chest, which from the level of the hyoid bone to the lower edge of the first rib is marked by lineæ atrophicæ, alternating with lines of healthy skin, but in which there is an increase of pigment. The development of the lineæ atrophicæ may here be studied by the aid of a pocket-lens. The affected area is pervaded by a coarse network of hair-like vessels, which form a scanty network with oblong meshes. The larger vessels lie in or by the borders of the lines of healthy skin; the finer branches lose themselves by sudden attenuation in the lineæ atrophicæ, which already possess a pearly whiteness. Such a network of bloodvessels is not seen in the healthy skin, and its presence in the morbid areas is due, the author maintained, to regular interruptions of the circulation, by the shrinking of the lacunæ, canalicular system, and bloodvessels of the affected lines or areolæ, resulting in the formation of non-vascular tendinous tissue in place of soft vascular skin. In the second stage of the process these vessels disappear. The temporary congestion of these vessels on their way to extinction leads to no other change beyond perhaps the deposition of pigment (as may result from the application of a sinapism in some persons); and the part is neither the seat of irritation nor of hypertrophy, but the reverse, there being a diminution of temperature and of tactile sensibility throughout the process. Already there are indications of functional disturbance of the alimentary canal. Standing alone this case would appear to have no definite signification, but side by side with that of a patient whose history has been recorded by the author in the last volume of *Transactions* (vol. lx.), it becomes extremely interesting, since there is an exact resemblance in the two cases in every particular, and they differ only in sex, age, and in the duration of the disease. For the case brought forward now, the disease is in its earliest stage; in the previous one it has existed for six years, and has nearly brought the patient to the term of his existence. Both the patients were in attendance.

CLINICAL SOCIETY OF LONDON.

Friday, January 25.

George W. Callender, F.R.S., President, in the Chair.

A Case of Spina Bifida successfully treated by the Injection of Iodine.

Mr. A. Pearce Gould read notes of this case. The patient was born with a tumour the size of a hen's egg, situated over the last lumbar and the upper sacral vertebra; this slowly increased in size, whilst the skin over it thinned. When eighteen months old he was brought to the Hospital for Sick Children. The tumour was then the size of a cricket-ball, sessile, with all the usual characters of spina bifida; an opaque bond was seen along the middle line of the lower three-fourths of the tumour. There was no paralysis or other deformity. The head was large, the fontanelle was widely open, becoming bulged when the tumour was compressed. On September 18, 1877, the tumour was tapped with a small hydrocele trocar at the upper part just to one side of the middle line; six drachms of fluid were removed, and half a drachm of Morton's iodo-glycerine solution was injected, the opening being closed with collodion. For the first few days all promised well: the tumour appeared to be firmer, smaller, and less translucent; but at the end of a fortnight it had returned to its former condition. On October 5 the operation was repeated, one drachm of the iodine solution being injected; but this was attended with the same result. On November 5 it was injected for the third time, two ounces and a half of fluid being removed, and two drachms of the solution injected. The sac became very tense, red, hot, and tender; fluctuation persisted for a week, but on the ninth day a marked change was noted: the tumour was smaller, flaccid, elastic, but not fluctuating, and it did not become tense when the child cried. The wall of the sac became gradually firmer and thicker, and the tumour shrank. On December 14, there being still distinct fluctuation in the now thickened cyst, it was again tapped and emptied by the removal of six drachms of a yellow viscid highly albuminous fluid; it was evident that the communication with the spinal canal was completely obliterated. One drachm of the iodine solution was injected into the sac, and firstly manipulated, and then allowed to escape. The tumour had since then gradually shrunk, and now presented a thick pad of skin, quite dense at the lower part, softer above, where there was a small spot which still fluctuated. From this Mr. Gould withdrew about half a drachm of yellow turbid fluid two days ago. There was no paralysis. The fontanelle was closing up. After each operation the temperature rose to 101° to 102·8°, and continued above the normal from two to six days. There was no convulsion or other sign of interference with the nervous system. The after-treatment consisted in thickly smearing the tumour with collodion each morning, and supporting it with wool and a bandage. The tumour evidently communicated very freely with the spinal canal, and most probably contained the spinal cord or nerves. Mr. Gould had examined twenty-three specimens of spina bifida, and had found nerves in the sac twenty times, two cases in which this did not occur, and one case in which it was doubtful. The nerves or cord generally occupied the middle line—the position of the opaque bond seen in this case. The absence of paralytic symptoms by no means favoured the opposite view. The fluid removed at the first three operations was colourless, becoming slightly turbid on standing, specific gravity 1011, faintly alkaline, containing a trace of albumen, chlorides, and phosphates. With Fehling's copper solution, it gave no reaction; but Dr.

Dupré analysed it, and after concentration was able to get distinct evidence of the presence of sugar. Because sugar could not be detected in spina bifida fluid, and that escaping from the skull in cases of fracture, it must not therefore be supposed to be absent, unless the tests be applied to the fluid after evaporation. Dr. Morton's treatment had now been employed several times; and in twelve out of fifteen published cases with success. As to the value of the glycerine, Mr. Gould stated that on pouring some of the "iodo-glycerine" on to some of the cerebro-spinal fluid in a narrow glass, it was found to sink to the bottom at once and not mix with it; and he was of opinion that the same thing occurred in injecting the tumour, for the fluid that oozed from the puncture after the injection was quite unstained with iodine, and the action of the injection had been much more potent at the lower part of the sac. Although the mode of cure resembled that seen in the radical treatment of hydrocele, there was an important difference in the two conditions—the one being a closed sac, the other communicating with a canal full of fluid. As to the fear that the inflammatory material would press injuriously on the contained nervous material, it was observed that in none of the published cases had consecutive paralysis been noted, and a specimen of Sir Astley Cooper's in St. Thomas's Hospital museum, described in his paper in the *Medico-Chirurgical Transactions*, vol. ii., showed that the radical cure might take place in this way when the cord was in the sac without nervous symptoms. Mr. Gould had considerable difficulty in stopping the oozing of the cerebro-spinal fluid, which was so dangerous if allowed to continue.

The President said that an important subject had been brought before the Society by the full and exhaustive narration of a case by Mr. Gould. With reference to the mode of operation, he might suggest that it would be found useful to introduce the trocar and canula through and beneath the skin some little distance to the side of the tumour. In this way direct puncture of the sac was avoided, and the valvular puncture permitted subsequent compression (after the removal of the canula) to prevent the escape of fluid. Whilst discussing the subject of the treatment of spina bifida, it would be of interest if members would give their experience as to the age to which patients might live despite the deformity. For some years a gentleman had been under his care, who had been originally attended by Sir Astley Cooper. He wore to the last a protecting case, removed from time to time, after the model suggested by Sir Astley Cooper. In this instance there was bladder-trouble, the rectum acted imperfectly, and innervation of the lower extremities was incomplete. Yet this patient lived an active professional life, and reached the age of seventy-four years. The President added that he believed this to be the greatest age ever attained by anyone afflicted with a spina bifida.

Mr. Howard Marsh thought Mr. Gould's case very valuable as an illustration of the excellent results of Dr. Morton's method of treatment. He saw the patient in the Children's Hospital, and well remembered that it was suffering from a formidable variety of spina bifida such as, under former methods, commonly ended in the loss of the patient's life. He believed Morton's plan would prove a very important addition to the surgery of childhood.

Mr. Thomas Smith expressed his thanks to the author of the paper for bringing the subject before the Society, and his conviction that Dr. Morton had given us the very best method of treatment for spina bifida that we possessed. The injections of watery solutions of iodine were very rarely successful. If sufficient irritation were excited in the sac to procure its obliteration, the inflammation was almost sure to spread to the spinal canal, as he had too often ascertained by examination. It was interesting to learn that the difference in the result of the iodo-glycerine solution was probably due to its remaining in the lowest part of the sac when injected, and therefore its effects were more limited. Mr. Smith had employed Morton's method successfully in four or more cases. He was, as yet, doubtful what effect this method of cure had on the innervation of the parts below. On this subject his colleague Mr. Barker would give some information. With regard to the President's remarks, Mr. Smith referred to a case mentioned in Mr. Holmes's "Diseases of Children," of a man with spina bifida aged forty-three, who survived an operation for stone. In his own experience he had been consulted by a gentleman of middle age with spina bifida, who, though inconvenienced to some extent by the malady, yet was able to discharge responsible professional duties, to fulfil the functions of a husband, and who suffered from no deficient innervation of the lower parts of the body. The disease in this case had not been treated. Sufficient time had not yet elapsed to judge of the condition of patients in later life cured by Dr. Morton's method; but, as far as his own experience went, he was bound to say that, in estimating the value of the result in such cases as he had cured by other means, it would have been better for the patients had they not survived the treatment.

Mr. Morrant Baker said that he had employed Morton's solution for the injection of a spina bifida in an infant two months old, who was under his care at St. Bartholomew's Hospital about eighteen months ago. The solution had been prepared according to the usual formula, and was injected with the usual precautions. The local effect was good; the sac becoming thickened after the second injection, and giving no further trouble. But, at the same time, loss of power of movement and of sensibility was noticed in the lower extremities; and this had remained to the present time. Mr. Baker thought the case should be mentioned, as it might elicit the experience of others on the subject: and would show that the injection of the iodo-glycerine solution, even when locally successful, was not without its dangers.

Mr. Gould briefly replied.

(*To be continued.*)

OBITUARY.

CHARLES HELIER LE MERLE.

Mr. Le Meele, who was a native of Trinidad, came over to England in 1876 to study medicine, and entered at the London Hospital as a student for that purpose. He had previously studied at Trinity College, Trinidad, and subsequently at the Colonial Hospital, and shortly after his arrival in England passed the preliminary examinations of the College of Surgeons and the Apothecaries' Hall. He was a very earnest and hard-working student. Indeed, his illness, which commenced last Christmas eve, was attributed to this cause. It was thought to be the result of over-work. The illness commenced rather suddenly with headache and vomiting, and shortly afterwards other symptoms of tubercular meningitis showed themselves. He died about the fourteenth or fifteenth day of the malady, and the post-mortem examination proved the correctness of the diagnosis. The death of a student so promising as was Mr. Le Merle is always a sad event; but when such death takes place far from home and friends, in a strange land, there is an additional sadness. Mr. Le Merle's relatives will, however, be glad to know that he had a friend who was more than a brother to him during his last illness, and one who nursed him faithfully to the end. Mr. Rhaheem Buksh, a fellow-student at the London Hospital, with whom he was lodging at the time of his illness, and with whom he had contracted a sincere friendship, devoted himself with untiring patience and care to his sick comrade.

As soon as ever the grave nature of the disease began to manifest itself, Mr. Le Merle was taken into one of the small rooms of the Hospital, and placed under the care of Dr. Sutton; but neither treatment nor friendship could save him. He died on January 7, 1878, aged twenty-two years. He was an accomplished linguist, speaking English, French, Spanish, and Italian fluently; and his untimely death is sincerely regretted by all who knew him.

Unqualified Medical Assistants.—The employing of unqualified men as their assistants by some medical practitioners has on several occasions called forth an expression of dissatisfaction by the Coroner for Sheffield, Mr. D. Wightman. Last week a case came before him, in which a certificate of burial had been given by the principal respecting a child which he had never seen, and merely on the statement of his assistant. The registrar had refused to accept the certificate; and the Coroner, in approving of the registrar's refusal, announced that he would hold inquiries in all like cases that might be brought under his notice.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 24th inst., viz. :—

Adcock, Harold, Norbiton, Surrey, student of Guy's Hospital.
Blomfield, Arthur G., L.S.A., Barton, Beds, of King's College Hospital.
Bothamley, Richard Broughton, L.S.A., Donington, near Spalding, of St. Thomas's Hospital.
Bowman, Harry Ernest, Clifford-street, W., of King's College Hospital.
Burn, Stacey Southerdon, Highgate Rise, of St. Bartholomew's Hospital.
Garland, George H., Royal Hospital, Chelsea, of St. Thomas's Hospital.
Greenway, Alexander Stevenson, M.B. Edin., Shooter's-hill, of the Edinburgh School.
Hampson, Joseph, Atherston, of St. Bartholomew's Hospital.
Hope, William More, Piccadilly, of University College Hospital.
Jakins, Percy Septimus, L.S.A., Osnaburgh-street, N.W., of St. Mary's Hospital.
Knaggs, Robert Henry Edward, L.S.A., Trinidad, West Indies, of St. Thomas's Hospital.
Leigh, William Watkin, Chislehurst, of Guy's Hospital.
Lynn, Edward, Woolwich, of Guy's Hospital.
Maxwell, Charles Mayne, Hobart Town, of University College Hospital.
Norman, Alexander Stewart, Southsea, of University College Hospital.
Nugent, Thomas Cureton, Brockley, Kent, of Guy's Hospital.
Pryce, Evan William, Montgomery, of St. Bartholomew's Hospital.
Robinson, Arthur Henry, Darlington, of University College Hospital.
White, William Robert, L.S.A., Warwick-street, S.W., of King's College Hospital.

The following gentlemen passed on the 25th inst., viz. :—

Aitkens, John Alex., Twickenham, student of King's College Hospital.
Bell, Richard Frank, Leicester, of St. Thomas's Hospital.
Bond, James William, L.S.A., Louth, Lincolnshire, of University College Hospital.
Bullock, Joseph Ernest, Great Berkhampstead, of University College Hospital.
Browne, Horace Ximenes, Plymouth, of St. Bartholomew's Hospital.
Clarke, Reginald, L.S.A., Craven-hill, W., of King's College Hospital.
Crick, Samuel Arthur, L.S.A., Cosby, Leicestershire, of St. Thomas's Hospital.
Ensor, Theodore Francis, Milborne Port, Somerset, of King's College Hospital.
Foster, W., L.S.A., L.F.P.& S. Glasg., Clifton, Bristol, of the Westminster Hospital.
Fox, Joseph Tregelles, L.S.A., Lordship-road, N., of the London Hospital.
Good, William Ernest, Dorchester, of University College Hospital.
Hartley, William Darley, Crewe, Cheshire, of Guy's Hospital.
Hawks, Robert Shafts, Hertford, of St. Bartholomew's Hospital.
Jackson, George Henry, Tooting, of the London Hospital.
Leah, William, L.S.A., Birchfield, Warwickshire, of the Birmingham School.
Morton, Shadforth, Hillsdrop-road, N.W., of University College Hospital.
Reader, Jeremiah, L.S.A., Bridport, Dorset, of Guy's Hospital.
Stewart, Frederick George, L.S.A., Plympton, of Guy's Hospital.
Willes, William, Bath, of St. Bartholomew's Hospital.

APOTHECARIES' HALL, LONDON.—The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on Thursday, January 24 :—

Clark, James Richardson Andrew, 16, Cavendish-square, W.

The following gentleman also on the same day passed his Primary Professional Examination :—

Midwinter, Edward James Henry, London Hospital.

BIRTHS.

CHILD.—On January 23, at New Malden, Surrey, the wife of Edwin Child, M.R.C.S., of a daughter.

SKENE.—On January 22, at Dewsbury, the wife of William Skene, M.D., of a son.

WIGHT.—On January 27, at 423, Liverpool-road, Holloway, the wife of George Wight, M.B., of a son.

MARRIAGES.

COOKE—WALKER.—On January 22, at Holy Trinity Church, Brompton, Kent, Conway Cooke, L.R.C.P., etc., of Bognor, of Sussex, to Margaret Logie, youngest daughter of the late Andrew Walker, Ceylon Civil Service.

DRING—CHIMMO.—On January 22, at St. John's, Notting-hill, Ernest Dring, M.D., L.R.C.P., of Boughton, Faversham, to Catherine, only child of the late Henry Hope Chimmo, Paymaster R.N.

JONES—BERTOLACCI.—On January 24, at St. Mark's Church, New Wandsworth, Arthur Crosby Brett Jones, eldest son of Edward Jones, M.D., of Sydenham-park, to Amelia Margaret, daughter of Francis Robert Bertolacci, Esq., of Park-road, Wandsworth-common.

JONES—BLACKBURN.—On January 3, at Chicago, U.S.A., Percy Owen Jones, M.R.C.S.E., to Alice, eldest daughter of the Rev. W. M. Blackburn, D.D.

LOWRY—MEDHURST.—On January 23, at St. Swithin's Church, Magherafelt, Co. Derry, Ireland, Thomas Harvey Lowry, M.D., of Malling Place, West Malling, Kent, to Elizabeth Jane, widow of Captain Frederick Edward Medhurst.

PHILLIPS—ELLAM.—On January 22, at the parish church, Edmonton, Alfred Phillips, F.R.C.S., to Margaret Hannah, eldest daughter of the late W. H. Ellam, Esq.

SLATER—SIMPSON.—On January 22, at the parish church, Llandrillo-yn-Rhos, North Wales, Walter John, eldest son of Robert Slater, L.K.Q.C.P., of Droylsden, Manchester, to Isabella Christina, eldest daughter of R. H. Simpson, of Yorkshire.

STEDMAN—GURNEY.—On January 21, at Christ Church, Bournemouth, James Stedman, M.R.C.S., to Elizabeth, second daughter of the late Thomas White Gurney, Esq., formerly of Park House, Towcester, Northts.

DEATHS.

COCKERTON, HENRY MILES, M.R.C.S., at Montgomery, on January 24, aged 53.

DE VITRE, JANET GRAHAM, wife of Edward Denis de Vitre, M.D., at The Elms, Bare, Lancaster, on January 21, in her 70th year.

HENDERSON, HECTOR GRAHAME, M.D., at Calicut, India, on December 22, 1877.

PAINE, FRANCIS TREVOR, only son of Henry James Paine, M.D., at 11, Crockherbtown, Cardiff, on January 27, aged 25.

PEACEY, WILLIAM HENRY, M.R.C.S.E., at Tewkesbury, on January 23, aged 59.

RITCHIE, CHARLES, M.D., late President of the Faculty of Physicians and Surgeons, Glasgow, at 27, Newton-road, Bayswater, on January 27, in his 80th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BRECON INFIRMARY.—Resident House-Surgeon. Candidates must have a medical and surgical qualification. Applications, with testimonials, to W. Powell Price, Secretary, on or before February 11.

ST. GEORGE'S HOSPITAL.—Surgeon and Assistant-Surgeon. Candidates for these offices must be Fellows of the Royal College of Surgeons of England. Applications addressed to "The Chairman of the Committee for the Election of a Surgeon and Assistant-Surgeon," under cover to the Secretary of the Hospital, on or before February 13.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATION.

Rugby Union.—Mr. Thos. B. Whitehead has resigned the Dunchurch District; area 14,454; population 2521; salary £40 per annum.

APPOINTMENTS.

Alton Union.—Arthur Curtis, L.R.C.P., M.R.C.S., to the Second District.
Ashbourne Union.—George A. Norman, M.B. Oxon., L.R.C.P. Edin., L.R.C.S. Edin., to the Longford District.
Bridgwater Union.—Jeremiah Wase, M.R.C.S. Eng., L.S.A., to the Fourth District.
Burton-upon-Trent Union.—Peter G. Bell, L.R.C.P. Edin., L.R.C.S. Edin., to the Etwall District.
Cardigan.—Wm. Morgan as Analyst for the County.
Croydon Union.—John D. Shapland, M.R.C.S., L.S.A., to the Second District. Henry H. Dearsly, M.R.C.S. Eng., L.S.A., to the Tenth District.
Godstone Union.—Henry H. Dearsly, M.R.C.S. Eng., L.S.A., to the Northern District.
Great Ouseburn Union.—Bertrand E. de Lautour, M.R.C.S. Eng., to the Tollerton District.
Huddersfield Union.—Edwin Dean, L.S.A., to the Slaithwaite District.
Ludlow.—Thos. P. Blunt, F.C.S., as Analyst for the Borough.

COLLEGIATE EXAMINATIONS.—At the last Pass Examination for the diploma of Membership of the Royal College of Surgeons of England (which was not brought to a close until the 25th inst., having extended over seven days), 143 candidates were examined, including fourteen who were examined in medicine only, having previously passed in surgery. Of the whole number, twenty-nine gentlemen, having passed in surgery, will be admitted Members of the College when qualified in medicine; and thirty-four candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months. Of the candidates examined, fifty-one were already in possession of registrable qualifications, as were also ten candidates *admitted* Members after obtaining such qualifications. The Licence of the Society of Apothecaries appears to be the favourite, judging from the number, there being as many as 38; L.R.C.P. Lond., 3; L.R.C.P. Edin., 2; M.B. Aber., 2; M.B. Edin., 1; M.B. Glasg., 1; L.K.& Q.C.P. Ire., 2; L.F.P. & S. Glasg. and L.S.A., 1; M.D. Brussels and L.S.A., 1; M.D. McGill, 1; and M.D. Laval, 1. The patients at the clinical examinations were selected from the following hospitals, viz. :—St. Bartholomew's, Guy's, St. Thomas's, St. George's, University College, and St. Mary's; and amongst them were some good typical cases, as femoral aneurism, epithelioma on forehead, psoas abscess, strumous cervical glands, umbilical hernia, hydrocele, arthritic shoulder, carbuncle and inguinal hernia, fracture of the olecranon, epithelioma linguæ, fracture of clavicle, abscess in testis, cancer of lip, varicose veins, orchitis, inflammation of the absorbents of the arm, exostosis of the femur,

inguinal scrotal hernia, varicocele, etc. Several visitors, as usual, attended the examinations each day, to which they were freely admitted on sending in their cards to Mr. Birkett, the President.

LECTURES ON DERMATOLOGY.—Professor Erasmus Wilson, F.R.S., commenced his annual course of lectures on Dermatology at the Royal College of Surgeons on the 28th ult.; the programme is as follows:—"Diseases of the Glandular System of the Skin."—I. *Diseases of the Follicles:* Cutaneous follicles, their structure; division into hair-follicles, sudoriferous follicles, and sebaceous follicles. Inflammation of follicles; pathological characters; classification of diseases of the follicles. 1. Errors of Development—*a*. Grutum; milium; pearly tubercles; their nature and treatment. *b*. Serous and vesicular sacs; serous cysts. 2. Errors of Function—*a*. Comedones, or grubs; pathology and treatment; the entozoon folliculorum. *b*. Follicular sacs and sebaceous tumours; pathology and treatment. *c*. Follicular cysts or encysted tumours—epithelial, atheromatous, melicerous; pathology and treatment. *d*. Follicular horns; folliculitis setosa; cutaneous horns; pathology and treatment. 3. Inflammation of Follicles—*a*. Folliculitis rubra; pathology and treatment. *b*. Acne or acmai; varieties of acne; pathology and treatment. *c*. Gutta rosea or rosacea; pathology and treatment. *d*. Mentagra or sycosis; pathology and treatment. *e*. Kerion, or pustular folliculitis of the scalp; scald-head; pathology and treatment. *f*. Phytosis—diseases characterised by the development of a fungous vegetation within the follicle:—Favus. Tinea, or ringworm of the scalp. Lichen circinatus, or ringworm of the body. Lichen marginatus, the Indian ringworm. Pityriasis versicolor. Pathology and treatment of these diseases. II. *Diseases of the Sebaceous System:* 1. Disorders of Function—*a*. Asteotodes, or absence of secretion. *b*. Steatorrhœa or seborrhœa, excess of secretion; steatorrhœa simplex or oleosa; sebaceous concretions; chromosteatodes or coloured sebum; steatorrhœa flavescens; steatorrhœa nigricans. Pathology and treatment. 2. Diseases of the Sebiparous Gland—*a*. Atrophy. *b*. Hypertrophy; molluscum adenosum *seu* contagiosum. III. *Diseases of the Perspiratory System:* 1. Disorders of Function—*a*. Anidrosis, or absence of perspiration; partial perspiration. *b*. Hyperidrosis, or idrosis; excess of perspiration; sudatoria. *c*. Osmidrosis, or fetid perspiration. *d*. Chromidrosis, or coloured perspiration; hæmidrosis. 2. Diseases of the Perspiratory Gland—*a*. Atrophy of the sweat-gland. *b*. Hypertrophy of the sweat-gland. *c*. Hydro-adenitis; hyperæmia glandulorum; vesicular hydro-adenitis; pustular hydro-adenitis.

THE HEALTH OF SCOTLAND FOR DECEMBER, 1877.—According to the report of the Registrar-General for the month of December last, Scotland would appear to have been exceptionally healthy, the deaths for that period (2622) being no less than 525 below the average number for December during the last ten years, allowing for increase of population. In the eight principal towns the ratios of mortality ranged as follows:—21 deaths per 1000 in Dundee, 24 in Perth, 25 in Glasgow and in Greenock, 26 in Aberdeen, 27 in Edinburgh, 29 in Paisley, and 33 in Leith. Of the 2622 deaths recorded, 1166, or 44 per cent., were of children under five years of age. Zymotic diseases proved fatal to 380 persons, constituting 14·5 per cent. of the whole mortality. The prevalence of whooping-cough in Paisley caused this rate to be exceeded in that town. Apoplexy was credited with 52 deaths, paralysis with 65, whilst the victims to heart disease are returned as 145; then 69 deaths are attributed to hydrocephalus, and 140 to premature-birth debility. As usual at this period of the year, the deaths from inflammatory affections of the respiratory organs were numerous, amounting to 718, or 27·4 per cent. of the whole mortality. Violent causes were accountable for 93 deaths, of which 4 were suicides, and 7 were of persons injured by the fall of a house in Edinburgh. Two males and six females had reached to ninety years and upwards, two of whom were aged ninety-eight years respectively.

RASPAIL.—In an article in the *Gazette Hebd.* (January 25), Dr. Chouppe inquires what are the scientific claims of this radical philosopher, who for half a century has enjoyed such immense popularity. Has political passion blinded his opponents, or has the paradoxical mercantile and noisy character of his proceedings of later times obscured the reputation due to the researches of the *savant*. An attentive perusal of what he has written has convinced Dr. Chouppe that the statement is correct, that he anticipated Schwann by some years in the discovery of the cell system; but then his observations were very inexact, and stopped quite short of the necessary demonstration and generalisation. In his otherwise remarkable investigations on parasites, on the other hand, he was led by imperfect histological data into hasty generalisation concerning their influence in the production of various diseases. As to his therapeutical procedure (which proved so profitable to him), it consisted in destroying by means of camphor parasitic diseases which had no existence. In fact, from Raspail's prolonged investigations (many of which were conducted during his numerous imprisonments) there are only a few results of any importance. Of his claims as a chemist Dr. Chouppe does not feel competent to speak.

ACADÉMIE DE MÉDECINE.—One of the hottest contests that ever occurred in this learned body has just been decided. A membership of the section Hygiene and Legal Medicine had to be filled up, and the section presented its list of candidates classified as follows:—First line, M. Lagneau; second line, M. Proust; third line, M. Gallard; and fourth line, MM. Léon Colin, Henri Guéneau de Mussy, Lunier, and Ernest Besnier. As a general rule, the candidate who heads the list is accepted by the Academy, but numerous exceptions, as in the present case, have occurred. On the first balloting of eighty-three voters present, twenty-nine voted for M. Guéneau de Mussy, twenty-eight for M. Lagneau, twelve for M. Proust, twelve for M. Lunier, and two for M. Colin. Thus M. Guéneau de Mussy was at once transferred from the fourth place on the list to the head of the poll, but not possessing the necessary majority (forty-two) a second balloting took place. There were eighty-two who voted, M. Guéneau de Mussy obtaining forty-one votes, and M. Lagneau thirty-seven; but the majority required (forty-two) not having been obtained, a third balloting took place, and M. Guéneau de Mussy obtaining forty-one of the eighty-one votes, which were now given, to M. Lagneau's thirty-eight, was declared elected. At its meeting on January 21 the Academy elected Prof. Peter into the Section of Medical Pathology, he having obtained the suffrages of fifty-two of the seventy-one academicians who were present.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. W. J. Branch, St. Kitt's.—Received with thanks.

A Student of Guy's.—The lectures now in the course of delivery every Monday, Wednesday, and Friday, at the Royal College of Surgeons, are freely open to all medical students.

Mathematical Tripos.—At Cambridge the Mathematical Tripos list was issued on Friday last, and, as usual, excited great interest. The second gentleman on the list of wranglers is Mr. John Edward Aloysius Steggall, of Trinity College, a son of Mr. J. W. B. Steggall, M.R.C.S. Eng., of Queen-square, Bloomsbury, a Gold Medallist of the Society of Apothecaries, and a grandson of the late well-known Dr Steggall. He was educated at the City of London School.

Inexorable.—The Town Council of Dover last week, for the fourth time, received a letter from the Local Government Board urging them to appoint a public analyst. The receipt of the letter was ordered to be acknowledged, but no steps were taken towards complying with the request of the Board.

Abstainer.—Mr. Leone Levi calculates the proportion of alcohol consumed by the working-classes at two-thirds of the whole; and he calculates, that of the 33s. per week, or £85 per annum, which constitutes their average income, they expend about £40 for food, £7 for house-rent, £20 for fire, lighting, clothing, education, health, and recreation, and £18 for drink and tobacco, including the taxes thereon. The regulation of ale-house and "typlers" in 1605 appeared the most pressing question, as it still does after the lapse of 270 years. The orders in Council, however, were accompanied by a list of articles which all persons licensed to keep "typliug-houses" were to be bound to observe. In those days no children or servants were to be allowed to tipple at all. No one was to be allowed to tipple above *one* hour in any one day. No tippling was allowed during the time of "sermons or service," nor at any time after nine o'clock at night. No "carding," dicing, or drunkenness was to be permitted. The number of alehouse-keepers was to be as "few as may be," and certificates of the number were to be produced to the judges of assize.

Unfeminine Drudgery.—Yes; a German peasant may be seen walking leisurely smoking his pipe, unencumbered by any burden, and followed by his womankind staggering under a load of hay or vegetables or faggots, which almost conceal the human beast of burden from view. Women are harnessed to a barge and tow it against the stream of the Rhine, no man putting his shoulder into the rope-harness in their stead. On the Italian side of the Alps the heaviest burdens are carried by women, and it is called *faccenda di donna*—women's work. It may be remembered that during the war in Ashantee the women were said to be the best baggage-carriers, and kept up with the line of march with a box of ammunition on their heads and a baby on their hips.

Antiseptic.—The surgeons of the sixteenth and seventeenth centuries used to treat gunshot wounds as if they were poisoned, and they therefore applied vulnerary remedies, of which the *arquebusade* was the chief. The arquebusade is still to be had of old-fashioned perfumers, but its place is generally supplied by eau de Cologne, which possesses the same virtues. The apparent poisoning of gunshot wounds, which at first was thought to be due to the powder or the ball, was no doubt due to putrefaction of the sloughing surface of the wound. It was pointed out by Garengot in 1723 that the putrefaction of the fluid of a wound is a great cause of inflammation and want of union. These views were reiterated and enforced by John Hunter, but it was Simpson, of Edinburgh, who in modern times pointed out the necessity of avoiding every source of putrefaction, and showed that the ordinary thread ligatures and sutures when soaked with decomposing fluid became putrid setons.

Ambulance Vessels.—The Swedish Society for Succouring the Wounded have recently fitted up two ambulance vessels. They are not intended to be exclusively attached to a naval expedition or coast-defence squadron, but to be used for transporting wounded men on the many canals with which Sweden abounds, rendered necessary by the limited railway communication in the kingdom. The Society purpose organising an "ambulance brigade." It is ultimately to comprise a steam vessel to serve as quarters for the doctors attached to the ambulance, and as a depôt for medicines and supplies, four decked boats, each to be fitted with from twelve to fifteen beds, a small boat of light draught of water for embarking and disembarking wounded men from the larger vessels, and a steam tug for towing the hospital boats, carrying orders, etc. The naval authorities presented the Society with the two vessels, which are now fitted out, but which were furnished at the expense of the Society. The accommodation provided appears to be ample and efficient for the sick, medical attendants, and crew.

A Student's Complaint.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—It was with mingled feelings of surprise and disappointment that many of us read your account of the "plucked" men at the College examinations, especially as so many men have been unsuccessful. The fault is often laid on our demonstrators and teachers of anatomy, but any student of common sense knows at once that failures are not the result of neglect on their part nor on the part of students themselves. I contend that our practical work has to suffer considerably, and will do so until a reform takes place in the absurd length and frequency of our lectures. What is more important than dissection, seeing cases round the wards, and in the out-patient room? In the majority of cases we do not want men with a special knowledge of any one subject. We want men with a thoroughly good general knowledge of practical work, and who have seen so many different cases in the hospital that when in practice they can at once see what is the matter with people, and be able to cure them.

Now, in our everyday life at the hospital we begin either at 8.30 or 9 a.m. with an hour's lecture, which is just half an hour too long. We are supposed to dissect from 10 a.m. (provided no out-patient work is required) as long as we can - which means till noon. We must get a bit of lunch. At one o'clock we have to go round the wards, which takes till three o'clock (if quickly and hastily done) twice a week at least. I do not consider twice a week anything like sufficient. At three o'clock comes an hour's lecture, and another lecture till five o'clock. Thus you will see we get about two clear hours per diem for dissection, and (without reckoning out-patient practice) about two hours to go round the wards.

How can the examiners expect us to do justice to our practical work when we are encumbered with utterly useless lectures, which in nine cases out of ten are the same thing we can read ourselves in "Gray" and "Kirkes," etc., with the words put in different phraseology. I say the lectures are useless because their very length and frequency make them disagreeable, and they are not therefore impressed very deeply on our minds.

Again, surgery should go side by side with anatomy at the examinations. It is our anatomical knowledge that makes us good surgeons; and under the present regulations I will venture to say that out of the hundreds of qualified men turned out at the hospitals at every final examination, there is hardly one who has personally performed the simplest operation—the only experience they have had being a "bird's-eye" view of the operating table, which is generally surrounded with chloroformists, surgeons, and some "camp-followers." If a man has very good sight, and be perched on the top bench of the theatre, he smells the chloroform, and sees a little blood, also a little manipulation and cutting going on. He is enabled thus to get a very hazy idea that something has been done. The student on the lower benches contents himself with the surgeon's black coat and back hair until the thing is explained verbally.

Lastly, Mr. Editor, what is the use of beginning lectures at 8.30, or even at 8 a.m.? as is the case, I believe, in some hospitals. Well, it is useful in keeping medical students in some very doubtful localities near the hospital, in order to be in time for morning lecture. Apartments in good localities are often beyond a medical student's pecuniary powers, and instead of being able to live a little way out of town in cheap and comfortable rooms, and investing in a season ticket at the beginning of the session, before the "governor's allowance" is gone, he is obliged to inhabit more or less gloomy apartments belonging to that species of London landlady well-known as "sbark" (*squalidæ*). It is needless to add that if the lectures began at 10 a.m. (the usual hour of business, by-the-bye), every man would be in his place at that time, besides being able to enjoy the comforts of a suburban home for study, and husbanding his small resources, or at any rate spending them on his cricket or football club, instead of on music-halls and theatres.

I find that in your article you say that because a man is "ploughed" a few times he would make an inefficient practitioner. It occurs to me that he may have thoughtlessly neglected his anatomy and physiology a little, through too eager a desire to see as much as possible of hospital practice and surgery. Therefore, I cannot agree with you in that remark, because I am convinced that men who have been "referred to their studies" a few times make, often, the very best practitioners.

People do not live in London now as in former times. It is all very well for men who can afford a West-end house, and have made their fortunes; but why on earth should we be compelled in our young days to live in bad neighbourhoods? We boast of the great medical and surgical progress of modern times,—suit actions to words; meet progress by reform!

If my humble suggestions were carried out, the pass-lists would be very different indeed. I am, &c., A Student who wishes to get

Middlesex Hospital, January 21. through his Examinations.

Self-Help.

It is said that Dr. Peter of Paris, who has been elected by a very large majority a member of the Academy of Medicine, commenced life as a compositor.

A Royal Compliment.

The Empress of Germany has written an autograph letter to Professor Esmarch, of Kiel, expressing her high appreciation of the obligation under which he has laid the world by the publication of his valuable work upon the Art of Surgery in War.

Temporary Paraplegia.

This condition is not at all an infrequent consequence of the fatigue of excessive travelling in an upright posture. We have known it affect a man, who, having travelled as fast as possible from Brindisi to Dover, when he arrived at the latter place could not move his legs, and was obliged to be carried on shore. An instance of a like attack is mentioned in the lately published "Story of my Life," by Captain Meadows Taylor. After describing a long ride on horseback, he says, "I had not felt tired, and even came in first in a race which one of the officers proposed. As I slid from my horse, however, I felt very stiff, and, sitting on the ground, found I had no power to rise. The surgeon declared my condition to be caused by temporary paralysis of the spine consequent on my long ride of 113 miles, and I did not recover at all till the afternoon of the next day, when a painful tingling sensation set in in my legs and back, and I was soon able to sit up."

"A Warning to Planters."

Under this title the *Madras Weekly Mail* of December 8, 1877, gives an account of the trial of a planter for ill-using one of his coolies. Seeing the man apparently lazy, he struck him several blows with a stick. The man got confused, and the master, enraged, belaboured him with the stick till he became insensible. Shortly afterwards, when ordered to get up, the coolie was found with jaws locked and eyes turned up, and was removed to the hospital, where he died that same evening. The planter was summoned before a magistrate to answer for his death, but the jury acquitted him of culpable homicide, and said they considered the charge of accelerating the coolie's death not proven. The judge, however, sentenced him to six months' rigorous imprisonment. We wonder that, in spite of many warnings, especially that of the Fuller case, Europeans are not more cautious about lifting up their hands against the natives, who, although able to work hard, are nevertheless very fragile, and liable to internal haemorrhage into the pleura and the cavities of abscesses. This is shown also by the frequency of haematocele among the Hindus.

A New "Cure."

It is stated that the *abattoirs* in New York are visited daily by many invalids, who drink the blood of the slaughtered bullocks, which, like the "grape cure" and other cures, is said to effect cures of consumption and other diseases. Many physicians in New York have been applied to for their opinions on the subject. They nearly all oppose blood-drinking, but a large number of them acknowledge that excellent results have apparently followed the practice in some cases. Dr. Platt Saxton, who has made a special study of the matter, on being questioned respecting the "blood cure," replied that "it is a theory very difficult of demonstration, except as we demonstrate all remedies that are celebrated for certain cures, by the result of the prescription—practically, we see patients improving upon the warm blood of bullocks. They are at first in a weakened and debilitated condition from pulmonary phthisis and other diseases, but eventually they become strong and robust, regaining apparently perfect health."

Colouring Edibles.

A method has been discovered by two Frenchmen of extracting chlorophyll—to which the natural green colour of fruits and vegetables is due—from green leaves, and utilising it for the purpose of tinting vegetable substances that are liable to be bleached in cooking or preserving processes. The process has been favourably reported upon by the Paris Academy of Sciences, and is briefly as follows:—Leaves of spinach, sorrel, or other plants, containing large quantities of chlorophyll, are scalded with boiling water, and chopped into a finely divided mass, which is boiled in a solution of caustic soda until the leaves are dissolved. From this decoction an insoluble chlorophyll lake is precipitated, which is frequently washed to remove all traces of soda. The lake or vegetable pigment thus obtained is dissolved by means of an alkaline phosphate, citrate, or double tartrate—such, for example, as the phosphate of potassium or ammonia,—and water is added until the solution is reduced to the required strength. This solution is then heated to about 212° Fahr., and the vegetable products to be coloured are immersed from two to fifteen minutes.

BOOKS AND PAMPHLETS RECEIVED—

Local Government Directory, Almanack, and Guide for the Year 1878—Transactions of the International Medical Congress of Philadelphia, 1876—N. S. Davis, A.M., M.D., Contributions to the History of Medical Education and Medical Institutions in the United States of America—Army Medical Department Report for the Year 1876—The Invalids' Home or Home Hospital Movement; some Account of its Origin and Progress—Jukes Styrap, L.M.K.& Q.C.P., A Code of Medical Ethics—Charles Smart, M.B., C.M., On Mountain Fever and Malarious Waters.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médicine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Night and Day—National Anti-Compulsory Vaccination Reporter.

COMMUNICATIONS have been received from—

Mr. B. R. Wheatley, London; Dr. Bauce, London; Dr. Thos. Barlow, London; Dr. F. Churchill, London; Mr. T. M. Stone, London; Dr. W. Moxon, London; Mr. John Chatto, London; Dr. Wilson Fox, London; Dr. Draper, Mass., U.S.A.; Mr. J. Crocker, Plymouth; Mr. W. Collier, Cambridge; Sir Harcourt Johnstone, London; Mr. S. W. North, York; Sanitary Commissioner, Lahore; Mr. Becke, Northampton; Dr. Williams, London; Dr. Thin, London; Secretary of the Royal Institution; Mr. Golding Bird, London; Mr. Walter Reeves, London; Dr. Grainger Stewart, Glasgow; Dr. Sparks, Mentone; The Honorary Secretary of the Harveian Society; Dr. Devitt, London; Mr. R. W. Parker, London; Dr. J. W. Moore, Dublin; The Secretary of the Stafford House Committee; Mr. Howard Marsh, London; The Registrar of Apothecaries' Hall, London; Mr. W. E. Poole, London; Dr. James Ross, Manchester.

APPOINTMENTS FOR THE WEEK.

February 2. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

Royal Institution, 3 p.m. Mr. R. Bosworth Smith, "Carthage and the Carthaginians."

4. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Lettsomian Lectures—Mr. Francis Mason. "On the Surgery of the Face." Lecture III.

Royal College of Surgeons of England, 4 p.m. Professor Erasmus Wilson, "On Dermatology."

Royal Institution, 2 p.m. General Monthly Meeting.

5. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Pathological Society, 8½ p.m. Dr. Yeo—Heart and Aorta (sequel to a Case of Rupture of the Aortic Valve). Mr. T. Bryant—1. Prostatic Tumours removed in Lithotomy; 2. Impacted Fracture of Shaft of Femur. Mr. Nunn—Sequel of a Case of Recurrent Sarcoma. Mr. Morgan—Case of Congenital Obstruction to the Common Bile-Duct. Mr. Lennox Browne—1. Cancer of the Tongue involving the Tonsil (living case); 2. Cancer of the Tonsil; 3. Encephaloid Cancer of the Larynx. Mr. K. Thornton (for Mr. Taylor)—Tumours of Both Ovaries. Mr. K. Thornton—Cysts from the Peritoneum. Mr. Wood—Cystic Disease of the Thyroid. Dr. Samuel West—Thrombosis of the Vena Cava and Portal Vein. Dr. Legg—1. Aneurism of the Right Auricle; 2. Melanotic Liver. And other Specimens.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

6. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Obstetrical Society, 8 p.m. Dr. MacCullum, "Report of the University Lying-in Hospital, Montreal." Dr. Greene, "Case of Puerperal Convulsions." And other Communications.

Royal College of Surgeons of England, 4 p.m. Professor Erasmus Wilson, "On Dermatology."

Royal Microscopical Society, 8 p.m. Anniversary Meeting. President's Address, etc.

7. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

Harveian Society, 8 p.m. Mr. Hornsey Casson, "Gunshot Injury of Elbow-Joint." Dr. Fitzpatrick, "On the Defective Drainage of Westend Houses, and Cases of Zymotic Disease arising therefrom."

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

8. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Clinical Society, 8½ p.m. The President, "Specimens of Tendon Ligatures." Mr. Nunn, "Two Cases of Cancer." Mr. Hutchinson, "Retinitis Hæmorrhagica: its Connexion with Gout, and probable Dependence upon Thrombosis of the Vein." Mr. Balmanno Squire, "Severe Psoriasis treated by Daily Immersions"; and "A Case of Psoriasis treated by Chrysophanic Acid" (living specimens).

Royal College of Surgeons of England, 4 p.m. Professor Erasmus Wilson, "On Dermatology."

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Mr. Matthew Arnold, "On Equality."

VITAL STATISTICS OF LONDON.

Week ending Saturday, Jan. 26, 1878.

BIRTHS.

Births of Boys, 1245; Girls, 1185; Total, 2430.
Average of 10 corresponding years 1868-77, 2438·5.

DEATHS.

	Males.	Females.	Total
Deaths during the week	951	913	1864
Average of the ten years 1868-77	776·7	762·0	1538·7
Average corrected to increased population ...	...	...	1646
Deaths of people aged 80 and upwards ...	...	..	68

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	1	5	10	1	15	1	1	1	1
North	751729	15	9	9	2	27	...	8	3	2
Central ...	334369	...	3	1	...	5	...	5	...	..
East	639111	7	18	9	1	18	...	4	1	5
South	967692	11	28	10	2	52	2	5	1	5
Total	3254260	34	63	39	6	117	3	23	6	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·896 in.
Mean temperature	42·3°
Highest point of thermometer	51·8°
Lowest point of thermometer	29·4°
Mean dew-point temperature	34·5°
General direction of wind	W.S.W.
Whole amount of rain in the week	0·11 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, January 26, 1878, in the following large Towns:—

Borough, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Jan. 26.	Deaths Registered during the week ending Jan. 26.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air Cent. Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577300	47·5	2130	1814	54·8	29·4	42·3	5·73	0·11	0·28
Brighton	103923	44·1	79	53	50·2	28·4	41·0	5·00	0·34	0·86
Portsmouth ...	129481	28·9	77	38	...	...	...	...	...	...
Norwich	84620	11·3	52	34	56·5	27·0	40·8	4·89	0·35	0·89
Plymouth	73599	52·8	41	38	54·0	34·0	45·5	7·50	0·75	1·90
Bristol	206419	46·4	134	76	54·3	31·0	43·2	6·22	0·52	1·32
Wolverhampton ...	74240	21·9	41	34	54·5	25·7	40·6	4·78	0·43	1·09
Birmingham ...	383117	45·6	285	178	...	...	...	...	...	...
Leicester	121473	28·0	104	39	55·8	27·8	41·4	5·22	0·42	1·07
Nottingham ...	165257	16·6	100	65	55·7	26·1	41·5	5·28	0·64	1·63
Liverpool	542881	102·2	361	276	53·7	27·0	40·7	4·83	0·57	1·45
Manchester	360514	84·0	247	182	52·0	25·0	38·7	3·72	0·83	2·11
Salford	170251	32·9	122	68	55·4	25·0	39·5	4·17	0·88	2·24
Oldham	107366	23·0	81	36	...	...	...	...	...	...
Bradford	185688	25·6	107	68	53·7	25·0	39·9	4·29	0·73	4·89
Leeds	304948	14·1	213	123	56·0	27·0	41·1	5·06	1·10	2·79
Sheffield	289537	14·7	193	130	56·1	25·5	41·5	5·28	0·55	1·40
Hull	143139	59·4	116	44	56·0	23·0	38·8	3·78	0·89	2·26
Sunderland ...	112459	34·0	74	48	...	...	...	...	...	...
Newcastle-on-Tyne	144570	26·9	104	67	...	...	...	...	...	...
Edinburgh	222371	53·1	124	103	52·4	17·5	35·7	2·06	2·42	6·15
Glasgow	566940	94·0	469	29	51·0	24·0	39·0	3·89	2·05	5·21
Dublin	314668	31·3	178	177	56·5	29·6	43·6	4·78	0·56	1·42
Total of 23 Towns in United Kingdm	8373953	37·9	5659	4017	56·5	17·5	40·7	4·83	0·84	2·13

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·70 in. The highest reading was 30·25 in. at the beginning of the week, and the lowest 29·18 in. on Friday morning.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

CLINICAL LECTURE ON
CASES OF
ŒDEMA OF LOWER EXTREMITIES, ONE WITH GANGRENE.

By W. MOXON, M.D., F.R.C.P.,
Physician to Guy's Hospital.

In clinicals we have to honestly face our difficulties, and to bring our doubts out and weigh them fairly. I could give you a lecture upon cases I know much more clearly, but perhaps we shall get more good by considering our way towards these obscure ones. They are two cases very different in their nature, and yet with one marked feature in common, namely, swelling of the lower extremities; one of them has incipient gangrene.

Do not be in fear lest I should take you over all your well-known learning about dropsy; yet I will first allude to three cases as types of the more common causes of dropsy, so that we may mutually understand each other as to our views of dropsy. Of course we have some poor fellow with heart-dropsy, as usual. He is now in No. 11, and has some features of interest, especially in his extreme goutiness. He is a poor cabman, aged fifty-six, who has had gout since 1855, but in the summer of 1875 grew breathless, and was in Philip under my care in the autumn with dropsy, when we gave him twenty-five-minim doses of tincture of digitalis with relief, and afterwards relieved him still more by adding tincture of belladonna to the medicine. His gout came upon him, but colchicum relieved that part of his trouble. He went to a convalescent home, and came back as bad as ever; was relieved again, then tried some work all last summer, getting on pretty well. But now here he is with the winter, as we might have expected.

He has the usual small intermitting pulse of auricular dilatation, and the dropsy of the lower half of the body proper to heart disease. Any of you could lecture me on him as well as I you. Thus, if I asked, you would tell me, "The heart not driving the blood, that fluid gravitates and over-fills the vessels of the lower extremities, and the over-full vessels filter out the serum." It all might happen in a sponge! And if I objected to such a view as really too beautifully simple, and as only suitable to a dropsical sponge, and pointed out that all over-full bloodvessels do not filter out fluid—for instance, overgorged kidneys do not filter off more water, you would say, "Well, the over-full vessels may let out much water, but I dare say the chief reason of the dropsy is that the vessels will not take it up again because they are so full." You believe that there is an extravascular circulation of lymph, an exhalation of it, and an absorption of it by the vessels, which keeps dry the upper part of the body; but that this absorption cannot go on in the overcharged lower extremities. Indeed, we must see that in a living thing causes become quickly plural; and, whilst admitting that those mentioned explain the onset of the dropsy of the legs, we cannot ignore other conditions which have preceded the dropsy. If we continue our inquiry, we soon find that deterioration of texture plays a part. Thus, the resilient texture of the limbs, which in health reacts so quickly that, unknown to you, at every pulse your legs and arms dilate and contract, becomes ill-nourished by the stagnant blood, and there is no longer that recoil which keeps the vessels pressed upon and sustained. Also the vessels, thus held permanently wide and stagnant, deteriorate, and become more fit for physical oozing, and less for absorption. And meantime the blood is reduced by the same conditions in the intestinal system, which prevent absorption; and also the kidneys become engorged, and they do not filter off enough water, so that the blood is thus poor and diluted.

A watery state of the blood tends to cause dropsy, although at first thought you might not expect this; but think what the celebrated Dr. Hales thought when he expected that water would pass more easily than blood from the arteries to the veins because it is thinner! Perhaps you would not, like him, proceed to try this by an experiment—throwing water into a living dog's vessels—which resulted only in a great resistance in the vessels, and in dropsy, until, when he persisted in injecting water into the carotid artery of the dog, he finally produced general dropsy. These causes, then, have to be recognised in explanation of the occurrence of cardiac dropsy and its limitation to the lower parts of the body. Poverty of blood, inaction of kidney, gravitation of blood downwards, inelasticity of tissue, deterioration of vessels, extravasation of serum, and retention of the serum in the debilitated textures,—all these things should be thought of in incipient cardiac dropsy, and the benefits of the reclining posture urged, seeing that, by lying down, the patient causes blood and serum to pass towards parts whose texture is still resilient and the vessels in good order. But the horizontal posture perhaps has a certain evil effect, because it casts the gravitating influences on the kidneys, and it may be good policy to let the patient have his way, and sit up for a time. They usually declare they are better for this, apart from its effect on the breathing. Then stimulating the kidneys is useful here, and resin of copaiba did good to our cabman; but relieving the renal venous congestion by the tonic effect of digitalis on the heart and small arteries is yet more important.

So much for cardiac dropsy. Then, again, we of course have our Bright's disease case. Take No. 2: she is a barmaid, who was six weeks ill on admission, when her disorder had the characters of an acute renal dropsy. The urine was scanty, and specific gravity 1032; it afterwards came slowly down to specific gravity 1017, the quantity still scanty; history of dark urine, etc., before admission. There is suspicion of former syphilis in her husky throat and scaly eruption; but the eruption itched much, and the idea of syphilis as the cause of the albuminuria is not borne out by the qualities of the urine, for in syphilitic lardaceous kidney you get pale, very albuminous urine of low specific gravity. There is great dropsy in this case. Dropsy in Bright's disease is less easy to explain than in the case of heart disease. There is of course an excess of the dropsy in the dependent parts, due to gravitation, with the results I have just traced. But so far are we from explaining the dropsy by the state of the heart, that when the proof of cardiac affection is greatest there is usually no dropsy at all—that is, in the case of granular kidney, where the heart is much hypertrophied, and where no dropsy occurs except as the result of an intercurrent acute attack.

In this case of renal dropsy, your answer would be, if I asked you the cause of the dropsy—"The retention of the urinary water is the great cause of dropsy"; but you would remark also the loss of albumen as tending to cause the blood to be poor and thin, and perhaps notice that the retention of urinary solids charges the blood with crystalloids, whose presence may be supposed to favour exosmosis from the blood into the tissues—at least, if you had read or heard of Dr. Owen Rees' suggestion to this effect. The high tension in the vessels, too, must be taken into consideration. But then I should be obliged to put this question, seeing that dropsy is in our case general over the whole body, so that there is "puffing" even of the face, as usual in renal dropsy—Why is the dropsy thus universal? And then what would you say? Undoubtedly you would have some difficulty in replying; and in answering we may find ourselves not far remote from admitting that, after all, the past generation of physicians who spoke of inflammatory dropsy were perhaps not altogether in the wrong. No doubt, the immediate cause of renal dropsy is a more active and sudden cause than that which produces the slow accumulation of fluid in the dependent parts of the body in heart disease. What is the nature of the cause of this active and sudden development of universal dropsy? Authorities for the most part lay stress, in explaining it, on a check to the flow of urine. And no doubt this must be allowed to be an important factor. But I have met, and you will meet, with cases of suppression of urine lasting many days, proving ultimately fatal, without any dropsy supervening. True, vomiting is usually present in these cases, but this has not been so constant or obstinate as at all to explain the absence of dropsy, especially when you certainly often meet with more obstinate vomiting without any great check to the flow of urine. Then, again, you may have much dropsy after scarlatina without any albuminuria or signs of kidney disease. And, further, you will often find cases where great dropsy co-exists with an abnormally free flow of urine. These considerations show that we must look further for explanation of the rapid and universal dropsy of Bright's disease. And we shall, I

think, require to use something like the old conception of active or inflammatory dropsy. The remarkable tendency of renal dropsy to shift its position from side to side or from part to part, noticed by Niemeyer, must be remembered. Dr. Bright himself was much struck with the tendency to serous inflammations in these cases; and here he himself remarks upon the old title, "inflammatory dropsy," which he identifies with renal dropsy as he was describing it. And you will have frequent opportunities of verifying this disposition to serous inflammations in Bright's disease. Here, then, I shall offer you this explanation—namely, that the cause of the universal and sudden dropsy in Bright's disease is a sub-irritation of the areolar tissue of low degree, similar to that which produces catarrh of the pleura. This irritation is to be referred to the presence of urinary elements in the blood, which set up low inflammation universally in the areolar tissue—an inflammatory fluxion as slightly inflammatory as that fluxion which pours out the fluid of "sudamina." I would liken it to the dropsy of trichiniasis, wherein the presence of the worms in the muscles becomes a cause of so much and yet so little irritation that the result is extensive dropsy, the great viscera showing no signs of implication whatever. If this be a true view of renal dropsy we may better understand the little subjection it shows to the usual means of removal, and may apprehend the need there is for great patience in dealing with it. And our patient is progressing slowly.

The two kinds of dropsy I have alluded to bring us by far the greater number of our dropsical cases, nearly all the general dropsies. Then come a class of cases where local disease in the abdomen causes pressure on the abdominal veins, and so produces anasarca of the lower limbs, as in tumours or pregnancy; or in cases where carcinoma may have even grown into the vena cava; or less directly from ascitic fluid, caused by hepatic disease or otherwise, weighing down upon and compressing the cava. Notice as to these causes that hepatic ascites is more likely to produce anasarca of the lower limbs than an equal pressure through a great ovarian tumour. In No. 34 we have an enormous ovarian tumour without any anasarca of legs: for there is texture-deterioration in hepatic disease, such as does not occur through ovarian tumour; and texture-deterioration favours dropsy. In carcinoma cases the pressure on the cava is generally more immediate through the swelling of glands around the vein, and very often the vein-wall is actually invaded by the cancer; so that the production of dropsy of the legs by slight enlargement in the abdomen is suggestive of cancer. If the enlargement of the abdomen be greater before anasarca, then cirrhosis of liver is probable. But it is remarkable how much more enormous the abdomen will grow in women through ovarian disease without any anasarca appearing. Here let me give you the case of George H., No. 7 John, showing remarkably early dropsy of the legs in a cancer case. He is a bookbinder, aged forty-two; no history of cancer in his family; his first wife died of cancer of uterus; no cause of cachexia in personal history. Five weeks before admission he felt ill, and after food had dull aching at the umbilicus, long enduring, and ceasing if no more food was taken. Soon after the first appearance of these symptoms, he says, he had pains in the legs and swelling, especially of the left leg; that of the right leg subsided, that of the left never. Then a little lump formed in the epigastric region, and he vomited soon after everything taken, the vomit being yellow and bitter.

On admission he was a dark, sunken-looking, emaciated man, with a tumour in the pyloric region. The left leg much swollen and œdematous; not painful. In a week the right leg showed acute phlebitis and swelled much. He died a month afterwards, and cancer of the lymphatic glands was found, firmly compressing the vena cava. I have met with two cases in which the first complaint the patient made was of swelling of the legs, when his disease proved to be cancer about, and of, the stomach.

Now, passing on to other causes of swelling of the legs, there are the proper phlebitis cases, due to a variety of causes more or less traceable. These may complicate any of the other causes, as in the last case I have mentioned, but usually occur without any pressure in phthisis, diabetes, gout, or fevers, or by extension from wounds and injuries generally.

I have, fortunately, no example to offer you; but I wish to direct your attention to another very distinct form of anasarcous swelling, of which we have an example in No. 33. One leg is much swollen as high up as the knee, and the skin near the knee is pink, and this colour ends above by a distinct margin. This sort of swelling is one, I think, well worth your attention. It is accompanied from the first by slight redness and some tenderness of the surface, so that it appears, if observed closely, like a cutaneous eruption. Yet it may remain as a dropsy, as in the case of a stout, tall, rather flabby gentleman, whom I recently saw with "dropsy" of one foot; the other foot *quite* normal. On close inspection a red border was seen near the knee, and a light pink congestion everywhere. A bandage cured it after the pinkness went off. Also I have twice seen cases of a symmetrical swelling of the region of the elbows, with pain and pinkness marginated. You may call it *Œdematous Erythema*. Our present case is that of Ellen C., a needlewoman, aged seventeen, who worked from 9 a.m. to 8 p.m. in a large room. A healthy-looking dark girl; no signs of cachexia, or history of it. Two years ago she fell from a chair, and hurt her side with the back of it. No menses since (previously regular since thirteen and a half). Three months ago, when at work, pains came in the right side, and increased, and for a month she has been unable to lie on the right side. A fortnight ago the right foot and leg grew pink, and swelled much; she has not been able to walk since. On admission the right leg below the knee was much swollen, as though from simple œdema, and no eruption remained. A bandage cured this swelling. (The pain and fulness of right side proved due to hydatid of liver.)

There remains now a last and most difficult case, in considering which you need have by you all your knowledge of the causes that can produce dropsy, active or passive, even to the rapid and enormous swelling from venomous serpent-bites, and perhaps call in the belief Dr. Laycock favours, and ask how far dropsy may arise from nervous disease, as in the puffiness of paralytic limbs (unless you think the puffiness of such limbs due to want of muscular pressure on the veins), and in the occasional hydrarthrosis of paralytic limbs. Our difficult case is as follows:—Harriet P., aged thirty-nine; father died of phthisis at forty, mother of fits in a confinement; a brother died of phthisis; has six children, and has lost four—two of those living are "queer in the head." She has never had any miscarriages, and no gout. Was healthy until five years ago, then had "painters' colic, with sore gums, swollen abdomen, diarrhœa, and shaking all over." All this lasted two months. About the same time was unsteady on the legs, and was accused of drink, falsely. Then was comparatively well until ten months ago, when she got cough and spat phlegm and blood, and had pains in temples, singing in ears, and headache. Nine months ago (after her feet had often been wet) she had shooting pains in the right foot up to the thigh, and these grew worse, with swelling of right foot, until five months ago; then the *left* leg became paralysed, and never has moved since; and in three months the left leg swelled without any pain. Then she lost power slowly in right foot, and meantime her hands lost the power of working and her fingers tingled. Two months ago, first the little and then the big toes of the right foot blackened, and her memory became defective, the great pain in right foot still continuing. On admission she is a thin, dull, dusky-looking woman, unable to lie down in bed, suffering enormous pain in the right leg and foot, so that she disturbs the ward much unless injections of morphia are freely given. There is great œdema up to the abdomen; some rather large hard lymphatic glands can be felt in the groins above and below Poupart's ligament. The uterus is low down in the pelvis, but no intra-pelvic mischief can be found. The tips of the right great and little toes are gangrenous. No obstruction of the veins can be made out. The femoral arteries pulsate freely.

In the absence of better information than we can obtain, I am not able to give a mechanical explanation of the anasarca in this case. It is, however, certain that there is more mischief in the legs than mere dropsy could produce. True, great dropsy may cause gangrene. We recently had in Bright ward a case of renal dropsy, where a piece of skin as large as the palm of the hand sloughed off the foot; and yet the woman recovered, in spite of her bad kidneys, and by "skin grafting" the enormous sore was healed up. But in that case, as in all such cases, the sloughing was of the dorsum of the foot and of points pressed upon, whereas here the gangrene is of the points of the toes—which always

means arterial disease, or, at any rate, the arterio-nervous failure which causes senile gangrene. What the cause of the arterial failure is, we cannot make out. The whole state of the limbs is more like what has been observed as the result of severe fevers, where both artery and vein have been found obstructed, as in a case recorded by Dr. Murchison; but there is no such cause here. Indeed, the history would suggest some protracted spinal disease. She is too ill, and her legs too unwieldly, for us now to ascertain what symptoms are due to any spinal paralysis. We cannot find any source of pressure on the artery and vein. The interest of this case, indeed, great as it is, is of the sort which needs light thrown on it from other similar cases, and I will take some opportunity of recording it.

[This patient died, and at the inspection—at which I was not present—no light whatever could be thrown on the cause of the symptoms, the spinal cord, arteries, and veins of the lower limbs, etc., being all reported normal. I think that if the arteries had been followed below the knee they would have been found diseased. As to the suspicion of spinal disease, you should note that pain, tingling, weakness, and other nervous phenomena may be produced in a limb by extreme disturbance of circulation in it, apart from any disease proper to the nervous system; the terminal organs of the nerves in the limb, with their peculiar powers, being disturbed and thrown into morbid activity or inactivity.]

ORIGINAL COMMUNICATIONS.

ON THE

SURGICAL TREATMENT OF NEURALGIA.

By GEORGE LAWSON, F.R.C.S.,
Surgeon to the Middlesex Hospital, and to the Royal London Ophthalmic Hospital, Moorfields.

THE following is a good example of a severe case of herpes frontalis. It occurred, as this disease always does, in an elderly patient, it was strictly confined to the one side of the head, and the eye was inflamed during the attack. It was preceded, accompanied, and followed by severe neuralgic pain, and, like many such cases, was in the first instance regarded as erysipelas of the head. The neuralgia, which continued after the attack, was unusually prolonged and severe; it had continued for over two years. Knowing that the mere division of the nerve frequently only affords a temporary relief from neuralgic pain, I decided to remove a piece of the frontal nerve, as the pain was most severe over the brow and side of the head; but only to divide subcutaneously the infra-orbital, as the pain below the orbit was not so intense. The removal of the portion of the frontal nerve was perfectly successful, and when the patient left the hospital I could rub the brow with my finger without producing pain; but the division of the infra-orbital gave great, but only partial, relief, and touching the skin below the malar bone would produce some neuralgic pains.

Excision of a Portion of the Frontal Nerve, and Subcutaneous Division of the Infra-orbital Nerve for the Relief of Severe Neuralgia of One Side of the Head and Face following an attack of Herpes Frontalis—Good Result.

Charlotte O., aged sixty-five, was admitted into the Middlesex Hospital on November 3, 1877, suffering from the most acute neuralgia in the branches of the supra-orbital nerve, and to a less degree in those of the infra-orbital.

The history of the case was as follows:—About two years ago she suffered from what was then considered to be an attack of erysipelas of the face and head, but specially on the right side, and during which the right eye was severely inflamed. After the so-called erysipelas had subsided, large and deep scars marked the region over which the disease had raged. The attack, which was really herpes frontalis, was ushered in and accompanied by pain, and since the cicatrisation of the herpetic ulcers there has been constant neuralgia, never absent, but varying in intensity. The pain is confined strictly to the right side of the head and face; it is most acute over the brow, and to a less degree in the course of the branches of the infra-orbital nerve. The face of the woman presents a peculiar and striking appearance. The right side of the forehead is covered by the white scars of the old herpetic ulcers, which extend far up into the hair of the head, and laterally on the outer side of the face to the zygoma, while on the inner side they slightly invade the right side of the bridge of the nose and the skin near the inner canthus of the eye. Not a scar transgresses the mesial line; but up to this line the skin of the forehead is literally seamed with cicatrices. The aspect of the woman is that of suffering. As you approach her to touch the forehead with your finger, she draws herself together and raises her hands to keep you off, as the slightest touch induces a paroxysm of excessive pain. The patient was willing to submit to any treatment, as her life during the past two years had been one of constant suffering.

November 20.—The patient having been put under chloroform, I made a vertical incision about one inch in length over the nerve as it escapes from the notch at the edge of the roof of the orbit, and having thoroughly exposed the nerve, cut away nearly three-quarters of an inch of it. I then divided the infra-orbital nerve subcutaneously, the point of the knife passing into the infra-orbital foramen. The wound over the frontal nerve was then closed with sutures, and covered with wet dressing.

21st.—The patient received great relief from the operation. The skin over the right forehead and far over the side of the head was dead to sensation. To use the patient's own words, she said "it was like wood"; she had no pain. The parts below the orbit were numbed and free from pain.

From this date the patient progressed very favourably, and the wound in the brow healed. Owing to the relief of pain she slept well and improved greatly in appearance. About three weeks after the operation the pain began slightly to return in the parts supplied by the infra-orbital nerve, but the parts over the brow were still quite numbed and free from pain.

January 9.—As there was some indrawing of the skin over the infra-orbital foramen, caused by an adhesion of the skin to the bone, and as the pain in this locality had recurred to some extent, I divided subcutaneously the bond of union between the skin and bone, and thus again cut through the reunited filaments of the nerve. This operation gave great relief.

On January 29 the patient left the hospital quite free from pain over the brow and side of the head, and much relieved as regards the pain in the face below the orbit.

The removal of the piece of the supra-orbital nerve was quite successful, but the mere division of the infra-orbital gave only a partial relief.

THE STRUCTURE AND FUNCTIONS OF THE NERVOUS SYSTEM.

By JAMES ROSS, M.D., M.R.C.P.,
Honorary Physician to the Southern Hospital for Diseases of Children, Manchester.

THE SPINAL CORD.

THE spinal cord consists of white and grey nervous substance, the former being situated externally, whilst the latter is disposed in the interior. A section of the cord shows the grey matter to be formed of two crescentic portions joined by a commissural band; and running through this band is a small canal, called the central canal. The two crescents of grey matter terminate in anterior and posterior cornua, the former of which is connected with the anterior or efferent, and the latter with the posterior or afferent nerves. The white substance consists of fibres, the greater part of which run in a longitudinal direction; the main exceptions being those contained in the white part of the commissure and in the roots of the nerves.

The adult cord may be compared to a completed edifice, the constituent elements of which cannot be determined without great difficulty. There are, however, several processes by means of which the elements of composition of this edifice may be ascertained. A stone building, for instance, may be pulled down in order to see how its different elements were put together; or an observer might have superintended its erection, and noticed how the stones were arranged during the building process. The former may be called the analytical, and the latter the synthetical method. But during the breaking-down process, the idea of how the stones were put together to form the building is

constantly present to the mind—hence the analytical method has a synthetical aspect; and during the building-up process the individual elements are watched separately—hence the synthetical method has an analytical aspect. But inasmuch as by the one process the building is resolved into its separate elements, and by the other the elements are brought together to form the building, the former method is predominatingly analytic, and the latter predominatingly synthetic.

Let us take the synthetic method first, and observe the various phases through which the cord passes during its construction. There are two ways of employing this method. By the one the spinal cords as they appear in the whole vertebrate series, and by the other as they appear in the developing embryos of the higher vertebrates, are compared with one another; but a combination of these two methods of procedure is usually adopted. Now, the cord during its development must conform to the fundamental laws of all development. The order of development is from the indefinite to the definite, from the simple to the complex, and from the general to the special. By "general" is here meant that which is frequently repeated; and conversely, by "special," that which is not frequently repeated.

Fig. 2.

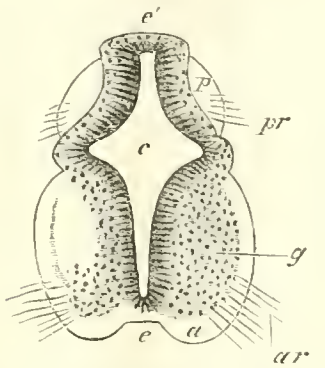

Fig. 2.—Transverse section of the cervical part of the spinal cord of a human embryo of six weeks (from Kölliker).—*c*, central canal; *e*, *e'*, its epithelial lining; *g*, grey substance; *ar*, anterior roots; *pr*, posterior roots; *a*, anterior root-zones; *p*, posterior root-zones.

A nervous mechanism which is repeated in all animals whatever—even the very lowest which possess a nervous system—is the most general, and appears first in the order of development; while a nervous mechanism which is only present in one species of animals, such as that which regulates moral conduct in man, is the most special, and appears last in the order of development. Reflex action is the most general and fundamental function of a nervous system; hence the mechanism which ministers to this function is the first to appear. In the embryo the internal grey substance of the cord is first formed, the first to appear being the parts which correspond to the anterior horns. These are soon succeeded by lateral masses, and somewhat later by the posterior horns. The cells composing the grey substance are at first spherical, they afterwards become elongated and spindle-shaped, and it is only at a later period that the cells of the anterior horns become caudate, with branched processes. The anterior grey commissure is first formed, then the posterior grey commissure; but the anterior white commissure does not appear until a considerably later period.

The white substance is formed on the surface of the deeper grey substance. Soon after the tube which forms the rudiment of the cord has closed, it is seen to be somewhat oval on section, with a central canal. At this period the cord consists almost entirely of grey matter; and by the appearance of lateral slits each lateral half becomes imperfectly divided into two parts, the anterior and posterior. In the human embryo a zone of white substance appears towards the end of the first month on the exterior of each of these parts; and these may respectively be called the anterior and posterior root-zones. The anterior portions of what are afterwards the lateral columns of the cord develope as parts of the anterior root-zones; but the posterior portions do not begin to develope until about two weeks later. The later portions appear to belong to the posterior root-zones; they join them in the medulla to form the restiform bodies, and Flechsig thinks that they pass directly to the cortex of the cerebellum; hence they may be called the direct cerebellar fibres of the lateral columns.

At the end of the eighth week, then, the grey substance of the cord in the human embryo is covered anteriorly, posteriorly, and laterally by a layer of white substance; but at this period very remarkable changes take place. Two bundles of longitudinal fibres, one for each side, are intercalated at this time between the direct cerebellar fibres of the lateral columns and the posterior horns of grey matter. These bundles on being traced upwards are found to pass forwards at the lower end of the medulla, and after decussating with one another they push aside the anterior columns, and form the inner and larger portion of the anterior pyramids of the medulla; hence the fibres may be called the pyramidal fibres of the lateral columns. About the same time analogous formations appear in the anterior columns, one on each side of the median fissure which separates the anterior root-zones. These bundles are very variable in size and form, but are generally wedge-shaped or elliptical; they form the outer and lesser portion of the anterior pyramids of the medulla, but do not decussate with one another. They are called the columns of Türck, or of Lockhart Clarke; and they may also be called the pyramidal fibres of the anterior columns. At the same period at which these bundles begin to develope, somewhat similar formations appear between the posterior root-zones, one on each side of the posterior median fissure, and these are called the columns of Goll. The anterior white commissure also appears at the same time, that is, about the eighth week. A most important point to notice in connexion with the development of the white substance is that the fibres when first developed are destitute of a medullary sheath, and only become medullated at a later period of development. The law of development already stated might indeed have led us to anticipate that such would be the case. A correlated fact is that the fibres of the bundles which are first formed develope a medullary sheath at a time when the fibres of the later-formed bundles are non-medullated. When the cord of a human embryo is examined at the end of the fifth month it will be found that the pyramidal fibres of the lateral columns, the fibres of the columns of Türck and of the columns of Goll, are non-medullated; while the fibres of the anterior and posterior root-zones, and those of the cerebellar fibres of the lateral columns, are medullated. When a transverse section of the cord is examined in glycerine after hardening in chromic acid, the bundles composed of the non-medullated fibres will be found to transmit the light more readily than those composed of the medullated fibres, so that the section exhibits the appearances represented in Fig. 3, which was drawn by camera

Fig. 3.

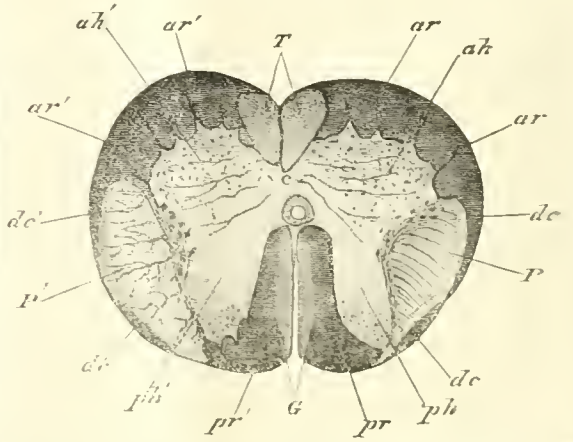

Fig. 3.—*ah*, *ah'*, anterior horns of grey substance; *ph*, *ph'*, posterior horns of grey substance; *ar*, *ar'*, anterior root-zones; *pr*, *pr'*, posterior root-zones; *P*, *P'*, pyramidal fibres of lateral columns; *T*, columns of Türck; *G*, columns of Goll; *dc*, *dc'*, direct cerebellar fibres of lateral columns; *c*, anterior commissure.

from a section from the middle of the cervical region of the cord of a human embryo at the fifth month. Even when

examined by the naked eye after hardening in chromic acid the bundles composed of non-medullated fibres are seen to be of a much darker colour than the bundles constituted of medullated fibres; and the former also become much more deeply stained with carmine than the latter. The bundles composed of the non-medullated fibres are, indeed, in their naked-eye appearances, and in their reactions to staining fluids, more like the grey than the white substance of the adult cord.

These, then, are the different pieces of which the cord is composed; and now one word with regard to their longitudinal distribution. The grey matter extends the whole length of the cord, and its size maintains a constant relation to the number and variety of movements to be co-ordinated; hence it is larger in the lumbar and cervical regions, where the movements of the limbs are co-ordinated. The anterior and posterior root-zones also extend the whole length of the cord, and, speaking broadly, their size maintains a pretty constant relation to the size of the grey matter, although there is also probably a slight increase of size from below upwards. The most noticeable feature with regard to the remaining bundles of fibres is, that they increase steadily in size from below upwards, and, conversely, diminish from above downwards. The fibres of Goll extend the whole length of the cord, but they gradually diminish in size from the medulla, so that mere traces of them are to be found in the lumbar region. The pyramidal fibres of the lateral columns also extend the whole length of the cord, but steadily diminish in size from above downwards, so that they are reduced to comparatively small bundles in the lumbar region. The direct cerebellar fibres of the lateral columns appear in the cervical region as thin lamellæ of fibres, one on each side, external to the pyramidal fibres. The former diminish in size from above downwards, and disappear somewhat below the middle of the dorsal region, so that in the lower dorsal and lumbar regions the pyramidal fibres come to the surface of the cord. The fibres of Türck also diminish in size from above downwards, and usually disappear about the middle of the dorsal region.

In the history of the development of the cord, the greatest contrast in the order of time is shown between the grey substance and the root-zones on the one hand, and the pyramidal fibres of the lateral and anterior columns, the anterior white commissure, and the fibres of Goll on the other; while the direct cerebellar fibres of the lateral columns hold an intermediate position between the two. Now, according to the fundamental law of development already mentioned, the parts of the cord which begin to develope at an early period are engaged in the most general actions; while those which develope at a late period are engaged in the most special actions. The most general actions of the cord are those in which it is engaged as a group of simple co-ordinating centres; and the most special are those in which the functions of the cord are subordinated to the compound and doubly compound co-ordinating centres. According to this view, then, we may expect to find that the grey substance and the anterior and posterior root-zones constitute a group of simple co-ordinating centres; while both sets of pyramidal bundles, the columns of Goll, and the direct cerebellar fibres, connect the cord with the higher nerve-centres.

This conclusion is confirmed to a considerable extent by an examination of the various divisions of the cord in their passage through the medulla and pons to the cerebellum and crura cerebri. The medulla oblongata is the continuation upwards of the spinal cord, but centres for some of the special senses, and for various organic functions, such as respiration and deglutition, are also situated in it. These special functions are much more independent of one another than are the actions co-ordinated in the cord; hence the nerve-nuclei of the medulla are separated from one another, so as to form defined masses of grey matter, instead of a continuous mass like the grey matter of the cord. But since the nerve-nuclei of the medulla are more distinct from one another than those of the cord, it follows that the former are co-ordinated with one another by means of fibres, instead of the co-ordination being effected, as in the cord, to a large extent by grey matter. It may, therefore, be expected that there will be a large increase of white matter in the medulla over and above what is continued into it from the cord.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CASES OF DISSEMINATED SCLEROSIS IN CHILDREN.

(Continued from page 113.)

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

(Under the care of Dr. CHEADLE.)

Case 3.—Alfred B., aged five years, was admitted February 23, 1876.

Family History.—Father had gout and heart disease, and died in a fit, aged forty-six; no insanity in his family. Mother healthy; no fits or insanity in her family. She has had twelve children at full term; of these one had St. Vitus's dance; most of the others died of whooping-cough or measles. Of the four living the other three are healthy. When the mother was pregnant with this boy she was in trouble; moreover, she says she frequently had to look after a neighbour's child who was subject to fits. This child was born at full term, and was suckled fifteen months; "fed as well." He cut his teeth quickly, and began to walk at fifteen months; had scarlet fever and whooping-cough when a baby; subject to convulsions from when he was three weeks old till when he was three years old. The longest interval was fourteen days; often had two or three in a day. He became stiff and then twitched all over, as much on one side as on the other. For the last two years the mother has noticed that the boy has not lifted things up to his mouth properly with the left hand, and that he has fallen about a great deal. She thinks that he has been weaker on the left leg than on the right. Mother thinks he talked as early as the other children. He knows some of his letters and knows the Lord's Prayer. He calls out when he wants to have his bowels moved, and generally when he wishes to pass water; but often has passed his water before the utensil can be brought to him.

Condition day after he was Admitted.—The boy has rather a flattened root to the nose. His head is long from before back, and rather compressed laterally in the temporal regions. He holds his head rather far forwards. The arch of the palate is not very high, and there is nothing except the way he holds his head to suggest congenital mental defect. When he was brought into the hospital he screamed in a passionate way, but he is quiet now; has slept well; has called out several times when he required attention, but twice has passed his motions under him. He has not seemed to be longer in micturating than other children. The boy talks well: tells his name, age, and residence quite correctly. The eyes are parallel; there is no nystagmus; his pupils are equal. There is no asymmetry of the face. He protrudes his tongue straight, but it always turns to the left before he gets it in again. He uses his masseters well, and localises pin-pricks on cheeks; he swallows well. His upper limbs are well developed. When he makes purposive movements it is evident that they are ill co-ordinated. Thus, in feeding himself he lowers his head, takes hold of the spoon with the right hand, and in lifting it up to his mouth he helps to steady his right hand with his left (*vide* Case 2, *Medical Times and Gazette*, February 2). Even then he sometimes misses his aim. Grasp not quite so good as it ought to be. When he puts out either arm there is a coarse tremor of the whole limb, and the fingers cease to be parallel. If he lies in bed on his back no involuntary movements take place so long as he makes no effort, but any purposive movement brings on fumbling. Lower limbs well developed. When he stands up he is a little unsteady both as to arms, trunk, and legs. It is true he can bring his feet together, and stand with his eyes shut, but he does not seem to maintain his equilibrium well; seems as though a little would knock him over. There is no definite drag in his gait. Thoracic and abdominal viscera appear natural to physical examination. Urine is free from albumen.

February 29.—When the boy protrudes his tongue there are waves of muscular contraction, so that it arches up in the middle several times before it is held steadily. It gets round to the left side before he draws it into his mouth again. There is no nystagmus. Ophthalmoscopic

appearances natural. Dr. Tibbits finds some diminution in reaction to faradism in all the muscles of the legs—not much,—but no increase to voltaic current.

March 1.—Nurse states that the boy has no trouble in passing his water. The urine is neutral, and deposits phosphates on boiling.

6th.—There is now no deviation of the tongue to the left, but still the waves of contraction from side to side and from before back occur. Sometimes the boy succeeds in steadying his tongue after a time, but then it is contracted up in the lateral portions. There is no nystagmus even when he is induced to look laterally. On the whole, the left hand is a shade steadier than the right. When he holds his hands and arms extended out there is not the same want of parallelism about the fingers of the left hand as about those of the right hand.

April 6.—Rather steadier than on admission. He runs about in the ward. In doing so he generally holds the right upper limb stiff, straight, and close to his side; the left arm also hangs by his side, but is limp. His head is still carried slightly forwards. He often laughs immoderately. His temperature has been generally subnormal in the axilla, from 97° to 98°. His treatment has been two grains of iodide of potassium with steel wine thrice daily for a fortnight, and one minim of liquor strychniæ thrice daily with steel wine for a fortnight. He has also had constant current applied to his limbs every day for about three weeks.

Remarks by Dr. Cheadle.—The undulating tremor of the tongue, and the tremor of the hands and arms on purposive movement (all such tremors being absent when the patient is in a state of motor rest) seem to me conclusive as to the nature of the morbid condition in this case—viz., disseminated sclerosis. It may be noted that there was no affection of the eyes, nor any difficulty of swallowing or alteration in speech. These symptoms point to the upper portion of the cord and the medulla as the seat of the lesion—the latter being affected only as far as the origin of the hypoglossal, and there in no extreme degree. The roots of nerves arising from the bulb and pons above this point appear to be entirely untouched.

ROYAL INFIRMARY, MANCHESTER.

(Cases under the care of Dr. DRESCHFELD.)

The following two cases, occurring in the same family, present several points of interest, both as regards etiology and family predisposition, so that I may be pardoned for recording them, although in their present condition they show nothing but the ordinary well-marked and now sufficiently recognised symptomatology:—

Case 4.—Thomas F., the elder of the two brothers affected, is now eight years and nine months old, and was well up to the end of his first year; when fourteen months old he had two convulsions, which were soon followed by trembling of the eyeballs, and trembling and weakness of the limbs. The disease from this rather sudden onset had gradually progressed up to the present day.

Present Condition.—He is fairly developed, well nourished, but unable to stand or walk; when he attempts to move, his whole body trembles. His face has a vacant stare, the lower lip is large and dependent; nystagmus is constantly present; his vision is good, and fundus of the eye normal; pupils normal; his intelligence is blunt; his speech is very much affected—it is slow and "scanned," and certain letters (*n, g, d, t*) he is quite unable to pronounce; there is marked glosso-labial pharyngeal paralysis; the mobility of the tongue is very much impaired, though tongue presents no atrophy, and on the contrary is large and flabby; saliva is continually trickling from his mouth, and he has great difficulty in swallowing fluids; the uvula is not drawn to one side, nor is its mobility impaired; when he is made to drink, the head shakes violently; there is no trembling of the head when he is at rest, though the nystagmus persists. The upper extremities are paretic, and the movements, which are limited, are accompanied by marked tremor; there is no atrophy, but the muscles of the arm feel flabby; there are no contractures; the sensibility (to touch, pain, weights, and temperature) is normal; there is no diminution of electro-irritability or electro-contractility; there is no reflex trepidation on flexing or striking the wrist, nor are there any spontaneous reflex contractions. The lower extremities are in a much more advanced state of paresis, and may be said to be almost paralysed; inability to walk or stand; the feet are extended, and show beginning contractures; there is neither atrophy of the muscles nor impairment of cutaneous sensibility; the electric reaction is normal; on forcibly flexing the foot or striking sharply the ligamentum patellæ, marked reflex trepidation (spinal epilepsy) is seen. Bladder and rectum are not affected; the digestive functions are normally performed, and the examination of the organs of chest and abdomen shows normal conditions.

Case 5.—James F., aged seven years and four months, seemed perfectly well up to his fourth year, when he began to show a tendency to falling forward on walking; his walk at the same time became unsteady, and was accompanied by trembling. He gradually grew worse, and presents now the symptoms of the disease in a well-marked though less advanced form than in his elder brother.

Present Condition.—He is well nourished and fairly well developed; he is able to stand, but walks with very great difficulty; his walk resembles in a very marked manner that of a patient affected with locomotor ataxy, with this difference, that in walking he puts his toes (and not his heels) first on the ground, owing to commencing contractures in his feet; when walking he reels from side to side, and the whole body trembles; he is unable to walk with his eyes shut; when he attempts to sit down the ataxic symptoms are equally well marked; there is no trembling when he sits or stands quietly. His face shows the same vacant stare; his intelligence is good, but there are emotional disturbances (immoderate laughing and crying); nystagmus is not constantly present, but is only marked when his attention is fixed on some object; his vision is good, and fundus of eye normal; his speech is "scanned," but he is able to pronounce all the letters of the alphabet; there is beginning glosso-labial pharyngeal paralysis, though by no means so far advanced as in his elder brother; he has, however, great difficulty in swallowing fluids. When he attempts to drink out of a glass the characteristic tremor of head is very marked. Upper Extremities: They are slightly paretic and ataxic; any movement is accompanied by violent trembling; there is slight impairment of tactile sensibility, together with retarded sensibility to tactile impressions; there is no muscular atrophy, and the reactions to the induced and constant current are normal. Lower Extremities: The ataxic symptoms have already been noticed. The feet are extended, owing to beginning contractions; the phenomena of spinal epilepsy are very well marked. There is no muscular atrophy; the cutaneous sensibility is, however, perceptibly diminished, while the reactions to the electric currents seem normal. The patient complains of cold feet, and suffers much from involuntary reflex contractions in his legs; he has, however, never complained of any pains in them, nor has he ever suffered from gastralgia or nephralgia. The temperature in both upper and lower extremities is the same. The abdominal and chest organs are healthy; bladder and rectum not affected.

Remarks on Cases 4 and 5.—I wish briefly to draw attention to the following points:—1. As regards the age of the patients. Recent observations have shown that insular sclerosis is by no means so rare an affection amongst children as was at first supposed. Charcot(a) states, in an analysis of thirty-four cases, the youngest to be fourteen years old; Leube(b) describes the case of a girl, where the first symptoms showed themselves with the seventh year; while Jaccoud(c) quotes the following observations concerning the affection in children:—Stöhr, a boy aged two years; Van Camp, a boy aged thirteen years; Barthez and Rilliet, a boy aged twelve years; Schüle, a girl aged fourteen years six months. To these must be added cases recently observed in this country:—E. Wilson (quoted by Charcot, *loc. cit.*, page 403), a girl five years old; Humphreys,(d) a boy three years old; Sparkes;(d) Dickinson,(d) two cases—girl aged five years four months, boy aged four years eight months; Cheadle (*vide antea*). It will thus be seen that, considering the total number of observations published, the cases in which children were affected form a not inconsiderable proportion. 2. As regards family predisposition. The two cases given above seem, as far as I can gather, to be the first instance in which several

(a) "Leçons sur les Maladies du Système Nerveux," 3ième edit., 1877.
(b) *Deutsches Arch. f. Klinische Medizin*, 1876, page 14.
(c) "Traité de Pathologie Interne," 1877, vol. i., page 207.
(d) *Medical Times and Gazette*, November 3, 1877; December 29, 1877, and February 2, 1878, respectively.

members of the same family were affected. Charcot (*loc. cit.*, page 268) says as regards hereditary influence—"Nous n'aurons à citer qu'un seul exemple où elle était paru jouer un certain rôle. Cet exemple nous a été communiqué par M. Duchenne de Boulogne"—but does not give the details. I may say that both father and mother of the two little patients are perfectly well, and the other children of the same family (one child aged four years and four months, and the other two years) so far show no symptoms of the disease. 3. As regards the course of the disease in the two cases: In the first case the disease seems to have been ushered in by two epileptic attacks; the same happened in the case reported by Dr. Humphreys. It seems, however, to be unusual as an initial symptom, though epileptic convulsions may occur during the course of the disease. In the second case the lesions seem to occupy chiefly the posterior columns, hence the well-marked ataxic symptoms. This is by no means uncommon in this disease, and Charcot (*loc. cit.*, page 342) has seen several cases where the ataxic symptoms were well marked during life, and the lesions corresponding to the symptoms found after death (*loc. cit.*, page 263). In conclusion, I may just draw attention to the presence of the symptoms of "spinal epilepsy" in this case, which, according to the very recent observations of Westphal,(e) are absent in locomotor ataxy.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 9, 1878.

SOME RECENT TRIALS AT LAW.

Some cases have lately been decided in our courts of law, of various grades, which deserve prominent record and notice in our columns, either as affecting and concerning the profession especially and chiefly, or as being of great importance to the community, and therefore to the members of the profession. The first we shall notice is that of Mareh *v.* Farrant, which came on in the Chancery Division of the High Court of Judicature, before Vice-Chancellor Sir Richard Malins, on January 31. In September last an injunction had been obtained restraining the defendant in general terms from practising as a surgeon and general practitioner within three miles of the plaintiff, Dr. Mareh, who practises at New Wandsworth; but the defendant had, notwithstanding, continued to practise and to attend patients within the prescribed limits, as an accoucheur, and application was now made for an order to commit him to prison for contempt of court. The defence offered was that the business of an accoucheur did not come within the terms of the agreement; but the Vice-Chancellor said that he was most distinctly of opinion that practising as an accoucheur was contrary to the terms of the agreement entered into by the defendant not to practise as a surgeon, and that he had therefore been guilty of contempt. Upon this the counsel for the defendant said that he (Mr. Farrant) had acted under his advice as regards practising midwifery, but after that expression of opinion by the Court the defendant was ready to apologise, to pay the costs of the proceeding, and to undertake not to practise in any way within the fixed limits. The Vice-Chancellor said that under those conditions he would not commit the defendant to prison; but should he offend again, even in one instance, on an affidavit to that effect no apology would be accepted. The lesson of this case is too clear to call for any comment. The law will enforce *bonâ fide* agreements of this kind; but they must be drawn very fully, as well as clearly, or much expense, money, and anxiety may be incurred in obtaining their legal enforcement.

The next case is a very petty and miserable one. A surgeon of Chippenham brought an action against a farmer, residing at Stanton, about six miles from Chippenham, to recover the sum of five guineas for attendance on the defendant's wife—viz., three guineas for her confinement, and two guineas for subsequent attendance at the rate of 8s. a visit. The defendant occupied a farm, the rental of which was nearly £400 a year, and looking at this, and at the distance the surgeon had to go, the charges certainly appear very moderate; and two medical men from the neighbourhood appeared in support of that opinion. Three other medical men, however, gave evidence that the charges were beyond what was the usual rate of charge in the district; two of them—one a Fellow of the Royal College of Surgeons—stating that the distance from Chippenham to Stanton was five miles, and the proper charge 5s. a visit. The Judge observed that the evidence went to show that, according to the custom of the medical men in Chippenham, the three-guinea fee covered all attendance during the week subsequent to the confinement, but that he would allow for one attendance after that week, at the rate shown to be the customary one, viz., 1s. per mile. He added, however, that he should have been glad to have come to a different conclusion; he had often said that medical men were frequently underpaid for the serious trouble and responsibility they incurred, and he thought these disputes might be avoided if a more definite agreement were arrived at as to the charges to be made in these cases. We suppose that it is usual for the fee for a confinement to include all the attendances for the next few days; but we commend the remarks of the Judge to the consideration of the practitioners at Chippenham. It is sufficiently evident that it is their own fault if they are paid for attendance, advice, and journeys at the rate of only 1s. per mile.

The two next trials to which we draw attention interest medical men only as members of the community. It may be remembered that, some time ago, the Attorney-General, on behalf of the Crown, laid an information charging Mr. Henry Lamplough that he did in September, 1876, "expose and utter and vend a bottle of medicine containing a certain preparation to be used and applied as a medicine or medicament, for the prevention, cure, and relief of disorders and complaints incidental to and affecting the human body, called "Lamplough's effervescing pyretic saline," wherein

(e) *Berliner Klinische Wochenschrift*, No. 1, 1878. *Vide* Dr. Stewart's lecture on "Tendon-Reflex," *Medical Times and Gazette*, February 2.

he had, or claimed to have, an occult secret or art for making or preparing the same," and that he did so sell it "without the cover, wrapper, or label provided by the Commissioners of Stamps for denoting the duty chargeable on such bottle." The information was tried before Mr. Baron Cleasby and a special jury, and a verdict for a penalty of £10 was taken for the Crown, subject to the opinion of the Court above on the point of law involved. When the question was argued before the Lord Chief Baron and Barons Cleasby and Huddleston, on a motion to enter the verdict for the defendant, the Court was divided in opinion; the Lord Chief Baron considering that the preparation in question was not a medicine within the meaning of the statute under which it was sought to tax it, while the Barons Cleasby and Huddleston held the contrary opinion; and judgment was given for the Crown. From this decision the defendant appealed, and the case was heard in the Court of Appeal of the Supreme Court of Judicature, before Lords Justices Bramwell, Brett, and Cotton, on January 22 and 23 last. By the Act 44th Geo. III., stamp duties were chargeable on certain patent medicines which were specified in the schedule by name, and also by general words. That Act was repealed by the 52nd Geo. III., cap. 150, so far as regarded the schedule, and another schedule was enacted, which set forth in alphabetical order the articles to be taxed; and under the heading "waters" appeared all artificial waters impregnated with soda or mineral alkali, or carbonic acid gas, and all compositions in a liquid and solid state. "Lamplough's Pyretic Saline" is composed of tartaric acid, bicarbonate of soda, and a small quantity of chlorate of potash, and it was admitted that it formed an artificial mineral water when the ingredients sold in a solid state were mixed with water, and would as such be liable to be taxed but for an amending Act—the 3rd and 4th William IV., c. 97, sec. 20—which altered the schedule of the 52nd Geo. III., and repealed the duties as regards artificial mineral waters. The defendant contended that the pyretic saline was a beverage, which was, in fact, an artificial mineral water, and as such exempt from duty, and that, if so charged, Schweppe's soda-water and lemonade, and all other beverages of the same kind, would be chargeable; while for the Crown it was urged that the pyretic saline did not come within the provisions of the repealing Act as an artificial mineral, but the contrary, as its value depended on its medicinal properties. The Lords Justices were unanimously of opinion that it was the intention of the Legislature, by the repealing Act of William IV., "to exempt all these waters from taxation, even if the vendors held that they were beneficial for human ailments; and that therefore the pyretic saline was not chargeable with duty." Accordingly, the judgment of the Court below was reversed, and the appeal allowed with costs. Mr. Lamplough is to be congratulated on the glorious uncertainty of the law, and on the length of his purse. The victory was gained by the latter endowment. A weaker man, in a pecuniary sense, would have been overcome.

The last trial we shall now notice is that of Palmer *v.* Thatcher, which came on in the Queen's Bench Division of the High Court of Justice, before the Lord Chief Justice and Mr. Justice Manisty, on January 31, and raised the question whether a grocer who has taken out a wine dealer's licence from the Excise can sell single bottles of wine without a Justices' licence under the Wine and Beer-house Acts. The Revenue authorities have held that grocers have the right so to sell wine, and, as is well known, grocers, relying on that view, have been in the habit of selling wine in that way. The appellant, who is a grocer at Clifton, had had a licence granted by the Commissioners of Inland Revenue, under the Act Geo. IV., for the sale of wine, and under this Act sold single bottles of wine. A police-constable laid an information against him under another Act, and obtained, under a third Act, a warrant, under which the police seized and carried away some seventy dozen of wine; and the magistrates decided that he was not a wine merchant, and therefore ought to have obtained a Justices' licence. They accordingly convicted him, but reserved for the Court the question whether he was a wine merchant, and whether they were right in holding that he was not entitled, under the wine dealer's licence, to sell wine by single bottles. The question was one depending on the interpretation of several different Acts of Parliament, and the appellant had relied on the following notice, issued in 1863 by the Inland Revenue Office:—"That licensed dealers in foreign wines are not required to take out a licence under 23rd Vic., c. 27, for the sale of wines by retail, and that they may sell in any quantity in the same way as they did previously to the passing of the Act." Counsel for the appellant said that the question was whether wine dealers were deprived of the right they had previously had of selling wine in this way, because they were not considered wine merchants merely because they sold other things as well as wine. Ever since 1828 wine dealers had had these Excise licences, and the Acts of 1869 and 1872 did not require magistrates' licences for wine merchants. As wine dealers they were wine merchants, and not the less so because they sold groceries as well as wine. That was the whole question; and it was a serious question if these grocers who thus sold wine were liable to have their stock seized. On the other side it was argued that the Acts of 1869 and 1872 required Justices' licences for the sale of wine, except as to wine merchants, and that the appellant was not a wine merchant, but a grocer. The Court observed that neither the Excise authorities nor the Commissioners of Inland Revenue appeared to think that the Justices' licence was required; and the counsel for the informant admitted that they were at variance with the magistrates on the question, but said that the magistrates represented the cause of order. To this, however, the Lord Chief Justice replied by the question, "Are you sure that they do not represent the interests of the larger wine dealers?" It was allowed that the enactments on the subject are extremely complicated, and their effect and construction very difficult; but in the end the Lord Chief Justice said that, "looking at the statutory enactments on the subject, wine dealers who were wine merchants were not required to have magistrates' licences—that is, wine dealers who were not mere retail dealers, but had general wine dealers' licences. He thought, therefore, that the Inland Revenue Department, who, no doubt, were acting on good advice, were right in their view of the law, so that the grocers who were wine dealers required no magistrates' licences." Mr. Justice Manisty concurred, and the result was that the decision on the appeal was in favour of the appellant. It is decided, therefore, that grocers may sell wine in bottles without Justices' licences. But the grocers are not yet safe, for a Bill has been introduced by Mr. Staveley Hill into the House of Commons, and has already passed a second reading, for compelling grocers and other retail dealers in wine to take out a Justices' or magistrates' licence. This retail sale of wine is opposed, no doubt, by the wine merchants and by the publicans; and, further, it is alleged by teetotalers, and by many others who are not teetotalers, that it greatly encourages intemperance, and that women especially are led, by the facilities thus afforded for obtaining wine at such innocent-looking places as grocers' shops, to indulge in secret drinking; and that great numbers of them are being rapidly demoralised in this way. This has, as regards England at any rate, yet to be proved; at least we are not aware that satisfactory evidence of its truth has yet been brought forward; but it is a most grave matter, and demands the most careful and calm consideration. The

passage of Mr. Staveley Hill's Bill through Parliament will afford opportunity for the production of any evidence that can be brought in proof of such allegations; and the opportunity no doubt will, and ought to be, taken advantage of. If such charges possess anything like a wide foundation of truth, the facilities for obtaining wines afforded by the retail sale carried on by grocers ought without hesitation to be greatly restricted, if not altogether withdrawn; but in order to obtain either such object, proof of the existence of the alleged evils, and not "impressions" merely, will be required.

THE PREVENTION OF PUERPERAL FEVER.

Puerperal fever is a disease the ordinary social surroundings of which make its effect, when fatal, perhaps more distressing to the surviving relatives and to the medical attendant than is the case with very many equally dangerous disorders. The removal of a young wife from her husband, of a mother from a family not yet old enough to do without her help—and this as the result of an event natural, commonly harmless, and probably looked forward to as a bringer of joy; the hints that are so likely to be dropped as to the doctor's conduct of the case, and his possible culpability in bringing infection from some one else;—all make this disease one to which social consequences of peculiar importance attach themselves. Its interest to the scientific inquirer is not less, for we have much yet to learn about it. The knowledge that the medical attendant may carry with him the contagium of the disease, and the well-ascertained facts which show that infection from the dead body may produce it, have, with other causes, tended to prevent both post-mortem investigation of the disease and frequent examination of the affected parts during life. Our knowledge of it is thus principally clinical, and therefore incomplete. Hence the great number of different views about it; in this, as in other things, the amount and variety of diverse opinions being in inverse proportion to the amount of definite knowledge of the subject.

It is not our intention here to enter upon any discussion of the varying doctrines that have been held. We shall advert to etiological considerations only so much as is necessary to give weight to the practical precautions they indicate. It happens that the dominant theory at present is one which, if true, gives us good hope of being able to greatly hinder the spread and lower the mortality of this formidable malady. We speak of it as the dominant theory, in order that we may not assume that which is not yet universally admitted, not to imply that we think its reign is likely to be transient. It is enough for our present purpose that the theory in question is accredited by the acceptance of many great authorities both here and abroad, and is supported by much evidence; beside the scientific prejudice in its favour, from its being based on the latest, and therefore the largest, knowledge.

The current of opinion, which is now setting so strongly in Germany, and to a great extent in this country, is in favour of the view that puerperal fever is a disease like surgical septicæmia and pyæmia—that it is, in fact, the same malady, entering through a special channel; this channel being either some rent (minute though it may be) of the parturient canal (such as often occurs, especially in first labours), or veins the mouths of which have been bared in the separation of the placenta. Thus the greater frequency of the disease in question in first labours is accounted for by this hypothesis. As from wounds we have various degrees of disturbance, known as traumatic fever, septicæmia, and pyæmia, so in the puerperal state we have maladies which may be slight, severe, or fatal. As in the one, so in the other, the symptoms result from an absorption, through the wound, of pyrogenic or phlogogenic matter. Adopting the germ theory in the form so ably set forth by Dr. Roberts at Manchester, we may say that in the puerperal state slight fever, septicæmia, or pyæmia results whenever the secretions in contact with absorbing surfaces assume such a character that germs will live in them. These mischievous little organisms meet with barren soil in the fresh secretions of a healthy wound. But if these fluids accumulate and decompose, then the germs find nourishment in them, grow and multiply, and, if a way be open, get access to the system. There are, therefore, two ways in which this may be prevented—first, by keeping away (or killing) the germs; and second, by preventing the accumulation of secretions, and therefore the changes in them which make them fit for the little enemies to thrive therein. Professor Lister has successfully aimed at carrying out the first plan; Mr. Callender has attained the end by acting on the second. We shall do well to profit by the teaching of each, and try both to see that no germs get to the patient; and if they should, after all, reach her, to give them no congenial soil: and thus we may hope to prevent puerperal fever.

Let us take first some measures, based upon this theory, which relate to the patient herself. Attention has been drawn by more than one British obstetrician to the value of intra-uterine injections in cases in which feverish symptoms are accompanied by fetor of the discharges. But it is clear that if we accept the views, an outline of which we have been trying to draw, the use of antiseptics after labour must become more extended. There is even a better thing than curing such a set of symptoms; and that is, to prevent the discharge ever becoming fetid or the temperature rising. If the theory we have referred to as dominant be one holding good for all cases, this is within our power. And, further, Olshausen has shown that the introduction of lochia by a catheter into the bladder is followed by cystitis. Kehrer (in an able monograph, a review of which will be found in our first volume for last year) has proved that lochial discharge, apparently healthy, yet possesses a constituent capable of exciting inflammation and fever, and either that the amount or the virulence (probably both) of this constituent increases in the later days of the discharge. If these researches be correct, it is clear that we must not look upon fetid lochia as the only condition calling for antisepsis.

Our German brethren, in this as in many other things, are putting their theory into practice with method, perseverance, and ingenuity. In April last we put before our readers an account of the views and precepts of Fritsch as to this subject. Schülein, in a series of 201 cases, normal and other, washed out the interior of the uterus simply as a prophylactic measure. Münster, in twenty-four cases of labour, either very prolonged or attended with those complications which we know render the patient liable to puerperal disease, practised the same measure, without waiting for symptoms to come on. Of Münster's cases, all recovered perfectly. Schülein comes to the conclusions that these injections, with proper care, are harmless; that they diminish to a considerable extent the frequency of puerperal diseases, and the mortality of them; and that, when used in cases in which the temperature is already high, this treatment is often followed by a considerable fall. He therefore recommends their use both to prevent and cure puerperal disease. These results are most satisfactory, the only objection to which is, that they are based on but a small number of cases. Schede, beside washing out the uterus, put in, in order to prevent accumulation of secretions, a tube provided with a cross-piece, or with lateral projections at the end, in order to fix it in the uterus; and he tells us that, in some cases in which (he having used it only after severe septicæmia had already set in) the patient died, no ill effects

were perceptible from its use. We are quite willing to admit that this may have been a proper measure in Schede's cases; yet we do not think that to put into the uterus something which retains itself there by pressure against the walls of that organ is a procedure to be recommended as likely to prevent disease. Schücking has taken much pains in devising a means of applying a rigidly antiseptic treatment to the genital canal. His apparatus consists of a metal tube, with numerous lateral openings, wrapped round with several layers of gauze. This is put into the vagina, so that the end of the tube lies in the os uteri. The gauze is soaked in an antiseptic solution, and its function is to prevent the holes of the tube from getting stopped up by coagula, and to insure that the antiseptic shall be applied to an extensive surface. The tube is connected with an irrigating apparatus, so that a slow, steady stream of the antiseptic solution used shall flow through the tube, percolate the gauze, and so bathe the genital passage. The patient lies on a mackintosh, or some other arrangement, serving to prevent the wetting of the bedclothes. The tube is removed every twenty-four hours, the gauze changed, and the vagina well syringed with an antiseptic. Schücking's plan is ingenious, and in cases in which the vagina has been wounded, or sloughing is to be apprehended, we should think it highly useful. But in ordinary confinements it seems to us too troublesome and disagreeable for routine use; and we question whether ordinary syringing with an antiseptic does not effect all that is required in a simple case.

A practical conclusion of some value, if correct, which Kehrer draws from his investigations, is this: that in cases in which, in the later days of the lochial discharge, symptoms arise making one think that a bit of placenta or membrane has been retained, and therefore the uterine cavity should be explored. It is better not to do this at once, but to remain content with antiseptic injections, until any rents that may be present in the genital canal have completely healed; for if done before, these wounds, then closed only by granulation tissue, will be torn open again, and thus a fresh surface exposed to absorb the virulent lochial discharge.

Wishing to make as little painful as possible a measure which he thinks very valuable, and also to enable the medical man to avoid all contact with the lochia, Dr. Chamberlain has had constructed for the purpose of intra-uterine injection a tube of toughened glass. It is fifteen inches long, five-eighths of an inch thick, rounded at the free end, bent at a curve convenient for introduction, and perforated with holes so arranged that some open on each surface. This tube is inserted into the vagina without need of a guiding finger. This canal is washed out, and then with a little manœuvring (which in practice, Dr. Chamberlain says, becomes very easy) the point is slipped into the cervical canal and pushed up to the fundus. The uterus can thus be thoroughly irrigated without any contact occurring between the medical man and the secretions of the patient. Judging from the description, this seems to us a most useful invention, sound in principle and safe in practice.

The antiseptics used by the authors from whom we have quoted were either carbolic acid, in solution of 2 to 5 per cent. strength; salicylic acid, 1 to 2 parts per 1000; or sodic sulphite, in a 10 per cent. solution, with 5 per cent. of glycerine.

The increased liability to puerperal disease which follows protracted labour and mismanaged third stage is well known. To discuss these points would take us so far into an entirely different subject that we will content ourselves with mentioning them.

Space forbids us here to go on to those precautions, designed to prevent the access of contagion, which relate to the surroundings of the patient. We may possibly do this in a future number. That part of the subject with which we have been dealing has been taken first, not because it is more important, but because newer, and therefore probably less familiar to our readers.

THE WEEK.

TOPICS OF THE DAY.

A CASE of some importance to the profession was heard last week in the Queen's Bench Division of the High Court of Justice: an application had been made by a medical man who had been struck off the Register, for an order on the Medical Council to restore him, the ground of his application being that his name had been removed on some charge of misconduct without a hearing. The circumstances of the case were not entered into, it being understood that the object sought was principally to obtain the opinion of the Court, and more especially for the guidance of the Medical Council in the future. In the course of the discussion which ensued the counsel for the Council contended that they had a discretion as to removing or restoring names of medical men on the Register, but the Lord Chief Justice said that he did not think there was a power to remove the name of a medical man on representations of professional misconduct without a hearing. If a medical man was to have his name struck off the Register for professional misconduct he ought to know what the charge was, and have an opportunity of making a defence. The Council, therefore, ought, in the opinion of the Court—assuming the proper qualification, and on proper inquiry,—to entertain the application for restoring the applicant's name. Upon this intimation of the opinion of the Court the counsel for the Council declared that they would act in accordance with it, and, on proper inquiry, restore the applicant's name. We think the Lord Chief Justice's decision will give universal satisfaction. In this country we determinedly set our faces against anything that seems unfair, and, however great a culprit a man may be, it is only common justice to give him a hearing.

Another meeting of the Hospital Sunday Fund Committee was held last week at the Mansion House, presided over by Sir Sydney Waterlow, M.P. The principal subject discussed was the advisability of recommending to the next annual meeting of constituents that surgical aid and kindred societies be admitted to participate in the awards of the Fund, and it was eventually resolved, after some discussion, to refer the matter to the Distribution Committee, in order that they may place themselves in communication with the secretaries or managers of surgical aid and other societies, with a view of ascertaining whether such societies are prepared to modify their rules and practice in order to secure to the poor the means of obtaining surgical appliances by one letter, instead of throwing on suffering patients the labour of soliciting a number of letters, as is almost invariably the case, and to report to the Council. The number of contributions already promised in aid of this year's collection is—Church of England 535, and other denominations 305—showing an increase of 110 over similar promises received at a corresponding date last year; but if the Committee is constantly endeavouring to enlarge the number and class of the recipients, an increased total will bring little gain to the *Hospitals* of the metropolis.

We recently reported that the Stafford House Committee had taken steps for replenishing its hospitals at Erzeroum and Rustchuk, in anticipation of the Russian advance; but recent advices describe the former town to be in a most distressing condition. The English surgeons have all been

prostrated with fever, and Dr. Stiven and Dr. Stokes have been despatched to render assistance. At Rustchuk, the Russians unhappily, for some reason, or by some mistake, directed their fire on the Committee's hospital; one patient was killed outright, five were wounded, and six subsequently died from shock and exposure to cold on removal. The building was so shattered that it had to be abandoned, and it was therefore determined to re-establish the hospital at Varna. The soup kitchens of the Committee, when not called upon to supply the wants of wounded soldiers in transit, have been utilised for the benefit of the refugees, and so great has been the demand for this latter service that they have been working night and day.

Under the provisions of the Metropolis Local Management Act of 1855, the Metropolitan Board of Works is constituted the central authority with power to control local boards in all questions of drainage, the main sewers being vested in the former, and the branch sewers in the latter. The 60th section of the Act requires that the local district boards shall make and maintain all sewers necessary for draining their districts, and that no new sewers shall be made without the approval of the Central Board. The Fulham Board has, however, recently constructed a sewer near to the Uxbridge-road, which has been made at so high a level—only a few inches from the surface of the road—that Sir Joseph Bazalgette reports that it will not drain into the main sewer, and will, therefore, be useless for the purpose of draining the district. Under these circumstances the Metropolitan Board has applied to the High Court of Chancery for an order to compel the Fulham Board to reconstruct the works in a manner which they (the former) may approve of.

A meeting, which is described as the largest which has for some time assembled at the Mansion House, was last week held there under the auspices of the British Women's Temperance Association, the object of the gathering being to "impress ladies with the importance of their influence in the cause of total abstinence from all intoxicating drinks." In the absence of the Lord Mayor, the Rev. Canon Duckworth presided, and addresses were delivered, bearing on the subject, by several ladies.

An application has been recently made to the Lord Mayor by a Paris Society, founded for promoting the use of horseflesh as an article of food, for an authority to open in London an establishment for the preparation and sale of this meat. They point out that horseflesh will be an important addition to our food resources, especially to those of the poor, whose means will not allow them to entertain senseless prejudices against the new item of food; and they state that horses past working are sold at higher prices to the butchers than to slaughterers, and that the animals are treated with the greatest care, it being to the butcher's interest to have them well nourished. The Lord Mayor has replied, wishing the experiment a fair trial and the success it may deserve, and pointing out that no authority is required to open such an establishment in this country. The Society, it appears, are not sanguine of at once converting Englishmen to the new delicacy, but they affirm that there are sufficient Frenchmen at present residing in the metropolis to insure the success of the new industry. In 1867 the number of horses, asses, and mules consumed in Paris was 2192, and this number had risen last year to 10,619. The founder of the Society is reported to be M. E. Decroix, the principal veterinary surgeon in the army of Paris.

It may not be generally known that by the English law every dog is allowed his "first bite," or, in other words, that to sustain an action against the owner of a dog for having been bitten by it, it is necessary to prove that the dog is a bad dog and accustomed to bite mankind. The law has been altered by statute as regards sheep, but is still in force in the case of human beings! A case was heard last week in the Queen's Bench Division of the High Court of Justice, in which a Mrs. Parker sued a Mr. Walker to recover damages for injuries sustained through having been bitten by the defendant's dog. Evidence showed that this was a bad dog, which would even bite his master, and, on a relative of the lady complaining to the defendant, and telling him it was a fierce dog which ought to be killed, he did not deny that it was vicious, though he refused to destroy it. The case had already been heard in the County Court at Gravesend, and the Judge there held that the defendant knew the dog to be vicious, the jury finding a verdict for the plaintiff for £22. It was now moved on behalf of the defendant that there was no evidence that the dog was known by its owner to be vicious, and, for anything that appeared to the contrary, this might be his "first bite"; as, however, the defendant had not denied that his dog was vicious when charged with it, the Court declined to set aside the previous verdict, and Mr. Parker's dog was denied the privilege of scoring the present as his maiden effort in trying his teeth upon the human form.

The Invalids' Home, or Home Hospital movement, has now been fairly brought before the public, and from the list of contributions already published would appear to have been well received. The Duke of Northumberland, chairman of the committee, has promised a donation of £1000 provided the whole sum required (£20,000) is subscribed by January 1, 1879; and a lady who has already subscribed 100 guineas offers a further donation when the sum of £10,000 shall have been subscribed. It is proposed to open the first hospital in the West-end of London so soon as half the fund has been subscribed; and as the class of society these hospitals are intended to benefit will comprise students of literature, science, the fine arts, medicine, and law, clerks in Government offices, banking-houses, merchants' counting-houses, foreigners, and sick persons visiting London for medical or surgical advice, there should be no difficulty in obtaining the comparatively small amount necessary to commence the undertaking. The honorary secretary at the Mansion House will receive contributions, and is ready to give any information which intending subscribers may require.

A meeting, composed principally of mill-owners, and others likely to be affected by the proposed Metropolis Water-Supply Bill, was held on Monday last at the Cannon-street Hotel. The Chairman, Mr. John Evans, said that they had assembled, not for the first time, in order to devise a scheme for protecting the rights which they now possessed with regard to the water-supply to their mills, lands, and property in general. On former occasions they had had to contend with private companies, rather than large public bodies; but on the present occasion they would have to cope with such an influential body as the Metropolitan Board of Works. That body had brought forward two schemes for altering the water-supply of the metropolis: they proposed as one part of the scheme to dig a series of wells in the chalk districts around London, from which they could pump water into reservoirs at a considerable elevation, and to supply that water under great pressure for domestic purposes. The other part of the scheme related to the purchase of the existing water companies, and with this they had little to do. The water which the Metropolitan Board of Works now intended to appropriate did not belong to them, but the class which that meeting represented. The chairman maintained that the existing water companies were sufficient to meet the supply demanded by the metropolis, and

the scheme would be injurious to the surrounding country whence the water would be obtained. After speaking of the scientific aspects of the question, the chairman concluded by observing that the new scheme involved a reckless expenditure of money, and was one of the most barefaced attacks upon property which had been witnessed for some time. A number of resolutions condemning the Bill were then passed, and an association was formed for the purpose of opposing the measure.

The Lords of the Admiralty have issued the following regulation:—"Inspectors-General of Hospitals and Fleets shall rank as Rear-Admirals, according to date of commission; and all Deputy Inspectors-General of Hospitals and Fleets shall rank as Captains of over three years' standing, according to date of commission." This regulation is to take effect from December 12 last, upon which date the Queen by an Order in Council sanctioned an alteration in the relative rank of these officers, with a view of assimilating their positions to that of Surgeons-General and Deputy Surgeons-General in her Majesty's Army.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

At a meeting of the Royal College of Physicians, held on Thursday, January 31, a report was received from the Council on "Exemptions in the Examinations," and on the subject of how the wishes of the donor of a prize of one hundred guineas on the subject of hydrophobia can best be carried out. Both matters had been referred by the College for consideration and report. As to the first, the Council recommended the following regulations with respect to exemptions from examination of candidates for the licence in chemistry and materia medica:—"Any candidate who shall produce satisfactory evidence of having passed an examination on chemistry and materia medica at a university in the United Kingdom, in India, or in a British colony, will be exempted from re-examination on those subjects. Any candidate for the licence who shall have obtained a qualification which entitles him to practise medicine or surgery in the country where such qualification has been conferred, after a course of study and an examination equivalent to those required by the regulations of the College, shall, on production of satisfactory evidence as to age, moral character, and proficiency in vaccination, be admissible to the pass examination, and shall be exempt from re-examination on such subjects as shall in each case be conidered by the Censors' Board to be unnecessary."

Some regulations, which we subjoin, were also enacted respecting exemptions in the examinations for the membership:—"Any candidate who shall produce satisfactory evidence of having passed an examination on chemistry and materia medica at a university in the United Kingdom, in India, or in a British colony, will be exempted from re-examination on those subjects. Any candidate who has already obtained the degree of Doctor or Bachelor of Medicine at a university in the United Kingdom, in India, or a British colony, or who shall have obtained a qualification entitling him to practise medicine or surgery in the country where such qualification has been conferred, wherein the courses of study and the examinations to be undergone previously to graduation shall have been adjudged by the Censors' Board to be satisfactory, shall be exempt (if the Censors shall think fit) from all or any parts of the examinations hereinbefore described, except such as relate to the third or pass examination. The nature and extent of this examination shall, in the case of each candidate, be determined by the Censors' Board. Every candidate for the membership will, however, be required to translate into English a passage from a Latin author, and he will have the opportunity of showing a knowledge of Greek, or of one or more of the modern European languages."

It was resolved, for the second time, that the following by-law be repealed:—"Every candidate who has prosecuted his studies abroad, whether in part or to the full extent required by the preceding by-law (except such as shall be admissible under the provisions of Section xvi.), shall, nevertheless, bring proof of his having attended during at least twelve months the medical practice of a hospital in the United Kingdom."

With reference to the hydrophobia question, the Council recommended, as general principles—1. That the prize be offered for an essay on the Nature of Hydrophobia: its Causes, Prevention, and Treatment. 2. That original investigations be regarded as of especial value in deciding on the merits of the essays; and 3. That the prize be not awarded unless an essay of sufficient merit be presented. The report was adopted, and the Council were empowered to lay down more in detail the points on which information is especially required, and to take the necessary steps to carry into effect the wishes of the donor of the prize.

Dr. Matthews Duncan and Dr. Wyndham Cottle were admitted Members of the College. A mourning ring formerly belonging to Dr. Burwill, President of the College in 1692-93, was presented to the College by the Rev. H. F. Ellacombe. Drs. Handfield Jones, Munk, Burdon-Sanderson, and Priestley were elected into the Council, and some other routine business was transacted.

THE SERVICES.

The following are lists of candidates for the Army, Indian, and Naval Medical Services who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley:—

Army Medical Service.

	Marks.		Marks.
1. Keays, W.	4930	13. McLaughlin, H. J.	3330
2. Young, P. G.	4553	14. Power, E. R.	3316
3. Crofts, F. W.	4273	15. Donovan, H. L.	3229
4. Beamish, R. T.	3956	16. Leader, N.	3156
5. Parker, W. A.	3900	17. Tidbury, J.	2913
6. Green, A. P.	3869	18. Lyle, A. A.	2842
7. Lundy, A. R.	3865	19. Clinch, J. V.	2784
8. Anderson, J.	3865	20. Conolly, J. V.	2742
9. Pedlow, J.	3850	21. Charlton, H. A. H.	2542
10. Routh, J. J.	3350	22. Barrington, H. E. W.	2496
11. Mulrenan, J.	3348	23. O'Neill, S. L.	2495
12. Grier, H.	3335	24. Quarry, C.	2454

Indian Medical Service.

	Marks.		Marks.
1. Thompson, S. J. (a)	5008	10. Jervis, H. P.	4065
2. Campbell, R. N.	5000	11. Tully, E.	4050
3. Brander, E. S.	4972	12. Davidson, D. C.	3985
4. Manser, R.	4885	13. Bennett, C. H.	3942
5. Chatterjie, F. C.	4719	14. Peacocke, J. C. H.	3890
6. Emerson, G. A.	4565	15. Nariman, K. S.	3875
7. Adey, H.	4500	16. Sargent, A. F.	3697
8. Koyaji, B. N.	4290	17. Thornhill, W. H.	3615
9. Street, A. W. F.	4130	18. Robinson, R. H.	3486

19. Reporter, M. E. . . . 3327 marks.

Naval Medical Service.

	Marks.		Marks.
1. Porter, J.	4670	5. Triggs, J. B.	3544
2. James, C.	4015	6. Charlton, G. R. D.	3445
3. Loane, Th.	3775	7. Bell, G. W.	3350
4. M'Leod, A. W.	3620	8. Jeans, F. A.	3160

9. Reid, A. W. W. . . . 3145 marks.

(a) Gained the Herbert Prize and the Martin Memorial Medal.

THE PREVENTION OF FLOODS IN THE RIVER THAMES.

The Metropolitan Board of Works has at length found courage to attempt the prevention of Thames floods, and at its meeting held last week the Works and General

Purposes Committee submitted their report, which stated that they had had under consideration the report of the Committee of the House of Commons on the Thames River Prevention of Floods Bill, and recommended that a Bill on the subject be introduced by the Board in the present session of Parliament. This Bill they recommended to be based upon the following principles:—"That any compensation payable in respect of damage to private property be paid by the Board, but that special clauses be inserted in the Bill providing for such compensation. That this Board shall direct what works are required to be done to prevent the overflow of the river. That the works be carried out by this Board, unless the owners of property, or the district boards and vestries respectively, prefer to execute the same; and, in the latter event, that such works shall be carried out to the satisfaction of the Board. That the vestries, district boards, and owners of property abutting upon the river shall pay the cost of the necessary works, such costs not to exceed a specified sum, to be inserted in a schedule to the Bill; and that the Board shall obtain power to recover from the owners of private property, and from the vestries and district boards respectively, the cost of the necessary works. That it shall be the duty of the Board to maintain the respective works in proper order, the Board having power to determine what repairs from time to time may be necessary, charging the cost thereof on the owners, district boards, and vestries respectively, provided always that owners, district boards, and vestries may execute the repairs themselves subject to the satisfaction of the Board." The report was adopted, on a division, by twenty-seven against four votes.

BRITISH MEDICAL BENEVOLENT FUND.

The annual meeting of subscribers to this Fund was held on the 10th ult., at Messrs. Churchill's, New Burlington-street, when the report of the Committee was presented, and the officers were chosen for the ensuing year. The hard times have pressed heavily on the resources of the Fund, for not only has the number of applicants for relief been larger than hitherto, but there has also been a smaller amount of money wherewith to help them. In no year since the establishment of the Fund in 1836 has so much been expended in giving immediate aid, £1640 having by the aid of a bank deposit been distributed in the form of grants to needy members of the profession, their widows or their children. It has been doubted whether there really is such distress in the medical profession as can be relieved by small grants of money, but it is a fact, with which perhaps only those conversant with the working of this charity are familiar, that there are numbers of medical men or their relatives whom such help does preserve from abject poverty. There are persons—nearer to them than many may imagine—for whom a few pounds at once, or a few shillings in weekly doles, provide the only means of sustenance. Another branch of the Fund is that for giving annuities of from £10 to £25 to deserving members of the profession above sixty, but the number of applicants is so large that it is rare for anyone to obtain this boon before the age of seventy. The working expenses of the Fund are small beyond those for postage and printing. The officers are all honorary, and the room in which the Committee meets monthly is very kindly lent by Messrs. Churchill. We venture therefore to urge the claims of this Fund upon the charity of every medical man. There are many, we believe, who do not give because the existence of the Fund has been unknown to them, and we would ask them now, with these few facts before them, to do all they can, and to get others—their friends in the profession, and not less their friends in the laity—to help this really benevolent work. The Treasurer, Dr. Broadbent, 34, Seymour-street, Portman-square, or the Financial Secretary, Mr. Herbert W. Page, 28, New Cavendish-street, W., will gladly acknowledge any new subscriptions or donations which may be sent to them.

EXCRETION OF ALCOHOL BY THE KIDNEYS AND LUNGS.

Professor Binz, of Bonn, with the assistance of Herrn H. Henbach and A. Schmidt (*Archiv f. Exper. Pathologie*, vi., 287), has lately re-examined this question, using Geissler's vaporimeter for the detection of small quantities of alcohol in the urine, instead of the ordinary chromic acid or iodine reaction, and the same method for the pulmonary vapour, the latter being previously condensed by passing the breath through a series of Wolff's bottles containing cold distilled water, or through a Liebig's condenser. With the vaporimeter as little as 0·05 per cent. of alcohol can be detected, though certain precautions, fully described in the original, are necessary for its accurate use. Admitting all possible errors, experiments on the urine of six patients with various febrile affections (erysipelas, pneumonia, phthisis, etc.) showed that during a period of eight or nine hours after a given dose of alcohol had been taken, not more than 3·1 per cent., or at the highest computation 6 per cent., escaped by the kidneys, while in some determinations no alcohol at all could be discovered in the urine. With regard to the excretion by the lungs, it was found that if from thirty to sixty cubic centimetres of pure alcohol were drunk diluted with syrup, and the patient's breath were condensed continuously for one or two hours, and the product examined either immediately after the ingestion of the alcohol, or at any time within six hours, not a trace of alcohol could be found in it. Even assuming that the alcohol ingested required fifteen hours for the whole of it to evaporate by the lungs, the vaporimeter method was delicate enough to detect the fraction of it which would have escaped during the progress of the experiment. The idea that alcohol is present in the breath after wine or spirits have been drunk depends on the odour imparted by the presence of various ethers, fusel oil, etc., and not of alcohol. A quantity of pure diluted alcohol, equal in volume to half a bottle of champagne, may be drunk without tainting the breath in the least; and alcohol may be subcutaneously injected with the same result, though it is immediately detected if a little fusel oil is added to it first. Reasoning from analogy, Professor Binz and his assistants regard it as improbable that the skin should eliminate alcohol, if the lungs, which are so much better constructed for excreting it, do not do so. They conclude, therefore, that by far the larger part of any ingested alcohol is disposed of within the organism in the processes of tissue-change; and, if we remember rightly, this is the conclusion to which the late Dr. Anstie was also led by his own experiments.

MICROCYTHÆMIA.

Hayem (*Comptes-Rend.*, lxxxiv., No. 22) expresses his opinion that the so-called microcytes which are present in blood that has been treated with certain reagents are artificial products of the latter, and that their number entirely depends on the particular process of preparation adopted. The microcytes are round, vesicular, highly refracting bodies; whereas, healthy blood-corpuscles, no matter what their size, are biconcave and discoid. There are normal blood-corpuscles in the blood which only measure two thousandths of a millimetre in diameter, and other gigantic corpuscles which measure twelve to fourteen thousandths of a millimetre, with a variety of intermediate forms between these two extremes. The smallest corpuscles are very rare in healthy adult men, whereas they are constantly present in great abundance in new-born infants, in women at the period of menstruation, and in invalids after severe

hæmorrhages (epistaxis, hæmoptysis, menorrhagia, etc.); and also during convalescence from severe febrile diseases, as well as in all forms of chronic anæmia of medium intensity. Hence their presence is not characteristic of any special form of anæmia (*e.g.*, of pernicious anæmia), as has been stated by some observers. There is, according to Hayem, a constant relation between the presence of small blood-corpuscles and the abundance of red blood-cells of normal size; and hence, in anæmic conditions, their number rises and falls with the increase or diminution of the latter. In general terms, they invariably appear, both under normal and pathological conditions, during the production of normal red blood-corpuscles. They represent an *immature* stage of these latter, and only require to meet in the organism with the necessary conditions for their development, to become converted into them. Hence they are only met with, as a rule, at such times as a new crop of normal red cells is being, so to speak, manufactured—for example, at the menstrual period. If pathological causes impede their development, they remain small, and accumulate as such in the blood, and this explains their special abundance in certain forms of anæmia, their conversion into red cells being prevented by the existence of the disease.

ENFIN!

We understand that the following requisition for a special general meeting of subscribers to the Hospital for Diseases of the Throat has been sent in to the Secretary:—

"We, the undersigned subscribers to the Hospital for Diseases of the Throat, 32, Golden-square, London, W., in accordance with By-law 38, do hereby request you to convene a special general meeting of subscribers. The objects for which we require such meeting to be held are as follows:—

"1. To receive a letter from Sir Dighton Probyn, enclosing, by permission of his Royal Highness the Prince of Wales, the report of the Committee of Inquiry, held on July 14 last, at the request of his Royal Highness, into the alleged mismanagement of the medical department of the Hospital.

"2. To receive the report of the Committee of Inquiry above mentioned, which, it appears, has resulted in the withdrawal of the patronage of their Royal Highnesses the Prince and Princess of Wales, and in the resignation of the Marquis of Bute, the President of the institution.

"3. To take such steps as may be necessary to reorganise the Hospital, so as to justify the renewal, if possible, of their Royal Highnesses' countenance and support."

Signed by the Marquis of Hamilton, Vice-President; the Earl of Pembroke, Vice-President; the Earl of Ilchester, Vice-President; Earl Cowper (President 1874-75); the Earl of Rosebery; Lieut.-Colonel Lord Eustace Cecil, M.P.; the Hon. Wilbraham Egerton, M.P.; Sir Charles Legard, Bart., M.P.; Colonel Wm. Pinney, Vice-President; H. B. Mildmay, Esq.; F. R. Wegg-Prosser; Sir Louis Mallet, C.B.; Captain Hughes-Hallett, Vice-President; and others.

THE HEALTH OF LONDON.

For the week ending Saturday, February 2, the annual death-rate from all causes in London, which in the two previous weeks had been equal to 27·8 and 27·2 per 1000, declined to 24·8. To the seven principal diseases of the zymotic class 266 deaths were referred, against 291 and 304 in the two preceding weeks. Whooping-cough is still the most fatal disease of this class, causing 89 deaths last week, against 94 and 117 in the two preceding weeks. The fatal cases of measles declined in numbers, while there was some increase in the deaths from scarlet fever. The deaths referred to fever, which had been 21 and 32 in the two preceding weeks, declined to 20 last week, and were 15 below the corrected average; 5 were fatal cases of typhus, 12 of enteric or typhoid, and 3 of simple continued fever.

The deaths from small-pox, which had been 51 and 34 in the two preceding weeks, were 38 last week, of which 22 occurred in the Metropolitan Asylum Hospitals, 4 in the Highgate Small-pox Hospital, and 12 in private dwelling-houses. Judged by the number of small-pox cases under hospital treatment, the prevalence of the epidemic in London continues to increase. The number of small-pox patients in the Metropolitan Asylum Hospitals, which at the beginning of October last had declined to 137, has since steadily increased to 415, 468, 505, and 542 at the end of the last four weeks; 146 new cases were admitted during last week, against 129 and 126 in the two preceding weeks. The Highgate Small-pox Hospital contained 56 patients on Saturday last; in the five preceding weeks the numbers had steadily increased from 26 to 55.

The deaths referred to diseases of the respiratory organs, which had been 541 and 455 in the two previous weeks, further declined to 448 last week, but exceeded the corrected weekly average by 37; 280 resulted from bronchitis, and 111 from pneumonia.

LECTURES BEFORE THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

On the afternoon of Monday, February 4, the course of Annual Scientific Lectures for 1878 was commenced by Dr. Walter Smith, who delivered the first of his two lectures on "The Principles of Electro-Therapeutics." Lecture I. dealt with the physical basis of electro-therapeutics.

After a brief historical sketch, and the explanation of some fundamental physical conceptions, the lecturer proceeded to treat of the forms of electric currents utilised in medicine, which were arranged as follows:—I. *Galvanic (Voltaic) Currents:* 1. Continuous; 2. Interrupted—*a*. Direction uniform. *b*. Direction alternating. II. *Induced (Faradic) Currents:* 3. Electro-magnetic—*a*. Extra current of primary coil. *b*. Alternating currents of secondary coil. 4. Magneto-electric currents.

Each form of current was illustrated by diagrams, and the two varieties of interrupted galvanic current were experimentally shown. With the aid of Sir William Thomson's reflecting galvanometer, the alternating currents of the secondary coil and magneto-electric currents were demonstrated, and the greater physiological effect of the opening current was exemplified on the muscles of the forearm. With a current of suitable intensity no contraction was produced on completing the circuit; but on breaking contact a marked contraction was obtained.

The lecturer next spoke of electro-medical apparatus, and strongly recommended for general adoption either the Leclanché battery or the recent modification of it proposed by Clamond, in which peroxide of iron is substituted for the peroxide of manganese. From seven years' experience of the Leclanché battery it appeared to answer every demand that can reasonably be made upon it, even although, being a single-fluid combination, it cannot give either a constant electro-motive force or a constant resistance. Of induction machines, those furnished with coils worked by a zinc-carbon cell with bichromate of potash solution were recommended as portable, easy to manage, and thoroughly satisfactory in every respect.

The arrangements for the trembler in Stöhrer's larger apparatus are needlessly complex. For electrodes, carbon or metal terminals are more cleanly and convenient to use than the ordinary cup sponge-holders, which offer greater resistance, and may be entirely dispensed with. A simple hand-instrument, by which a galvanic current can either be simply interrupted by moving a spring or commutated, was shown, and its action demonstrated on a galvanometer; and some such appliance should be supplied with every galvanic battery intended for medical use.

The latter part of the lecture was devoted to an exposition of the laws of the transmission, diffusion, and localisation of electric currents in the human body.

The cases were considered successively of the propagation of electricity along linen conductors, and through conductors of three dimensions, homogeneous and heterogeneous: and the complex nature of the problem in reference to the human body was pointed out.

It was next explained how that, although, strictly speaking, it is impossible to absolutely localise an electric current

in any part of the body, a *relative localisation* of a current can be effected. The different factors that influence the localisation of currents were explained and illustrated. With the aid of diagrams it was shown how the density of the current is altered by modifying the dimensions of the electrodes; how the distribution of the electric curves can be controlled by varying the distance which separates the two electrodes; and how enormously the resistance of the skin varies according as dry or moist electrodes are employed.

MEDICAL PARLIAMENTARY AFFAIRS.

Medical Officers of Health.—Mr. Sclater-Booth, replying to Colonel Naghten, said that he did not intend to propose any change in the law making it compulsory to appoint medical officers of health for unions or other large areas, instead of, as now in many cases, for parishes only. The Local Government Board have always encouraged a combination of local authorities in respect of the appointment of these officers, and will continue to do so.

The Metropolis Management and Building Acts Amendment Bill was read a second time on Wednesday last.

FROM ABROAD.

The Prizes of the Académie des Sciences.

Among the prizes adjudged at the recent annual meeting of this learned body, the following will prove of interest to our readers:—1. The Thore Prize in Anatomy and Zoology to M. Jousset de Bellesmes for his various investigations on the Physiology of Insects. 2. The Montyon Prize in Medicine and Surgery. Of this 2500 fr. are adjudged to Prof. Hannover, of Copenhagen, for his work, "The Retina in Man and the Vertebrates"; 2500 fr. to Prof. Parrot, of Paris, for his work on "Athrepsia"; and 2500 fr. to Prof. Picot, of Tours, for his work, "Les Grands Processus Morbides." "Honourable mentions" with 1500 fr. each are accorded to M. Topinard for his work, "L'Anthropologie," to Profs. Lasègue and Regnauld for their memoir, "La Thérapeutique jugée par les Chiffres," to MM. Delpech and Hillairet for their memoir on the Accidents to which Workmen employed in the Preparation of the Chromates are exposed; to M. Francis Franck for a series of memoirs on "The Changes in the Volume of Organs in their Relations to the Circulation," and to Prof. Oré for his work, "De la Médication Intraveineuse." The following are also cited as worthy of approval, although not attaining prizes:—MM. Armingaud, "Vasomotory Neuroses in relation to the Hysterical Condition of the Apophysary Point in Neuralgia," etc.; Brouardel, "Urea and the Liver"; Burq, "Metalloscopy and Metallo-Therapeutics"; Couty, "Entrance of Air into the Veins and Intra-vascular Gases"; Desprès, "La Chirurgie Journalière"; Lecomte, "The Elbow and Rotation of the Hand"; Méguin, "Monograph on the Tribe of Psoric Sarcoptidæ"; Peyraud, "Regeneration of Osseous and Cartilaginous Tissues"; Salathé, "Movements of the Brain"; Sanné, "Treatise on Diphtheria"; Testu, "Symmetry in Affections of the Skin." 3. The Bréants Prize of 5000 fr. is given to M. Joanny Rendu for two memoirs, one printed, on "An Epidemic of Variola at Lyons, in relation to Contagion," and the other in MS., "On Isolation in Variola in France and Foreign Counties." 4. The Godart Prize of 2000 fr. is given to M. Cadiat, for two memoirs, one on the Muscles of the Perineum, and the other on Tumours of the Breast; and the Montyon Prize of 760 fr. in Physiology has been divided into two parts, one of which is adjudged to Prof. Ferrier, of London, for his series of experiments on the effects produced by the Electrisation of the Surface of the Brain, and the other to MM. Carville and Duret, for their experimental researches on the Functions of the Cerebral Hemispheres. A "very honorable mention" is accorded to MM. Jolyet and Regnard for their experimental investigation of the Chemical Phenomena of Respiration in Aquatic Animals; and a "mention" is also accorded to M. Charles Richet for his "Mémoire sur la Sensibilité." 6. The Lacaze Prize is given to M. Dareste for his researches on the Artificial Production of Monsters. By a recent decision the Academy prohibits persons who have only received "mentions" or "honourable mentions" styling themselves "Lauréats" of the Academy; those only who have the actual prizes awarded them being entitled to employ this designation.

Prof. Sée on the Treatment of Asthma.

Prof. Germain Sée, whose recent enthusiastic praises of salicylic in rheumatism and gout were received with some scepticism by the Académie de Médecine, has just read to that learned body a paper, in which he speaks (*Bulletin de l'Académie*, January 29) in scarcely less warm tones of the efficacy of iodide of potassium and the iodide of ethyl in the treatment of asthma. After adverting to the few occasions on which *iodide of potassium* has been hitherto used, he observes that his own employment of this substance has not been for the mere relief of the paroxysm, for which it obtained some success in the hands of Trousseau, but as a means of effecting the cure of the disease itself, preventing the development and return of the paroxysms which constitute the attack that may last for a longer or shorter time. He began his investigations with it in 1869, after having convinced himself that the medicinal substances which had hitherto proved most useful in asthma, as the bromide of potassium, and especially chloral, only exert a very temporary and doubtful effect. Since then he has met with fifty cases, and he has been able to keep twenty-four of these under prolonged observation, never for less than a year, and in some of the cases for three or four years. He dissolves ten grammes of the iodide in 200 of wine or water, and gives before each meal, twice a day, a dessert-spoonful (eight or nine grammes), so that the patient takes daily sixteen or eighteen grammes of the solution, or one gramme eighty cent. of the iodide daily. After some days this quantity is gradually doubled. The same doses may in preference be taken in syrup of orange-peel. If the patient become disgusted with the taste he may take the iodide in wafers. There is no definitive time for the duration of the treatment, but generally at the end of two or three weeks, when the attacks are attenuated or abolished, the dose may be diminished to a gramme and a half per diem. From time to time the treatment may be interrupted for a day, but a longer interruption may be followed by a return of the accidents. In one case a patient who had been cured for a year, having suppressed the iodide for four days, was again attacked. Any accompanying cough may be relieved by the addition of a little extract of opium or syrup of poppies, while, when there is not much cough or catarrh, two or three grammes of chloral given in the evening assist in diminishing the dyspnœa.

The effects of the iodide on the asthma and its paroxysms are—1. The respiration becomes free in about two hours; and when it has been administered some hours before the paroxysm the development of this is almost certainly prevented. The second paroxysm is suppressed with certainty. 2. The respiratory murmur can be heard in regions wherein it was suppressed. 3. Recent emphysema disappears, with the exaggerated sonority dependent upon it. 4. The râles cease to be sibilant, and become mucous, allowing of the penetration of air. 5. At the end of some hours the orthopnœa and emphysema have given place to normal respiration, intermingled or not with disseminated mucous râles. 6. When the asthma is chronic with permanent emphysema, if the treatment be continued after the subsidence of the attack, not only do the paroxysms totally cease, but the emphysema and oppression habitual to the asthmatic entirely disappear, especially in dry asthma. In catarrhal asthma the catarrh may persist for a longer or shorter time after the dyspnœa has disappeared. 7. When the asthma is due to a valvular lesion of the heart, the effects produced are but slight; but when it is connected with degeneration or hypertrophy of the cardiac tissue itself, the iodide treatment leads to the disappearance of the dyspnœic element. But before pronouncing on the existence of cardiac asthma, we should be aware of a fact that may easily give rise to error. This is, that in a great number of the subjects of asthma we may observe at the apex of the heart, and more rarely at the base, a very gentle but very evident systolic *bruit de souffle*, which may lead to the fear of the existence of valvular lesion. But this sound, which seems to reside in the valves of the right side of the heart, entirely disappears, and that in some days, with the removal of the asthma by means of the iodide treatment.

As inconveniences of a prolonged employment of the

iodide, may be mentioned—1. Oozing of blood from the mouth and fauces. 2. Hæmoptysis. This occurs only in those predisposed to tubercle; and in all such subjects, and even when the diagnosis is doubtful, the iodide must be proscribed. 3. Loss of appetite and disgust at food. For this it suffices to suspend the treatment for a day from time to time, and to diminish the dose during a week. 4. Emaciation. This is not a contraindication, for at a later period the patients may recover their flesh. 5. Iodine cachexia and diffluence of the blood have never been met with even after prolonged treatment. The general result is, that a cure takes place in almost all cases, even when the patients are placed amid atmospheric conditions which are habitually injurious (thus, a bakeress, who always had paroxysms of asthma excited by inhaling flour, was by the use of the iodide enabled to continue her occupation). The patients also resist far better the changes of temperature, the influence of heat and cold, the action of the wind and of dusts. No precaution has to be taken as regards hygiene and regimen, and the use of coffee and tobacco has not seemed to be injurious.

The Iodide of Ethyl.—Prof. Sée has employed inhalations of this substance in five cases of asthma, and the paroxysm was arrested in all very rapidly. In three cases of cardiac dyspnœa it also acted favourably, and in two cases of chronic bronchitis accompanied by dyspnœa the effect, although much less prompt, was advantageous. Quite recently, in a case of œdematous laryngitis, inhalations repeated ten or twelve times a day effected a cure. Like the iodide of potassium, the iodide of ethyl increases the bronchial secretion, and by this hypersecretion renders it more fluid, and thus favours the admission of air into the pulmonary alveoli. The iodine stimulates the action of the respiratory centre, and, by reason of the greater quantity of blood this is brought into contact with, respiration becomes more easy, being still further aided by the ether in combination with the iodine.

The general conclusions to be drawn from the paper are—1. Iodide of potassium constitutes the most certain means of curing asthma, whatever its origin may be. 2. The iodide of ethyl relieves the paroxysms of asthmatic dyspnœa with great rapidity. It also appears to act advantagously in cardiac and even in laryngeal dyspnœa.

Headache.

Dr. Wm. H. Thomson, Professor of Therapeutics in the University of the City of New York, in a clinical lecture "On the Diagnosis and Treatment of Headache" makes the following observations, as reported in the *New York Medical Record* for November 17:—

Headache, he observes, is a symptom, and not a disease; and pain at all times is a symptom, and never a disease. When called upon to prescribe for a headache we must remember that it may be symptomatic of very different conditions; but these may be classified, for while headache may be due to organic disease, yet in the great majority of cases it is only functional. A *functional* headache is never steady, rarely lasting more than twenty-four hours, and attended always with intermissions, however frequently it may recur. One of the most striking features of an *organic* headache is that there is a continuous sense of discomfort about the head, although the intense severity may be modified. There may also be an intermediate class of cases between those which lasts only a few hours or a day, and those in which it is a symptom of organic trouble. These are the cases in which the headache is due to some specific fever, such as diphtheria, measles, small-pox, typhus, etc., or to malarial poisoning. This headache dependent on specific fever differs from the functional in the fact that it is more prolonged, and is accompanied by a rise of temperature. When a patient complains of a steady headache for four or five days, we should examine whether his eyes are suffused, which they usually are when the headache is a precursor of fever. Again, the headache is in the frontal region, and radiates across the top of the head, but is not usually felt behind. The state of the temperature and pulse also will probably enable us to determine whether the headache is symptomatic of some specific fever. In typhoid, the pulse may remain normal for two weeks, and yet the case prove to be a severe one. In the other fevers this is not the case.

The other intermediate variety of headache is the *malarial*, and this may continue for ten or fourteen days, or, although rarely, longer. As a rule, this form either remits or intermits, after being more severe at a certain hour than at any other time. It is usually frontal, and is sometimes felt on one side only. A true malarial headache is as violent at its commencement as at any time during its course, and in a large proportion of cases there are chills or chilly sensations, sometimes affecting the hands only.

Organic headache is dependent upon some organic change in the brain or its membranes, most commonly the dura mater. As a rule, it is exceedingly violent, causing the patient at times to cry out; and there are no other headaches which give such examples of overwhelming agony as some of these cases. The pulse, if irregular, is a valuable confirmation of the diagnosis. There is no way of relieving this violent headache except by the use of the iodide of potassium. It matters not what the cause is—whether a tumour of the brain, or organic changes taking place in the membranes,—but no other remedy should be used until this one has been carried to the extreme of tolerance. That this is attained is known by the appearance of the peculiar symptoms of iodism; but to produce this, thirty grains, or 300 grains daily, may be required. The iodide is of little or no use in any other form of headache. Its action may be often assisted by ten or fifteen drops of fluid extract of conium and twenty drops of fluid extract of ergot. Syphilitic headache, although organic, is not usually so violent and agonising as in the case of tumour, and it is accompanied by nocturnal exacerbations. It is often surprisingly relieved by mercury, administered in a peculiar manner: rub one grain of calomel with sugar, and divide it into thirty parts, one of which is to be dropped on the tongue every ten minutes.

In treating *malarial headache*, when there is mere functional derangement, we should avoid if possible giving more than one dose. For example, in the subject of this lecture, twenty grains of quinine were ordered to be taken about an hour before the expected increase in the severity of the headache. He will be directed to repeat twenty grains each day for four days, then to omit two, renewing the dose again on the fourth day, and reporting himself at the end of a week. The administration of quinine as a remedy in fever and ague is conducted upon a different principle. Preceding it by a cathartic will then facilitate its absorption. It is gastric supervening on portal congestion that in these cases hinders the absorption of quinine, morphia, and all the vegetable alkaloids. If these remain long in the alimentary canal, and are subjected to the action of the ordinary chemical fluids there, they become so changed as to lose largely their special properties. These remedies, therefore, should be given on an empty stomach. It is not unfrequently the case that quinine, on account of disturbances in the stomach, is not absorbed even if it is retained. In such cases the hypodermic method should be resorted to.

"Is there any means by which the effective dose of quinine can be diminished? Capsicum combined with quinine will diminish the size of the dose required; and the same may be said of ginger and other aromatics. A good dose of capsicum, combined with twenty grains of quinine, will act as well as thirty grains of quinine without the capsicum. Spices in general stimulate the portal circulation, and promote the flow of bile, and hence their universal use in hot climates. There is a tendency on the part of quinine and capsicum to purge, and sometimes violently. This is caused by the increased flow of bile produced by the capsicum. Ginger and quinine when combined do not purge, and make a good combination. If the medicine is administered in the form of pills, capsicum may be preferable, because of the less bulk required; but, if desirable, the ginger may be given separately, and with the same effect as when combined with the quinine. The proportions should be one grain of capsicum to three of quinine, and with ginger one grain of each.

"There is constant failure in the treatment of malarial poisoning by the use of quinine, and nearly always it arises from the manner in which the remedy is administered. The point to be aimed at is the quick absorption of the quinine. Suppose, for example, you are called upon to prescribe where there is almost continuous vomiting, as in bilious fever. If there is gastritis present, there will be tenderness on pressure at the pit of the stomach and in the region of the gall-bladder; there is some swelling in the epigastrium, and the patient vomits as soon as anything is taken. It is useless to administer quinine by the mouth under such circum-

stances, because the excessive irritation which it produces on an inflamed mucous membrane causes its rejection at once. If injected into the rectum, under the same circumstances, it will not succeed any better, because rectal absorption is diminished on account of portal obstruction. Now, if you will apply two or three leeches to the epigastrium, the vomiting will be arrested almost certainly, and you will be able to get the quinine absorbed. Do not use either mustard or blisters here to arrest the vomiting, for they are vascular stimulants. Topical blood-letting, on the other hand, is a prompt vascular sedative."

REVIEWS.

On Harelip and Cleft Palate. By Francis Mason, F.R.C.S. London: J. and A. Churchill. 1877.

Mr. Mason has republished in a separate form the two papers on Harelip and Cleft Palate which he contributed to the *St. Thomas's Hospital Reports* for 1875 and 1876. In the first part, on Harelip, he gives "the results of inquiries made into the history and literature of the subject of harelip, briefly referring to such topics as are not usually included in works on systematic surgery." Secondly, he illustrates "by cases that have been under observation at the Hospital and elsewhere some practical points in the treatment of the malformation"; and lastly, he "groups together the most important operations that have been devised and practised for the relief of the deformity."

The various kinds and degrees of harelip are clearly described, and some curious and rare varieties are mentioned. Among the last is a case of fissure of the lower lip that was operated upon by Sir William Fergusson; and an illustration is given of a remarkable example figured by M. Guersant, in which the fissure on each side extended to the eyelids. Mr. Mason alludes to a complication of harelip not usually mentioned—namely, cyanosis, depending upon the patency of the foramen ovale.

A summary is given of M. Coste's account of the development of the upper jaw and the inter-maxillary bones; and Mr. Mason rightly points out that in harelip "one or both of the lateral incisors are almost invariably absent, or, if present, are slightly, if at all developed."

With regard to the causes of harelip, the author mentions and confirms an observation of Sir William Fergusson's, who "used to look for, and generally find, a partial defect in the upper lip and jaw of one or both of the parents. We think there can be no doubt of the hereditary transmission of the deformity in many instances.

Mr. Mason advises the performance of the operation about the second or third month after birth; and in most cases we think there is no good reason to defer it longer. But we consider that the condition of the child is of more importance than the exact age, so long as it is operated upon before teething commences; and we think something might have been said with advantage about the careful examination of the child, and the avoidance of operative interference during the occurrence of any pustular eruption or other indication of disturbed health—matters which cannot be too carefully investigated before any plastic operation, requiring union by first intention, is undertaken.

Mr. Mason advises the removal of the pins, "as a rule, between the second and third day." We believe that only harm is done by leaving them longer.

The various operations for the cure of harelip are clearly described and illustrated, together with the method of their performance. For our own part we do not attach much value to the use of Hainsby's compressor, but consider the application of plaster much more efficacious for keeping the parts in apposition, and taking off tension. The indiarubber plaster mentioned by the author is an excellent preparation. Mr. Mason calls attention to an important effect of closing the lip in severe cases—namely, the temporary occlusion of the nostrils and the pouting of the lower lip,—which may interfere seriously with respiration. We have seen a child in grave danger from this cause.

The second part of the book is devoted to the consideration of Cleft Palate and its treatment. The nature of the deformity is well described, and references are made to the literature of the subject. The operations for closing a cleft palate are divided into two classes: first, those for cases in which only the soft palate is cleft; secondly, those for closing the cleft in the hard palate.

We agree with Mr. Mason that "operations on very young children are as a rule very unsatisfactory," and that "unless there be good reason for doing it the operation should not be undertaken before the age of five or six."

Chloroform is recommended as the anæsthetic best adapted for the operation, as ether increases the salivary secretion to a greater extent. After describing the operation upon the soft palate, Mr. Mason quotes the various methods of dividing the muscles. This part of the operation he leaves till last, and releases the parts by a vertical incision of the sides of the soft palate. Silk is the material used for the stitches. Mr. Mason figures the gag he uses for keeping the mouth open, which we think inferior to that invented by Mr. T. Smith, inasmuch as it has no provision for keeping the tongue depressed.

In operating upon the hard palate Mr. Mason adopts Langenbeck's method of separating the soft parts from the bone. He also describes the operation of osteoplasty introduced by Dieffenbach, and revived by Sir Wm. Fergusson, and has himself devised a method of dividing the bone in a less rough manner than his predecessors. The revival of this operation seems to us a retrograde step, and we are not surprised that it has "not been received with favour by Continental surgeons." We do not think that English surgeons are more disposed to adopt it than Continental. Mr. Mason admits that "even with the greatest care exfoliation of bone to a greater or less extent not infrequently takes place," and that "the so-called Langenbeck method, especially on account of the less risk of exfoliation, if efficiently performed, is generally followed by equally successful, if not better results."

Mr. Mason has also revived the old treatment of cleft palate by cauterisation with nitric acid—a method which appears to be tedious and uncertain. It also has the disadvantage that it renders the edges of the cleft less prone to union if the operation is subsequently performed. Hæmorrhage seldom occurs to a dangerous extent in connexion with operations for the cure of cleft palate; but a case has recently been published at the Clinical Society by Mr. Marsh, in which a patient was in great danger from bleeding, which was arrested by plugging the posterior palatine canal—an expedient suggested by Mr. T. Smith. With the view of improving the voice after the closure of a cleft, Mr. Mason has suggested releasing the soft palate by two lateral incisions, so that the current of air is more completely diverted from the nose into the mouth. We do not doubt, however, that proper education is the greatest help to improvement in the voice after the operation.

Lectures for Practitioners of Some Years' Standing.—These lectures in the various branches of medical science, which were commenced last year at Berlin, will be repeated this year also in March. By spending six weeks at Berlin, country doctors can bring themselves up to the level of present medical knowledge.

A Severe Epidemic of Measles.—The German Sanitary Office in its second report for 1878 gives details of an epidemic of measles of unusual severity and extent which prevailed in the district of Culm, a town in West Prussia, from April to the end of July, 1877. Out of the 55,500 inhabitants of the district, 4587 were attacked, 4098 recovered, 305 died, and the final result is unknown in 246. The country population of the district is in round numbers 42,000, and of these 4400 fell ill, and 253 died. The population of the towns is estimated at 13,500 inhabitants, and of these 143 had measles, and 52 died. The town of Culm itself was by far the worst sufferer of any of the towns, for with a population of 9600 it had 138 cases and 52 deaths—*i.e.*, the whole of the deaths in the town district fell to its share. This excessively high mortality can only partly be explained by the elevated position of Culm, and by the width and the straightness of its streets, which give ready access to currents of air, and so facilitate catching cold, especially at a time when any predisposition to disease of the respiratory organs is increased by the recent attack of measles. The greater number of the fatal cases were due to pleurisy and bronchitis, and there is no doubt that many of the deaths were caused by the patients being sent out of doors much too early.

PROVINCIAL CORRESPONDENCE.

MANCHESTER.

February 6.

COMPLETION OF THE PENDLEBURY HOSPITAL FOR SICK CHILDREN—THE GROWTH OF THE MANCHESTER MEDICAL SOCIETY'S LIBRARY—TERMINATION OF DR. REED'S ENGAGEMENT AT THE ROYAL INFIRMARY: RECOGNITION OF HIS SERVICES BY THE BOARD.

LAST week witnessed the completion of the new Hospital for Sick Children at Pendlebury, near Manchester, one of the finest pavilion hospitals in the country. With a paternal and perfectly excusable pride, Dr. Borchardt assured the Bishop of Manchester, on the occasion of the formal opening of the new pavilions, that it was the most magnificent hospital, not only in the country, but in the world. The institution commenced life as a dispensary forty-nine years ago. In 1854 six beds were provided for in-patients; in 1857 this number was increased to twenty-five; and in 1874 the first portion of the new Hospital was opened with accommodation for eighty-four patients. To-day there are 168 beds available for general cases, besides fifty-six for cases of zymotic disease. The beds are distributed as follows:—For the treatment of general cases there are six pavilions, each containing twenty-six beds, and six small wards with two beds in each; while for fever cases and the exanthemata there are two pavilions of similar size and capacity, and two small wards. The Hospital is situated on an eminence four miles from the city of Manchester, in the pure air of the country. It was feared by many that this would interfere largely with the success of the institution, but the Dispensary in Gartside-street, where the out-patients of the charity are attended, serves the purpose of a central receiving-house so admirably that very little practical difficulty has arisen. An ambulance-carriage of the most approved construction is employed to convey patients from the Dispensary to the Hospital, and the parents and friends of the children are saved all possible trouble; hence an objection on the score of distance is a thing almost unheard of. It is pleasant to note that although the Hospital and Dispensary have together cost upwards of £50,000, the institution is free from debt. The new Hospital owes its existence, as I have already hinted, to the indomitable energy and public spirit of Dr. Louis Borchardt, the late Honorary Directing Physician. It was, I believe, mainly at his suggestion that it was decided to adopt the plan—new, so far as I know, to this country—of paying the medical staff. The post of Junior Physician was the first to be occupied by a salaried officer. Now, both the Senior and Junior Physicians (Dr. Humphreys and Dr. Channing Neill), as well as the Operating Surgeon (Mr. Thos. Jones), receive a remuneration for their services; the Physicians being paid respectively £400 and £300 per annum, while Mr. Jones receives the more moderate honorarium of £100 per annum. The medical directorship of the institution is entrusted, since Dr. Borchardt's retirement, to a triumvirate composed of the three gentlemen just named. All three are young, enthusiastic, and accomplished, and their appointment has met with the warm approval of the profession, every member of which wishes well to this magnificent undertaking.

The annual report of the Honorary Librarian of the Manchester Medical Society has just been issued to the members, and is of considerable interest as showing what may be accomplished in the way of forming a large and valuable library out of a very limited income. All that is needed is that there should be somebody, with sufficient knowledge of books and of the special shortcomings of the library with which he is connected, who is willing to devote a large amount of time to the work of book-buying—one of those rare men, in short, to whom catalogues are pleasant reading, and the fluctuations of the second-hand book market as interesting as the price of stock. It appears that some doubts have been expressed as to the wisdom of the committee in sanctioning the purchase, year by year, of a number of the older medical books. "But," says the Honorary Librarian (Mr. Cullingworth), "I would remind the members that the important position which the library now occupies amongst the medical libraries of this country is chiefly due to its large and rapidly-increasing size; and this could never have been what it is, with the limited means at the Society's disposal, if the committee had restricted itself to the purchase of new books. The result has been obtained by setting apart every year a sum of money to be expended in supplying the deficiencies of the library in the older medical literature. In his report for the year 1869 the then Honorary Librarian stated the number of volumes in the library to be 9531. During the eight years that have since elapsed, 10,338 volumes have been added—an average of 1292 volumes per annum. This large annual addition has been made at an average outlay of £143 0s. 6½d., or, in other words, at a rate of about 2s. 2½d. per volume. There is, I venture to say, no other medical library in existence in which equal results have been obtained at so small a cost. I can speak on this point without reserve, as the credit is entirely due to Mr. Windsor. His unceasing labours on behalf of the Society's library are indeed well known to the older members, and this seemed to me a fitting opportunity for making known, to those who have joined us more recently, how much the Society is indebted to him."

I enumerated in my last letter certain changes in the resident staff contemplated by the Board of the Royal Infirmary, and stated that the House Committee had been instructed to take the necessary measures for carrying these proposals into effect. At the last monthly meeting of the Board, two important resolutions were submitted by the Committee and approved. One of these had reference to Dr. Reed, the Resident Medical Officer; the other to Mr. Benjamin Brown, the Secretary. The engagements of both are to terminate. The arrangement with Dr. Reed is that he is to continue his services for three months, or, if desired by the Board, for six months, and that, "in recognition of his long and valuable services to the institution," he be paid at the full rate of his salary up to Christmas, 1878. A somewhat similar arrangement has been made with the Secretary, who is to retain his connexion, however, with the Hospital, but in a different and less important capacity. The Infirmary will lose in Dr. Reed a very useful and active officer, under whose management and personal direction material improvements have been effected year after year in the condition of the Hospital. When it is further remembered that mainly to his influence are due the founding of the Convalescent Home at Cheadle, and the establishment of the new Fever Hospital at Monsall, it will not seem a very generous recognition of his services, now that those services are no longer required, to present him with half a year's salary.

LIVERPOOL.

February 2.

POOR-LAW MEDICAL OFFICERS AND CERTIFICATES IN CASES OF DELIRIUM TREMENS—EXTRAORDINARY CASE OF MILK-ADULTERATION.

A CASE has just been heard at the Liverpool Assizes which illustrates the risk and responsibility that a medical man may incur who undertakes to give a certificate of lunacy in the case of a patient suffering, or supposed to be suffering, from delirium tremens. The action was instituted by a Mr. Yates against one of the relieving officers and one of the district medical officers of the West Derby Union, and the master of the West Derby Workhouse, for assault and false imprisonment. From the evidence it appeared that, in consequence of an application made by the plaintiff's wife, a relieving officer's order was issued, under which the medical officer visited Mr. Yates on November 3, 1877, and gave a certificate that he was then suffering from delirium tremens. This certificate was on a printed form ordinarily used for such purposes. It was headed "Medical Officer's Certificate," and contained a number of printed questions with spaces opposite to them for replies. Among the questions were those concerning the fitness or otherwise of the person for admission into the workhouse hospital, the nature and duration of the sickness from which he was suffering, and the degree of disablement from duty caused by it. On the strength of this certificate the relieving officer and a policeman called at the plaintiff's house on November 6, and, in spite of his remonstrances, conveyed him to a lunacy ward of the hospital, where after having undergone the usual bathing and change of clothes, he was lodged for twenty-four hours, at the expiration of which time he was visited by his private medical man and the resident medical officer of the workhouse, and immediately released.

After the witnesses had been examined, it was agreed by the plaintiff's counsel that the medical officer's name should be struck out of the record as if no action had been brought against him, as he had evidently acted under a sense of duty in fulfilling the order received from the relieving officer, and could have had no motive for doing anything illegal. Against the relieving officer and the master respectively verdicts of £25 and costs were consented to by their counsel, it being at the same time admitted that the latter had acted with great consideration and kindness throughout, and that though he was liable in point of law for the detention of the plaintiff, the liability was one which his position as master put upon him. It was agreed also that the relieving officer had simply acted under a mistaken belief as to his duty, in first of all giving an order for the attendance of the doctor, under the false impression conveyed to him by the wife that the plaintiff was not able to get one for himself; and secondly, in conveying the plaintiff against his will, and on the supposed strength of the doctor's certificate, to the workhouse. A clause from a circular issued by the Lunacy Commissioners in 1874 was read, which might easily be conceived to imply that a relieving officer would be justified in conveying temporarily to the lunacy ward of a workhouse anyone whom he believed on evidence given to him to be insane, and concerning whom he felt convinced that an order of a justice could be subsequently obtained for his removal, if necessary, to a lunatic asylum. The words of this clause are as follows:—"If under the peculiar circumstances of any case a removal in the first instance to the workhouse is considered necessary and is resorted to, the relieving officer must observe that neither such removal to the workhouse nor any previous or subsequent report of the case to the board of guardians, nor any direction by them, exempts him from the necessity of giving the statutory notice to the justices, upon whom alone the law casts the responsibility of deciding whether to send the supposed lunatic to an asylum or not."

In commenting on the case, the judge, Mr. Justice Denman, is reported to have said that the medical officer "appeared to have given the certificate upon information which he believed warranted him in giving that kind of certificate. In such a case as that of the plaintiff, who was admitted to be given to habits of intoxication, a medical man was, it would seem, placed in a very great difficulty; and when he acted on information that the man was suffering from delirium tremens, he was placed in a very great dilemma as to whether it could be dealt with as a case of insanity or whether it ought to be treated as a case of disease." With reference to the forcible removal of the plaintiff by the relieving officer, he remarked that "it should be well understood that while there were circumstances in which delirium tremens was a disease as well as a form of madness, the difficulties of people in such cases were very great, and if anybody laid hands upon a person who, at the time, was capable of exercising his senses and of saying 'No,' and took him against his will to a place where lunatics were confined, he did so at his peril. Whether that was a defect in the law or not, it should be understood. It had been very often thought in this country that the machinery for dealing with persons habitually addicted to intoxication was insufficient. However that might be, law was law, and it should be understood that the law did not justify persons in taking a man who was really sane and capable of exercising his judgment to a place where lunatics were confined."

A case of milk adulteration of more than ordinary audacity was heard before the Liverpool stipendiary magistrate on the 30th ult. Mr. Thomas Ithell, a farmer in a considerable way of business, residing at Upton Hall, near Chester, had been in the habit of supplying what was innocently supposed by the purchaser—a dealer in Liverpool—to be milk. This latter having his suspicions at length aroused, proceeded with an inspector to meet the train which contained his consignment of milk, and having with proper precautions removed a portion from one of the cans marked with his name, proceeded with it by the next train, in company with the inspector, to Mr. Ithell's residence. Here it was, according to the requirements of the Adulteration Act, divided into the customary three parts, of which one was given to Mr. Ithell, one retained by the dealer, and the third conveyed to the public analyst, Dr. Campbell Brown, who found it to contain from eighty to ninety parts of water added to every 100 parts of a milk previously deprived of a portion of its cream. Dr. Brown added that he had also examined a specimen of water obtained from the defendant's residence, described as "spring water from the pump," and found it contaminated with surface water. The dealer made the suggestive statement that since the proceedings had been taken he had received only from four and a half to five gallons of milk daily from Mr. Ithell, although previously he had had about eleven gallons.

In stating the case, the Deputy Town Clerk, who prosecuted, confessed to feeling some difficulty as to whether he should call it one of adulteration of water by milk or milk by water; as, however, the quantity of skimmed milk was very slightly in excess of that of the water—which latter also was, probably, of the same quality as the "spring water from the pump" analysed by Dr. Brown,—the latter seemed the rather more reasonable title of the two. Mr. Ithell's efforts to meet any possible diminution in the Liverpool water-supply by a generous daily consignment of some of the "pure spring" liquid from his pump was met by the imposition by our unappreciative magistrate of a fine of £10, to which was added £3 2s. 11d. costs. A few more such endeavours, especially if to the surface-water be added a little of the poison of scarlatina or typhoid fever, may possibly enable our legislators to recognise the advisability, in the interests of the public health, of demanding that a licence shall be taken out by the keepers of dairy farms and dairies, and that their premises shall be regularly inspected, and all cases of sickness at once reported to the authorities.

IRELAND.

DUBLIN, Feb. 1.

Annual Meeting of the Dublin Branch of the British Medical Association.

The event of the week in this city was the first annual general meeting of the lately organised "Dublin Branch" of the British Medical Association, which took place in the New Hall of the King and Queen's College of Physicians, Kildare-street, on the afternoon of Wednesday, January 30. The chair was taken at four o'clock by Dr. Alfred Hudson, Physician-in-Ordinary to the Queen in Ireland, President of the Branch. There was a very large attendance of metropolitan and provincial physicians and surgeons. Amongst those present were Dr. M. A. Eason Wilkinson (Manchester), President of the British Medical Association; Mr. Ernest Hart (London), Editor of the *British Medical Journal*; Dr. James Cuming (Belfast), President of the North of Ireland Branch; Dr. Curtis (Cork), President of the South of Ireland Branch; Dr. Darby (Bray), President of the Irish Medical Association; and the Presidents and Vice-Presidents of the Colleges of Physicians and Surgeons. Dr. George F. Duffey, the Honorary Secretary (for Ireland) of the Association and of the Branch, read the annual report, which, after describing the origin of the Branch, went on to say—"Your Council desire it to be emphatically understood that neither the British Medical Association nor its branches enter into rivalry or competition with the Irish Medical Association, to whose energy, zeal, and watchfulness the practitioners of Ireland owe so much. The object of both associations, though harmonising, are yet distinct. The special circumstances, conditions, and relations to the public of the profession in Ireland, render it essential that an Irish Association, especially conversant therewith, should specially act therein. The aim of this Branch is rather to co-operate with the profession in England and Scotland, as regards those national and imperial interests which bear on the welfare of the profession in the Three Kingdoms alike, or rather throughout the entire British Empire, embracing at once also the army, the navy, and civil professional services in its comprehensive consideration. Neither do we propose to interfere with the line of working of the various professional scientific societies of this city, but to confine ourselves to the general interests of the profession and the cultivation among our members of a spirit of kindly intercourse, fraternity of feeling, and recognition of our common aims and interests." The Cork and Belfast Branches were spoken of also; and the beneficent influence of the British Medical Association in various ways and directions alluded to.

The adoption of the report was moved by Dr. James Little, Vice-President of the King and Queen's College of Physicians, seconded by Dr. P. C. Smyly, Vice-President of the Royal College of Surgeons, and carried unanimously.

After the election of twenty-two new members of the

Association, and of twenty-seven members of the Branch, the President (Dr. Hudson) delivered an address. Having sketched the history of the Association, Dr. Hudson spoke of the progress in recent years of both preventive and curative medicine. The domain of the former was by no means limited to the investigation and prevention of external or exciting causes of disease. It had a far wider scope, embracing not only the physical, but also the moral, political, and social conditions of mankind. At the conclusion of a masterly yet practical address, he said: I am sure that each of our members will be anxious to support those interests and promote those high aims which the Association has in view. And, surely, if any stimulus to exertion were needed, we have it in the traditions of the Irish School of Medicine, and the memory of the illustrious band whose fame is for ever associated with it, of whom but one, Sir Dominic Corrigan—the last, but not the least in fame and honours—now survives among us. And may I not add that we have it in the example of one who has so recently passed away from among us—of him to whom Lord Carlisle alluded by name as "that living light of the profession, Dr. Stokes"—who, though dead, still lives in his living works, in the widespread influence of his clinical teaching, and in the grateful memory of the numerous pupils trained, by his precept and example, to the knowledge and love of their profession, and of the many friends and colleagues to whom he was endeared by his high principles, scrupulous honour, and kindly consideration. Nor will he be soon forgotten by those members of the Association who visited Dublin in 1867, when he presided so worthily over its annual meeting. The name of Stokes involuntarily suggests that of his great colleague, to whom so graceful and deserved a tribute was lately paid in this College Hall. Colleagues they were in more than the ordinary sense of the term, for no two men were ever more fitted to be thus associated, inasmuch as in their mental gifts and character they were each the complement of the other. During their lives—and to a great extent to the present time—their names were constantly coupled as "Graves and Stokes, of the Meath Hospital," as the joint authors of valuable papers in the *Dublin Hospital Reports*, and as the reformers of clinical teaching, and among the foremost of clinical physicians.

Dr. Duffey announced that the following had been elected to serve as officers and Council in 1878:—*President:* George H. Porter, M.D. *President-elect:* Samuel Gordon, M.D. *Vice-Presidents:* Robert McDonnell, M.D.; Thomas Hayden, F.C.P. *Council:* Isaac Ashe, M.B.; Lombe Atthill, M.D.; Edward Bennett, M.D.; Thomas Darby, F.R.C.S.I.; T. W. Grimshaw, M.D.; Edward Hamilton, M.D.; S. Haughton, M.D. *Clerk;* Henry H. Head, M.D.; Alfred Hudson, M.D.; Edward Mapother, M.D.; Alfred McClintock, M.D.; and William Stokes, M.D. *Hon. Secretary and Treasurer:* George F. Duffey M.D., 30, Fitzwilliam-place, Dublin. *Representatives on the General Council:* Isaac Ashe, M.D.; Rev. S. Haughton, M.D.; A. Hudson, M.D.; A. McClintock, M.D.; G. H. Porter, M.D.; William Stokes, M.D.

Dr. Hudson having left the chair, it was taken amid applause by Mr. George H. Porter, Surgeon-in-Ordinary to the Queen in Ireland, and incoming President of the Branch.

Dr. Gordon, President of the King and Queen's College of Physicians, proposed, and Dr. McClintock seconded, a vote of thanks to Dr. Hudson "for his admirable address, as well as for the ability with which he has presided over this Branch during the first year of its existence, and for the interest he has taken in its formation." The motion having been unanimously adopted, Dr. Hudson briefly expressed his acknowledgments, after which the proceedings terminated.

In the evening about eighty gentlemen dined together in the handsome Hall of the Statues in the College of Physicians. The usual loyal toasts were duly honoured, and the other toasts were—"The British Medical Association," responded to by Dr. Wilkinson; "The Dublin Branch of the British Medical Association," responded to by its President, Mr. Porter; "The Irish Medical Association," responded to by Dr. Darby; "The College of Physicians and the College of Surgeons," responded to by Dr. S. Gordon and McDonnell; "Dr. Duffey, Honorary Secretary of the Dublin Branch," responded to by that gentleman; "The South and the North Branches in Ireland of the British Medical Association," the former responded to by Dr. Curtis, and the latter by Dr. Cuming; "The Visitors," responded to by Mr. Ernest Hart and Mr. MacNaughton Jones; and "The Press," responded to by Dr. Patton, of the Dublin *Daily Express*, and Dr. Jacob, editor of the *Medical Press and Circular*.

And so ended a most successful meeting—a result in no small measure due to the untiring efforts and great tact of the Honorary Secretary, Dr. Duffey.

GENERAL CORRESPONDENCE.

THE TELEPHONE AND AUSCULTATION.

Letter from Dr. William Bird.

[To the Editor of the Medical Times and Gazette.]

Sir,—I notice in your Saturday's paper a suggestion, from a gentleman in Plymouth, for a telephonic stethoscope. The same idea occurred to me some short time since, and I got our celebrated opticians here (the Messrs. Cook) to make me a stethoscope, having a telephone at either end, and adapted to the requirements of a stethoscope. The instrument was beautifully made, but I am sorry to say it has not answered my expectation, for I get more and clearer sounds from the stethoscopes in ordinary use.

I am now trying to modify the arrangement, but am not sanguine of success; however, if I derive any advantage over the older instruments I shall be glad to give you the results. I am, &c., William Bird, M.D.

St. Leonard's-place, York, February 4.

AN APPEAL.

Letter from Mr. T. N. Dean.

[To the Editor of the Medical Times and Gazette.]

Sir,—I venture to appeal to your readers on behalf of the family of Mr. J. C. White, late Senior House-Surgeon to the Ardwick and Ancoats Dispensary, who was tried, convicted, and sentenced to five years' penal servitude at the last Manchester Assizes for attempting to procure abortion. However indignant we may feel that a member of our profession should have been guilty of such an offence, we surely must all sympathise with the wife and children who are thus suddenly, through no fault of their own, left in a state of utter destitution. A subscription-list has been opened with a view to affording temporary assistance to Mrs. White until she is able to obtain some employment. The Rev. John Watson, Rector of St. Jude's, Mill-street, Ancoats, Mr. Cullingworth, and myself, form a committee to receive contributions, and to see that the funds are properly applied.

We shall be greatly obliged to any friends who will help us. Post-office orders may be made payable to me at the branch office, Downing-street, Manchester.

I am, &c., T. N. Dean,
Consulting Surgeon to the Ardwick and Ancoats Dispensary.

37, Shakespeare-street, Ardwick, Manchester, Feb. 6.

P.S.—Without wishing in the least degree to palliate the crime, I may mention incidentally that the young woman has received no injury, and that at the time of the trial she was still pregnant of a living fœtus. I may state that there was no evidence to show that White had any personal reasons for trying to induce abortion. He appears to have had no other object in view than that of helping a married acquaintance to escape the consequences of an improper intimacy with his servant. T. N. D.

Royal College of Surgeons.—Professor Wilson, F.R.S., having brought his course of lectures on Dermatology to a close yesterday (Friday), will be succeeded by Professor W. K. Parker, F.R.S., on Monday next, when he will commence a course of nine lectures on the "Morphology of the Batrachia." The following is an abstract of his programme, viz.:—1. The meaning, aims, and methods of morphology. 2. Classification of the vertebrata. 3. Classification and geographical distribution of the batrachia. 4. Metamorphosis of the batrachia compared with that of other vertebrata. 5. Structure of the skull in the larva. 6. Structure of the skull in the adult. 7. Consideration of the great polymorphism of the group. 8. Structure of the spine, limb-girdles, and limbs. 9. The same, continued; summary; and conclusion.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, JANUARY 25.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

(*Concluded from page* 130.)

SAYRE'S PLASTER-OF-PARIS JACKETS IN SPINAL DISEASE. MR. BERKELEY HILL brought, for the inspection of the members of the Society, a selection of twelve patients with angular and lateral spinal curvature, for which they were wearing Sayre's plaster jackets. In doing this he avoided criticism of the correctness of the theoretical grounds on which Dr. Sayre explained the mode in which the spine was affected, and also descriptive of the method of application, observing that those matters were set forth in Dr. Sayre's "Spinal Diseases," etc. (Smith and Elder, 1877). He confined himself to the results which had been gained by six months' experience of the mode of treatment. The cases exhibited that evening had been mainly under his own care, but some were from the hospital patients of his colleagues, Messrs. John Marshall and Arthur Barker. Four cases from the Cheyne Hospital for Incurable Children were exhibited by Mr. James P. Bartlett. The cases comprised examples of angular and lateral curvature of various situations and degrees, some of the patients wearing the jury-mast to support a curve in the upper dorsal region, one with lumbar abscess and sinus. The first case treated in University College Hospital after Dr. Sayre had himself demonstrated his method was put up on July 13. The patient immediately lost the pain in her back, which up to that time had been too severe to permit of her walking about or sitting up for more than half an hour at a time; and she went for a walk out of doors of her own accord the same day. Two days later she went into the country till November. She at once discarded invalid habits; and in the latter part of her stay nursed a sick sister. The jacket put on in July was worn till nearly Christmas; it was then removed, and a poroplastic felt corset moulded on to the trunk while the patient was suspended. This did not appear to give sufficient support, as the pain in the back had returned frequently and increasingly. Hence Mr. Hill exhibited the patient wearing her corset—an excellent fit—to show that this material did not embrace the trunk with sufficient immobility to support it effectually. Mr. Hill next read the notes of the second case to which the plaster jacket was applied in University College Hospital; that of July 14, 1877, by Mr. Marcus Beck. This was a case of very acute character and of well-marked symptoms. The patient could not walk fifty yards without his crutches, and only a very short distance with them, on account of the severe pain produced. On being encased, he walked out of the hospital easily, carrying both crutches in one hand. One month later he was able to walk nine miles. He wore the shell for three months; it was then removed, and he had remained quite well ever since. Mr. Hill then briefly described the case of the daughter of Dr. Gooding of Cheltenham, who was encased by Dr. Sayre himself at Guy's Hospital on July 25, 1877. She had been suffering for eight years from injury to the upper dorsal region, causing collapse of the upper part of the column, great protrusion both backwards and forwards, complete inability to stand or walk, constant pain, and at one time paraplegia. On January 23, 1878, Dr. Gooding wrote: "She began to improve from the first, and has continued to walk with increasing strength ever since. She has literally had no pain at all. She does her share of play, and goes regularly to school." Mr. Hill then summed up the benefits which six months' experience of the plaster shells had shown:—1. Pain was at once arrested. 2. So far as the spine was concerned, the patient was immediately able to sit upright and to walk about. 3. Control of the lower extremities, when lost or diminished, was rapidly improved or restored. 4. Abscesses steadily closed. 5. The spinal column lost much of its abnormal curve and consolidated in the improved position. 6. In lateral curvatures a permanent increase of stature was often obtained. 7. Finally, by Sayre's jacket, cure was more rapid and less irksome than by any other method. Mr. Hill remarked that caution was necessary to prevent the patient attempting too much exertion; even when thoroughly supported in the shell, most patients required rest through some part of the day. In conclusion, Mr. Hill mentioned several small modifications in the method of application, which had been found to be improvements. The chin-piece should be more deeply cupped at the chin and well lined with thick felt. The suspending straps should be attached just in front of the zygoma and behind the ear. The axillary slings should be padded firmly and stiffened so as to take the form of the cross of a crutch. To receive adult or heavy patients from the gallows without risk of bending the plaster shell before it had set, Mr. Hill had contrived a table, swinging at its middle like a toilet looking-glass. This, carrying the slack air bed, could be pushed against the patient while suspended; two large hooks were slipped under the arm-pits and hitched to the top of the table. The patient, thus attached to the table, was freed from the gallows. The table was lowered from the vertical to the horizontal position, and the patient sank without strain or jolt into the slack air bed, which supported the plaster evenly on all sides till it set. Messrs. Mayer and Meltzer, who had constructed the table, had also made a light folding frame to answer the same purpose. To cut up or trim the plaster shells, a carpenter's dovetail saw and a pair of French vine-dresser's shears were the handiest tools.

The PRESIDENT said the practical character of Mr. Hill's paper added considerably to its value. In cases at St. Bartholomew's Hospital, the difficulty of removing patients from the upright to the lying-down position had been experienced, and he had overcome it by a table very similar to that shown by Mr. Mayer.

Mr. T. SMITH remarked that the table was of great assistance. He had seen a case in Dr. Sayre's hands in which the bandages were broken during the movement from the upright to the horizontal position. In private cases he merely asked for a leaf out of the dining-room table; that answered every purpose of the swinging table. As regarded the pads which had to be used for the female breast, and for the abdomen in both sexes, he always had recourse to air-pads with a stopcock; the air could then be let out before the dressings were removed. He highly praised Dr. Sayre's method of treating cases of spinal disease.

A Visitor, whose child had been under Dr. Sayre's treatment, said that he had found great difficulty in removing the plaster splints, and had consequently after a time adopted Hide's splints, with which the child could walk about without growing faint.

Mr. C. LUCAS had not yet found any inconvenience arise from the suspension of the patients necessary to the application of the jacket. Of twelve cases so treated by him, four were cases of lateral, eight of angular curvature. Three times he had had to undo the splint before cure was complete; once, in a child put up by Dr. Sayre himself at Guy's Hospital, the skin inclosed by the splint became covered with psoriasis. Arsenic being given, in three weeks the child recovered from its skin affection, and the splint was reapplied. In a second case, desquamation occurred in the skin covered by the splint. In the third case, the splint was removed for the treatment of pediculi. He had not seen sores produced by pressure, and thought they could only come where the bandage was applied badly, and where no pad was put over the spines of the vertebræ. He also spoke in highly laudatory terms of Dr. Sayre's method of treatment.

Mr. BARWELL was the first to put on the bandage in this country, which he had done before Dr. Sayre came to England. He had now used it in seventeen cases, and in only one case had the bandage had to be removed. It was replaced very carefully after three days, and was then worn with comfort. The angle of the spine did not improve subsequently more than it did at the first suspension. The apparatus shown by Messrs. Mayer and Meltzer was ingenious, but not applicable in private practice. At his own house he used a sofa and a stiff sheet; the patient being placed in the sheet, was gradually lowered to the sofa. Sayre's bar, when used for suspending the patient, pressed on the axillary nerves; in the suspender used by himself the pressure was made by two pieces instead of by one; and, as the pressure was thus made chiefly inwards against the chest-wall, heavy people even might be suspended without hurt to themselves. He did not find it necessary to pad the spines of the vertebræ; he simply lifted the bandage from the spines at the time of its application, and subse-

quently replaced it by a piece of cotton-wool in each axilla, and another large pad between the mammæ. He related the case of a man who, with angular curvature, had for four years had asthmatic breathing, and who, directly the splint was applied, lost the asthma.

Mr. Barker said that the troubles with the plaster corset witnessed by himself in cases at University College Hospital were chiefly the following, viz., chafing, which occurred to a marked degree in two cases:—The first was that of a very young child (affected with angular curvature), who, after a fortnight's application of the jacket, had a slough of some size over the most prominent spine. It rapidly healed, however, directly the splint was removed. In the second case, a slough also formed after the jacket had been worn six or seven weeks. This child had, however, been otherwise greatly improved by the jacket, and the slough healed when the bandage was removed. The jacket in the first case was shown to Dr. Sayre's son, who found it an excellent one, without any fault that he could detect. Perhaps the cause lay in the early age of the child and the consequent small size of the pelvis, upon which the corset could not take a good grip. In the second case, too, no cause in the plaster case could be found for the sloughing spot. One ought to be aware of possible troubles that might occur. At the same time, he was confident that other corsets which he had applied had been productive of unmitigated good, as in the case exhibited by him there that evening.

Mr. Golding-Bird said that he had seen about eighteen cases so treated, and had every reason to be satisfied with the method. He had seen much good and no harm result from its adoption. The practice was founded on physiological principles, especially those educed by Mr. Hilton. Suspension was its leading feature.

Mr. Hill having replied, the Society adjourned.

OBITUARY.

JAMES BLUNDELL, M.D. Edin., F.R.C.P. Lond.

Dr. James Blundell, who died on January 15, at his residence in Piccadilly, at the age of eighty-seven, had so long almost retired from active practice that he must have been nearly unknown to the vast majority of the busy and active practitioners of the present time; but to a former generation he was well and widely known as a great authority on obstetrics, and we cannot allow his death to be passed by without a few words on his life and works. Dr. Blundell was born in 1790, and studied medicine in Edinburgh, in which University he took his M.D. degree in 1813. Having selected London for his field of work, he ere long obtained considerable celebrity both as a teacher and a practitioner, and for many years had an extensive and lucrative practice. For some time he was Lecturer on Physiology and Midwifery—in those days teachers in our medical schools were often great pluralists—at the united hospitals of St. Thomas and Guy; and later on, Professor of Obstetricy at Guy's Hospital; and in 1838 he became a Fellow of the Royal College of Physicians of London. Nearly thirty years ago he moved into a large house in Piccadilly, adjoining the residence of the Baroness Burdett-Coutts, and previously occupied by the late Duke of St. Albans, who died in 1847. There he lived in comparative obscurity, but in the enjoyment of excellent health till within a very short time, we believe, of his death. At the last his strength failed somewhat suddenly and rapidly, and he died on the 15th ult., as we have stated, in a fit of convulsions. Dr. Blundell was not a Fellow of the Royal Medical and Chirurgical Society, but three papers by him were published in the *Transactions* of that Society for 1823 and 1824. In 1824 he published a small volume entitled "Researches Physiological and Pathological; instituted principally with a view to the Improvement of Medical and Surgical Practice." The first essay in this volume was written with a view to the improvement of the surgery of the abdomen, Dr. Blundell remarking at the commencement of it, "Of all the branches of surgery there is none, I conceive, which in this country admits of greater improvement than the surgery of the abdomen." He made many experiments to prove that large incisions might be made into the peritoneum, and important organs, as the kidney and the spleen, removed without necessarily causing death, or inducing fatal inflammation; and from these experiments and other facts and observations he drew various inferences, some of which—looking at how what may be called his forecasts have been carried out in the abdominal surgery of to-day—are very curious and remarkable: thus, he inferred "that the womb, spleen, and ovaries may be taken away certainly without of necessity destroying life, and *presumptively* without generally destroying it"; that "the peritoneum and abdominal viscera will, without fatal consequences, bear more injury than, from their modes of practice, the British surgeons especially seem disposed to admit"; that the extirpation of the ovarian cyst in scirrhus, combined with dropsy, or in simple dropsy, "will, I am persuaded, ultimately come into general use, and if the British surgeons will not patronise and perform it, the French and American surgeons will." And he suggested the removal of the cancerous womb, and the extirpation of the healthy ovaries, or normal ovariotomy, as "probably an effectual remedy in the worst cases of dysmenorrhœa, and in bleeding from monthly determination in the inverted womb, where the extirpation of this organ was rejected." The second paper gives "experiments on a few controverted points respecting the Physiology of Generation"; and the last is a long essay on the operation of Transfusion, of the practical utility and value of which he had a high opinion, believing that "after undergoing the usual ordeal of neglect, opposition, and ridicule, the operation will hereafter be admitted into general practice." In 1834, Dr. Thomas Castle, of Trinity College, Cambridge, published "The Principles and Practice of Obstetricy, as at present taught by Dr. James Blundell." The lectures were, in the main, those delivered by Dr. Blundell, at Guy's Hospital, in 1830-31, and published in the *Lancet*, but rearranged and revised in accordance with later courses of his lectures. The editor of the work observes in his preface that, "excepting in the flooding cases, the general cast and air of the instructions given is of the inhibitory kind"; and adds that "if to any persons mature in obstetrics the principles of repression should appear to be carried too far, they are requested to recollect that it is not to them, but to those who are incipient in practice, that the lectures were originally addressed." Dr. Blundell had unquestionably a great horror of meddlesome midwifery, and his lectures abound in proofs of the extreme caution with which he conducted his obstetric practice, and this most especially, perhaps, with regard to the use of the forceps. He gives very full and minute directions as to their employment and application, but adds, "I do not like to see an elegant pair of forceps. Let the instrument look like what it is, a formidable weapon. *Arte non vi* may be usefully engraved upon one blade, *Cave perineo* upon the other." He strongly deprecated the employment of the forceps or the lever to save time, though he thought that "a sort of amnesty might be extended" to a man who was very dexterous in the use of them; and he admits that when called in consultation to lingering cases, where friends were anxious, the practitioner worn out and harassed, and the patient herself perhaps importunately desirous that instruments might be used, he had "in some instances had recourse to the forceps, and delivered the woman with safety; nevertheless," he adds, "I have considered myself culpable for so doing." Speaking of the "murderous operation," craniotomy, he inculcates, in the most forcible terms, the greatest possible caution and reluctance, pointing out that "an overpowering and peremptory necessity" for it must be clearly established, "for, before the tribunal of reason, this alone can clear the operation from partaking of the nature of murder"; and he declared that he would wish the perforator to be inscribed with the sixth commandment of the Decalogue. Our former observations have shown, however, that he was by no means deficient in boldness when he had by experiment and observation seen his way clearly, and that with regard to many great surgical procedures his opinions were much in advance of the science and art of the time when he practised and taught.

FLEETWOOD CHURCHILL, M.D.,

Ex-President of the King and Queen's College of Physicians, Ireland, etc.

Scarcely had the grave closed over all that was mortal of William Stokes, when death visited another of the leaders

of medical thought and science in the sister-country. On January 31, Dr. Fleetwood Churchill, the distinguished gynæcologist, died at Ardtrea Rectory, County Tyrone, the residence of his son-in-law, the Rev. Wm. Meade. His final illness was of only a few days' duration—the inclemency of the end of January told with fatal effect on a weak heart, the action of which became further embarrassed by a bronchial catarrh; and so Dr. Churchill died one month before the completion of the allotted "threescore years and ten." Until his retirement in 1875, Dr. Churchill enjoyed one of the largest and most lucrative consulting gynæcological practices in Dublin; and we cannot but admire the character of the man whose undoubted ability and retiring modesty placed him almost beyond the reach of hostile criticism all his life through.

In the Dublin *Daily Express* of Saturday, February 2, a brief yet appreciative memoir of Dr. Churchill appeared, written, we understand, by two of his intimate friends; and it is so faithful a record of his life and character that we have not hesitated to borrow largely from it. Dr. Churchill graduated as Doctor of Medicine in Edinburgh in 1831, and in 1832 took the L.M. of the King and Queen's College of Physicians in Ireland. In conjunction with Dr. Speedy he founded the Western Lying-in Hospital, which did much for the poor in that quarter of Dublin. He was in 1856 appointed Professor of Midwifery to the School of Physic in Ireland, holding the office until 1864. In both the former and the latter years he was President of the Obstetrical Society, and during the years 1867 and 1868 he was President of the King and Queen's College of Physicians. On his retirement from the profession, in 1875, he presented his valuable obstetrical library to the College of Physicians, the College, in their turn, presenting him with an address couched in flattering terms, and directing his portrait to be painted and placed along with those of many other illustrious members of their body in the College Hall. In 1851 the honorary degree of Doctor of Medicine of Dublin University was conferred on him, and in the same year he became a Fellow of the King and Queen's College of Physicians. He was a voluminous contributor to medical literature, and the author of various well-known works on his special branch of practice, as his "Theory and Practice of Midwifery" and his work on "The Diseases of Women." These, as well as his work on "The Diseases of Children," were for a quarter of a century standard text-books on their subjects; and they have been republished in America, and translated into European languages. He was also the translator of a valuable series of papers on Puerperal Fever for the Sydenham Society in 1849. At the meeting of the British Medical Association at Norwich in 1874 he was chosen President of the Obstetrical Section, but from failing health he was unable even to attend the meeting. The address which he had prepared, on the Hygiene of Lying-in Hospitals, was, however, delivered by the Vice-President, and attracted much attention. Besides his professional labours, Dr. Churchill was well abreast of the current literature of the day, and took a keen interest in questions of general science and theology.

Among his friends he was known as an ardent supporter of foreign missions, the hospitable friend of missionaries, and better acquainted than almost any of his contemporaries with the history and work of the Church abroad. When the Act of Disestablishment of the Church of Ireland was passed, no Irish layman assisted more than Dr. Churchill did towards the arduous work of reorganisation. On this and on the financial arrangements of the Church he contributed some valuable papers and pamphlets, which were largely used and referred to by the Church Representative Body, by whom Dr. Churchill was gladly welcomed into council on these questions. He died surrounded by all his family, deeply and truly lamented by many friends, and respected sincerely by all who knew him.

Cork-street (Fever) Hospital, Dublin.—At the weekly meeting of the Managing Committee of this institution, held on Thursday, January 31, Dr. Thomas Wrigley Grimshaw, whose term of office as Permanent Physician expires on March 31 next, was appointed Consulting Physician to the Hospital. This honorary appointment was never before conferred, and we heartily congratulate Dr. Grimshaw on the compliment paid him, and to which his energy and ability so eminently entitle him.

MEDICAL NEWS.

Royal College of Physicians of London.—The following gentlemen were admitted Members on Jan. 31:—

Cottle, Ernest Wyndham, M.B. Oxford, 3, Savile-row, W.
Duncan, James Matthews, M.D. Aber., 71, Brook-street, W.

Apothecaries' Hall, London.—At the Preliminary Examination in Arts, held at the Hall on January 25 and 26, 1878, eighty-seven candidates presented themselves, of whom twenty-two were rejected, and the following sixty-five passed and received certificates of proficiency in general education, viz., in the First Class in order of merit:—

1. Richard Morris Lewis and Rolla Edward Rouse; 3. John Griffin and Alice K. Marston; 5. A. G. Laidler and Julia C. Swaagman; 7. E. T. Carlyon, I. R. Cory, O. D. Mackay, F. G. Walton, and C. J. Weller.

In the Second Class, in alphabetical order:—

E. H. M. Alford, C. L. Ashby, V. W. Baker, Elizabeth Beilby, A. J. Benhow, C. C. Browne, N. Bruce, H. J. L. Bullen, C. P. Bullock, Lucy E. Cradock, T. W. D'Aubney, C. T. Fisher, G. H. Fink, E. O. Gilkes, N. G. Gilkes, G. P. Godfrey, G. B. Gorrick, G. B. Guthrie, W. I. Haddock, P. R. Harris, I. Hartley, G. G. Hodgson, J. Hoole, J. M. Howe, W. Hull, J. E. E. Jones, J. R. Keele, J. L. W. Kitching, J. E. Loudon, F. W. McDonogh, J. E. May, F. M. Nickoll, W. T. Okell, G. V. Perez, H. E. Philbrick, T. H. Pott, Agnes Pritchard, H. G. Read, F. N. Roberts, A. E. Rook, H. T. Rudge, G. L. Rugg, R. H. Russell, R. H. Short, W. A. W. Smith, W. D. Stevenson, B. H. Stivens, M. Thane, F. E. Todd, J. G. Uppleby, H. W. S. Verity, G. B. Wood, and S. Wyborn.

The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, January 31:—

Lockwood, Charles Barrett, 17, Claremont-square, N.
Miller, James Duff, Brangham-place, Edinburgh.
Norton, Thomas Chalmers, King's-square, Bristol.
Orr, Rowland Beatty, Toronto, Canada.

The following gentleman also on the same day passed his Primary Professional Examination:—

Pierson, Alfred Henry, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Bellamy, Edward, F.R.C.S. Eng.—Surgeon to Charing-cross Hospital.

NAVAL, MILITARY, &c., APPOINTMENTS.

War Office.—The Secretary of State for War has appointed Thomas Alexander Mitchell, L.R.C.S. Ire., to be Assistant Visiting Surgeon for Woolwich under the Contagious Diseases Acts 1866 to 1869. Surgeon-Major Augustus Frederick Elliot, M.D., from half-pay to be Surgeon-Major; Surgeon Andrew Irwin resigns his commission.

Lord Chamberlain's Office.—The Queen has been pleased to appoint John Russell Reynolds, M.D., to be Physician to the Household in Ordinary to her Majesty, in the room of Francis Hawkins, M.D., deceased.

BIRTHS.

Batchelor.—On October 28, at Dunedin, New Zealand, the wife of F. C. Batchelor, L.R.C.P., M.R.C.S., of a daughter.

Brend.—On January 29, at 6, Argyle-road, Kensington, the wife of William Brend, M.R.C.S. Eng., of a son.

Eager.—On January 28, at the County Asylum, Melton, Suffolk, the wife of Wilson Eager, L.R.C.P. Lond., of a son.

Finemore.—On January 22, at 3, Malvern-villas, Grove-street, S. Hackney, the wife of J. Harman Finemore, L.R.C.P. Edin., of a son.

Platt.—On January 31, at 4, Upton-villas, Kilburn, N.W., the wife of W. H. Platt, L.R.C.P. Edin., of a daughter.

Meiklejohn.—On January 31, 1, at Royal-crescent, Weymouth, the wife of John W. S. Meiklejohn, M.D., Fleet-Surgeon H.M.S. *Warrior*, of a son.

Roworth.—On January 14, at Grays, Essex, the wife of Alfred T. Roworth, M.R.C.S.E., of a daughter.

MARRIAGES.

Byrch—Bremner.—On January 29, at St. Andrew's Church, Deal, Albert William Byrch, Esq., of The Abbey, Evesham, to Constance, third daughter of John T. V. Bremner, M.D., R.N., Deputy Inspector-General of Hospitals and Fleets, of Haslar Hospital and Walmer.

McCulloch—Williams.—On January 31, at the parish church, Bettws-y-Coed, North Wales, Latham Blacker McCulloch, F.R.C.S. Ed., to Hannah, elder surviving daughter of the late Evan Williams, of Bettws-y-Coed.

Speedy—Baxter.—On January 23, at St. Lawrence, Chapelizod, Dublin, the Rev. Thomas Borrodale Speedy, B.A., to Grace Isabella, second daughter of F. Hastings Baxter, M.D., F.R.C.S., Surgeon to the Royal Hibernian Military School.

DEATHS.

Cooper, Emanuel, L.S.A., at Tombland, Norwich, on January 26, in his 76th year.

CHURCHILL, FLEETWOOD, M.D., late of 15, Stephen's-green, Dublin, at Ardtrea Rectory, Co. Tyrone, on January 31.

FAY, FREDERICK, F.R.C.S., at High-street, Maidstone, on January 29, aged 68.

JONES, FREDERICK CHARLES, M.D., at 174, Blackfriars-road, S.E., on February 4, aged 61.

RENTON, JANE, eldest daughter of R. Renton, M.D., at 14, Lennox-street, Edinburgh, on February 1.

TAYLER, CHRISTOPHER, M.R.C.S. Eng., at Lovemead House, Trowbridge, Wiltshire, on February 2, aged 62.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BRECON INFIRMARY.—Resident House-Surgeon. Candidates must have a medical and surgical qualification. Applications, with testimonials, to W. Powell Price, Secretary, on or before February 11.

ST. GEORGE'S HOSPITAL.—Surgeon and Assistant-Surgeon. Candidates for these offices must be Fellows of the Royal College of Surgeons of England. Applications addressed to "The Chairman of the Committee for the Election of a Surgeon and Assistant-Surgeon," under cover to the Secretary of the Hospital, on or before February 13.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Easingwold Union.—Mr. Joseph Fall has resigned the Alne District; area 13,438; population 2303; salary £26 per annum.

Manchester Township. Mr. James Magill has resigned the office of Resident Assistant Medical Officer at the Crumpsall Workhouse; salary £140 per annum; residence, etc.

Portsea Island Union.—The Kingston District is vacant; salary £80 per annum.

APPOINTMENTS.

Barnet Union.—John Livingston, M.D., C.M., F.F.P.& S. Glasg., to the First District.

Bramley Union.—Henry Hick, M.R.C.S. Eng., L.R.C.P. Edin., to the New Wortley District.

Edmonton Union.—John Livingston, M.D., C.M., F.F.P.& S. Glasg., to the Mill Corner and Cockfoster District.

Hemsworth Union.—Everard W. Denton, L.F.P.& S. Glasg., L.S.A., to the Fourth District.

Spalding Union.—Robert E. Hunt, L.R.C.S. Edin., L.S.A., to the Pinchbeck District.

Sudbury Union.—Lucius Nicholls, M.R.C.S. Eng., L.S.A., to the First District.

Thingoe Union.—Lucius Nicholls, M.R.C.S. Eng., L.S.A., to the Eighth District.

Westbury and Whorwellsdown Union.—Nicholas V. Wise, L.R.C.S. Ire., L.K. & Q.C.P.I., to the Second District.

THE FRENCH HOSPITAL.—This excellent institution, located in Lisle-street, Leicester-square, will hold its tenth annual festival this day (Saturday) at Willis's Rooms, when his Excellency the French Ambassador will take the chair.

THE GERMAN UNIVERSITIES.—Dr. Hirt, Privat-docent at Breslau, having refused a call to Utrecht as Professor of Hygiene, has been made Extraordinary Professor of that subject at Breslau. Professor Bergmann, of Dorpat, has been made Professor of Anatomy at Würzburg. The Professorship of Anatomy at Basle is vacant by the sudden death of Dr. Ernst Hoffmann.

THE ABUSE OF TOBACCO PRIZES.—The Paris Société contre l'Abus du Tabac has received no less than 108 manuscript essays for its prizes of 1877, for the best essays on the abuse of tobacco. Of these fourteen come from England, one from Belgium, and one from Germany. The authors, most of whom are medical men or schoolmasters, are informed by the Society that several months must elapse before the Committee can have finished its examination of such a number of essays.—*Gaz. Méd.*, February 2.

DEATH OF PROF. HIRTZ.—Prof. Hirtz, one of the most distinguished French clinical teachers, formerly of Strasburg, and afterwards of Nancy, has just died of an affection of the larynx, which has for some time incapacitated him from teaching. Enjoying an excellent practice at Strasburg, he did not hesitate to abandon that position after the war, and threw all his energy into forwarding M. Thiers' project of forming a Medical Faculty at Nancy—of which, indeed, he was almost the only professor of note. This has met with but very indifferent success; and as the locality is defective in clinical opportunities, and the municipality has not fulfilled its promise of increasing these, this Faculty, which was intended to replace that of Strasburg, will, no doubt, soon be given up. Prof. Hirtz had recently resided in Paris, where he was getting a good consulting practice, when he was seized with his fatal disease.

PORTRAIT OF THE LATE DR. PARKES.—Messrs. Barraud and Jerrard, of 96, Gloucester-place, Portman-square, have lately completed a life-size oil portrait of the late Dr. Parkes, which is intended for the refectory at Netley School. We hear that the portrait gives great satisfaction to the committee for whom it has been executed; and Messrs. Barraud and Jerrard have asked us to state that it will be on view in their rooms all next week, as they think that medical men may like to see it who may never visit the Army School at Netley.

ANTAGONISM OF BELLADONNA AND OPIUM.—Dr. Ménoul had recently a good opportunity of exhibiting this antagonism. In a case of tetanus, having injected hypodermically a solution of atropia, symptoms of poisoning were induced, as exhibited by diplopia, dryness of the throat, and excessive agitation. For the relief of these symptoms he dissolved 0·03 of chlorhydrate of morphia in three grammes of water, and injected into the wall of the abdomen about a third of the quantity. Twenty minutes had hardly elapsed before the disorders had ceased and the patient had commenced to feel the effects of the morphia in producing sleep. —*Gaz. des Hop.* (February 2), from *Lyon Méd.*

GLYCERINE IN DIABETES.—Prof. Bouchardat observes (*Bulletin de Thérapeutique*, December 15) that more than twenty years since he employed this substance, but the results which he obtained from it were so uncertain and contradictory that he almost ceased to prescribe it. His attention having been recalled to it by several recent publications, he recommenced his trials with it, and with results not very dissimilar from those formerly obtained. In subjects strongly attacked with the disease it seems to do harm rather than good if their regimen be not also changed. In certain cases it acts more favourably, viz., if the quantity of glucose eliminated in the twenty-four hours is only small, when it aids the disappearance of the last traces; but it may be doubted whether this is or not a mere coincidence. In emaciated diabetics, or those suffering from habitual constipation, useful effects have followed its administration. He usually gives it in moderate doses, from a teaspoonful to two tablespoonfuls, in tea, coffee, white wine, or water. Given in larger doses the glycerine is only partially absorbed, or a portion passes off in the urine. In glycosuric constipation, two tablespoonfuls with one of salt as an enema are often useful; and Prof. Bouchardat frequently orders chocolate in which the sugar is replaced by glycerine.

THE INSECTOLOGICAL EXPOSITION AT PARIS.—The Société Centrale d'Apiculture et d'Insectologie has had constructed a pavilion in the Champ de Mars for the purpose of exhibiting in 1878, in the most complete manner, everything relating to the education of useful insects, especially bees, and the means of preservation of all kinds against noxious insects. This pavilion, which will reproduce on a large scale the collection which is annually exhibited at the Luxembourg, will after the closing of the Exposition be transferred to Montsouris, in the park of which an area measuring 2500 metres will be exclusively devoted for future exhibitions and public lectures on apiculture and insectology. The President of the Society, Dr. Marmottan, Deputy of the Seine, and M. Hamet, the Secretary, have entered into negotiations with the Ville de Paris, to which the park of Montsouris belongs; and the only difficulty that has been raised is the danger of annoyance to the frequenters of the park by the bees, but this will be obviated by placing the collection at a distance from the public paths. The Society proposes to give, among its other lectures, conferences on the applications of natural history to industry and the fine arts, addressed to the children of the primary schools.—*Progrès Méd.*, February 2.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Poor-law Guardian.—The pamphlet by Provost Mackenzie, M.D., of Inverness, was published in 1870 by the Chalmers Association, on "Pauperism and its Cure."

A Medical Student.—Since the recent addition to the Volunteer organisation of the Volunteer Ambulance, a large number of members have enrolled themselves. The number who have joined is nearly 300.

A Tutor.—The next preliminary examinations for the diplomas of Membership and Fellowship of the College of Surgeons will take place at the University of London on the 21st prox. Write to the Secretary of the College.

Dr. Young.—Dr. Peter Shaw was Physician in-Ordinary to their Majesties George II. and George III. He died in 1763, aged sixty-nine years, and was buried in Wimbledon Old Church. He translated "Boerhaave's Chemistry," and Hoffman on "Mineral Waters."

Two Students.—We do not decide bets, but we can answer your question. The vote for medical services in the military estimates of Prussia and the States administered by the Prussian Government for the year 1878-79 is 5,339,090 marks.

Fasciculus.—A well-known French writer, in his "Eléments de Statistique," gives a table of the number of marriages which are effected annually in the principal countries of Europe—Ireland comes first, with one marriage for each ninety inhabitants; France is sixteenth, with one for 142; England twenty-seventh, with one in 137; Tuscany twenty-eighth and last, with one in 143.

Samaritan.—The Charity Organisation Society aims not so much at devising new means of relief, as at making the best use of those already existing. The success of the Society has shown, both in London and in the provinces where it has branches, that, for public charities, concentration and not sub-division of work (often conflicting) and capital is necessary. Not only private persons and charitable institutions, but hospitals, have found it necessary to have recourse to the Charity Organisation Society for information to protect themselves against imposition. The Society is supported by the profession, not only by contributions to its funds, but by public advocacy on its behalf.

An Old Member.—There are three grades of Fellows of the College of Surgeons—viz., honorary, by examination, and by election. None of the former have been created since 1844, but we believe that the Council is about to proceed under the power conferred by Section 5 of the Charter of the 15th Victoria, and in accordance with the by-laws, to admit annually to the Fellowship, without examination, two members of twenty years' standing. The chief ground of recommendation for this mode of admission to the Fellowship will be distinction in surgery, or in the sciences relating to surgery, but, under certain special circumstances, other grounds of recommendation may be entertained. No personal application from members to the Council will be entertained, and no direct candidature will be sanctioned. You are in every respect eligible to the Fellowship by election, and can obtain the necessary forms on application to the Secretary.

A Query.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I should be glad if you could inform me, either in your journal or by other means, whether there are any laws respecting the cubic space in the dormitories of private boarding-schools, and what space would exempt the mistress from interference from the sanitary officer—(1st) in rooms with only, or without, the open chimney; (2nd) with a ventilator in one pane of the window. X. X. X.

"Faggots," "Foie Gras," and "Saveloys."

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Some months ago there appeared in your valuable paper some remarks on the death of a child, who was said to have died after eating "faggots," and the contributor who commented on the case seemed puzzled by the word "faggot," and expressed the opinion that it was very natural that a child should die after such a repast.

Having for many years taken an interest in the food used by the lower orders, and having often seen with admiration the nutritious and savoury elements which these "faggots" form in the diet of the poor, I venture to take up my pen to throw a little light on the subject. What are faggots? They are composite lumps or bundles formed of the cuttings and scraps of those delicious morsels which come from the inside of a pig. Scraps of liver, lights, lungs, mesentery, and any other bits that result from cutting up a pig, done up in lumps and baked, sold over the counter, hot, at a penny a piece, and forming a savoury supper for many a hungry family of poor children, who otherwise would have nothing but their baker's loaf to eat.

Faggots thus have an important place in "the short and simple annals of the poor," but still more, they have an etymology which betrays an ancient and honourable descent. The word "faggot" sounds English, and be it observed that almost every English name of a dish is sure to be a coarse lumpish kind of word. All our names of the better kinds of eatables are foreign. "Pudding," "pie," "tart," "roast," "toast," "boil," "stew," "hash," "grill," and "fry," are all, with few exceptions, Latin words, showing that our cookery, like our civilisation, is of foreign origin. The true English names of dishes are such indigestible terms as "bubble-and-squeak," "toad-in-a-hole," "rump-and-dozen"; and "faggot" sounds like one of these, but is not. Its real derivation is from the Italian *fegato*, which itself affords an instance of etymology interesting both to the cook and the physician, for the modern Latin languages—French, Spanish, Italian, and the rest—have discarded the Greek ἧπαρ and the Latin *jecur*, and have adopted a word which the Italians call *fegato*, the Spanish *hígato*, whilst the French have, after their manner, shortened it into *foie*. And why so? From early antiquity the custom prevailed of increasing the size of the liver, especially of the goose, by feeding the animal upon a carbonaceous food. Of such food it is well known that figs were the most abundant and cheap. Horace, in his well-known "Satire" in which he describes the supper of Nasidienus, enumerates "patè de foie gras" among the dishes. "Pinguibus et ficis pastum jecur anseris albi."

As time went on, the words *jecur ficatum*, or fig-fed liver, came to signify the *foie gras*, and soon the word *ficatum* was used alone for the same purpose, or for liver in general, whence it passed into all the modern languages of Latin origin, and found its way to our island, to denote a tion of liver now only known to the poor and obscure.

There is another cheap pennyworth, much in use amongst the very poor, called a *saveloy*. I cannot describe this in such glowing terms as I have the faggots. It is a kind of petty sausage, made of all sorts of refuse meat enclosed in a bit of gut, smoked, and otherwise treated antiseptically. I suspect its consumption is now confined to the very poor, but its etymology is very curious. It is evidently derived from the French *cervelas*, which, again, is derived from the Italian *cervellata*, that signified originally a sausage composed of brains, and thence came to be used to signify a sausage generally.

The word "sausage," I need scarcely say, is derived from the French *saucisse*, which, again, comes from the Italian *salsiccia*, and this, as the learned Mr. Vaux says in his little book entitled "Greek Cities," etc., published by the Society for Promoting Christian Knowledge, is derived from *salsum jecinum*, or salted minced meat

I need no apology for thus showing the long and honourable descent of a beggar's dish. Such details are sure to interest the physician and the social philosopher. Nature endowed me with a great appetite, and good fortune placed me under the tuition of a schoolmaster who was insatiable in his demands for the derivation of words, so that all my life long there is no word or thing I meet with of which I do not ask myself, "*Unde derivatur?*" I am, &c., HUNGRY ETYMOLOGIST.

P.S.—The *foie gras*, or *jecur ficatum*, comes to us with all the sanction of reverend antiquity, and well deserves its place in the list of comestibles of the highest sort. Certainly I have known patients eat and retain it when they could not relish or keep down anything else.

Contravening the Pharmacy Act.

A chemist at Nottingham was last week fined the full penalty of £5 for selling two ounces of cyanide of potassium without making a proper entry in his book, in contravention of the Pharmacy Act of 1868.

Deleterious Milk.

It was resolved at a recent meeting at Glasgow, at which the Lord Provost presided, that on account of the spread of typhoid fever through the drinking of poisoned milk, legislation should be urged and called for, to secure the supervision of all dairies and farms.

In Memoriam.

The death, by poison, is announced of Dr. Brown, Superintendent of Experimental Tobacco Cultivation at the Government Tobacco Farm at Akyab, in British Burmah. Dr. Brown went to Burmah about two years ago, having been deputed by the Government of India to ascertain the capabilities of Burmah for tobacco cultivation. He had studied the subject of tobacco for several years in Manilla.

The Boarding-out System.

From a recent report presented to the Edinburgh City Parochial Board, it appears that the number of children boarded in the county by them is 274, that no deaths have occurred since May, 1875, and that the total number dealt with since that date, including children sent into the country, those sent to service, trades, and others taken home by friends, is 520. The youngest was eleven months, and the eldest fourteen years old. The average cost of boarding out each child last year was £10 13s.

Juvenile Street Hawkers.

In Manchester and other provincial towns efforts are, we observe, being made, with the view of obtaining legislative powers over the employing of children in the streets for selling newspapers and various articles. The Manchester School Board has resolved to petition Parliament to introduce a clause in the Bill to consolidate and amend the law relating to factories, for defining the age at which children shall be employed to hawk in the streets, and the hours at night after which it shall be unlawful so to employ them. The object is to prevent young children being employed in any casual occupation in the streets without regulation and control.

An Example.

The directors of the Public Library at Topeka, in Kansas, have lately taken precautions against the spread of diseases by means of books. While there is any epidemic in the town, families having borrowed books from the library are required to keep them for a time and expose them to the open air. Moreover, so long as any infectious disease is prevalent, any more books are absolutely forbidden to be taken home from the library. The little, if any, care here generally taken to avoid the risk of spreading infection by means of books from circulating libraries is to be regretted. It exhibits a want of regard towards the well-being of the public, which should not exist. Disinfection by baking, and other equally ready and inexpensive means, would render books used by infected persons free from danger of infection—a safeguard which should not be neglected.

A Russian Charity.

A contemporary on Russian charities writes of the Foundling Hospital at Moscow. He states that it offers a good example of the ostentation of Russian charity and of the abuses which are begotten by ill-management. The place covers as much ground as a village. It contains 1700 wet nurses and 2000 babies. Fifty children are admitted daily on mere presentation at the gate, no questions being asked. After having been washed, dressed, and ticketed, each child is consigned to a nurse, and remains in the hospital from three to six months, after which it is boarded out, its foster-mother receiving 8s. a month for five years. At the expiration of this time the board is reduced, and the nurse must contract to keep the child for one rouble a month till it shall be able to earn its own living, or else the little creature is transferred to an industrial school. The boys are trained as soldiers or mechanics, the girls as domestic servants; and the number of these young people whom the Foundling annually supports exceeds 30,000. Although the mortality in the hospital is very large, owing to bad ventilation and unskilful medical attendance, all the show part of its arrangements are very striking. Unfortunately, this famous foundling refuge has corrupted all the villages round Moscow. The authorities know this, but Government persists in keeping up the institution in its unreformed state for the bewildering of foreigners. It is not in every country that one can see 2000 babies and 1700 wet-nurses under one roof.

BOOKS AND PAMPHLETS RECEIVED—

J. Marion Sims, A.M., M.D., Battey's Operation—Balmanno Squire, M.B. Lond., On the Treatment of Chronic Eczema by a Glycerole of the Subacetate of Lead—The Mother's Golden Guide to Rearing Healthy Children—John M. Hunter, M.D., R.N., Naval Dietaries—Great Industries of Great Britain—Dr. Theodore Billroth, Lectures on Surgical Pathology and Therapeutics—Transactions of the Odontological Society of Great Britain.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Medicale—Gazette Hebdomadaire—Le Progrès Medical—Bulletin de l'Académie de Médicine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Hardwicke's Science Gossip—Veterinarian—Monthly Homœopathic Review—American Journal of the Medical Sciences—Glasgow Medical Journal—North Carolina Medical Journal—New York Druggists' Advertiser—Students' Journal and Hospital Gazette—Archives Générales de Médecine—Obstetrical Journal of Great Britain and Ireland—American Practitioner—Gazeta Medica da Bahia—Analyst—Practitioner—Queensland Government Gazette.

COMMUNICATIONS have been received from—

Mr. W. A. Frost, Stoke-upon-Trent; Mr. Parker, Liverpool; Mr. W. D. Hemming, London; Mr. F. J. Glenison, Bowen; Mr. G. P. Field, London; Dr. J. W. Moore, Dublin; The Registrar of Apothecaries' Hall, London; Messrs. G. W. Bacon and Co., London; Dr. Wm. Bird, York; The Director-General of the Army Medical Department; The Secretary of the Army Medical School, Netley; Mr. F. N. Dean, Manchester; Dr. John Marsh, Wandsworth; The Secretary of the National Temperance League, London; Dr. John M. Hunter, London; Dr. Sparks, Mentone; The Secretary of the Medical Society, London; The Secretary of the Royal Institution, London; The Registrar-General, Scotland; Mr. W. Haward, London; Mr. Spencer Watson, London; The Secretary of the British Medical Benevolent Fund, London; Mr. W. E. Poole, London; Mr. George Lawson, London; Mr. John Chatto, London; Dr. John Sullivan, London; Dr. Thos. Barlow, London; Mr. Benjamin Walker, Spondon, Derby; Dr. Daritt, London; Dr. John Kent Spender, Bath; Mr. C. J. Cullingworth, Manchester; Mr. T. M. Stone, London; Mr. R. W. Parkes, London; Mr. B. R. Wheatley, London.

APPOINTMENTS FOR THE WEEK.

February 9. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

Royal Institution, 3 p.m. Mr. R. Bosworth Smith, "Carthage and the Carthaginians."

11. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Dr. Kelburne King (Hull), "A Case of Ligature of Carotid and Subclavian Arteries for Aneurism of Arteria Innominata and Aorta." Mr. Balmanno Squire, "Two Cases of Flat Vascular Nævus successfully treated by Repeated Linear Scarifications." Dr. Althaus, "On Diseases of the Anterior Cornua of the Spinal Cord."

Royal College of Surgeons of England, 4 p.m. Professor W. K. Parker, "On the Morphology of the Batrachia."

12. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

Royal Medical and Chirurgical Society (Ballot, 8 p.m.), 8½ p.m. Dr. Poore, "Analysis of Seventy-five Cases of Writer's Cramp." Dr. Broadbent, "On a Case of Amnesia."

13. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Professor W. K. Parker, "On the Morphology of the Batrachia."

14. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

15. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal College of Surgeons of England, 4 p.m. Professor W. K. Parker, "On the Morphology of the Batrachia."

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Dr. P. L. Sclater, "Zoological Distribution and some of its Difficulties."

VITAL STATISTICS OF LONDON.

Week ending Saturday, Feb. 2, 1878.

BIRTHS.

Births of Boys, 1319; Girls, 1241; Total, 2560.
Average of 10 corresponding years 1868-77, 2441·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	848	855	1703
Average of the ten years 1868-77	783·5	772·2	1555·7
Average corrected to increased population ...	...	...	1655
Deaths of people aged 80 and upwards ...	...	...	71

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	661359	1	8	7	3	12	1	3	1	...
North ...	751729	24	3	13	4	11	...	4	...	1
Central ...	334369	...	4	3	...	7	1	2	1	1
East	639111	5	13	8	...	16	...	...	1	4
South	967692	8	23	12	2	43	3	3	...	5
Total	3254260	38	56	43	9	89	5	12	3	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·056 in.
Mean temperature	38·2°
Highest point of thermometer	42·8°
Lowest point of thermometer	29·0°
Mean dew-point temperature	32·5°
General direction of wind	N.
Whole amount of rain in the week	0·42 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 2, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Feb. 2.	Deaths Registered during the week ending Feb. 2.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2560	1703	42·8	29·7	36·2	2·33	0·42	1·07
Brighton	103923	44·1	68	41	42·0	29·4	35·5	1·95	0·88	2·24
Portsmouth ...	129461	28·8	96	40	...	...	...	...	...	...
Norwich	84620	11·8	66	53	44·5	31·0	37·0	2·78	0·67	1·70
Plymouth	73599	52·8	44	50	50·0	30·0	39·3	4·06	0·66	1·68
Bristol	206419	46·4	142	72	46·3	24·5	36·2	2·33	0·61	1·55
Wolverhampton ...	74240	21·9	69	38	48·5	20·8	33·4	0·78	0·88	1·73
Birmingham ...	383117	45·6	278	191	...	...	...	...	...	...
Leicester	121473	38·0	123	52	43·0	25·8	34·6	1·45	0·63	1·60
Nottingham ...	165267	16·6	122	72	43·3	22·0	34·2	1·22	0·48	1·22
Liverpool	532681	102·2	404	289	43·1	29·0	37·0	2·78	0·76	1·93
Manchester ...	360514	84·6	265	227	...	...	...	...	...	...
Salford	170251	32·9	133	98	43·4	19·3	32·5	0·28	0·52	1·32
Oldham	107366	23·0	60	44	...	...	...	...	...	...
Bradford	185088	25·6	165	75	39·6	27·6	34·2	1·22	0·46	1·17
Leeds	304948	14·1	247	134	43·0	28·0	35·9	2·17	0·88	0·97
Sheffield	289537	14·7	237	120	46·0	25·0	36·5	2·50	0·80	2·03
Hull	143139	39·4	132	62	44·0	27·0	35·1	1·73	0·67	1·70
Sunderland ...	112459	34·0	76	44	50·0	30·0	37·0	2·78	0·50	1·27
Newcastle-on-Tyne	144570	26·9	105	63	...	...	...	...	...	...
Edinburgh	222371	53·1	139	117	44·5	27·5	36·2	2·33	0·58	1·47
Glasgow	568940	94·0	369	268	45·0	30·0	36·8	2·67	0·91	2·31
Dublin	314666	31·3	207	197	52·6	24·6	37·8	3·23	0·14	0·36
Total of 23 Towns in United Kingdom	8373953	37·9	5107	4050	52·6	19·3	35·9	2·17	0·40	1·52

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·06 in. The lowest reading was 29·54 in. on Monday, and the highest 30·40 in. on Friday morning.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

SUMMER PRURIGO.

PRURIGO ÆSTIVALIS, *seu* PRURIGO ADOLESCENTIUM, *seu* ACNE-PRURIGO.

By JONATHAN HUTCHINSON, F.R.C.S.,

Senior Surgeon to the London Hospital and to the Hospital for Diseases of the Skin, and Surgeon to the Moorfields Ophthalmic Hospital.

A Form of Prurigo hitherto Undescribed—Special Characters—Charles P.'s Case—Differences from Hebra's Prurigo—Harriet S.'s Case—Other Case—Comments.

GENTLEMEN,—I have had much difficulty in finding a name which should be even tolerably appropriate to the disease which we are about to consider. I am not aware that it has been named or described by authors. Its prominent features consist in its tendency to relapse, or to continue with but slight intermissions over many years and in spite of treatment, to affect by preference the face and the upper extremities, to be worse in summer weather, and to commence usually at or about the age of puberty. It is generally more or less pruriginous, but not by any means intensely so, and the eruption consists of small red papules which look as if they were about to form pustules, but which never do so (abortive pustules). Unless they are scratched no ulceration takes place and no crusts form. Although, however, there are no crusts, yet minute scars are constantly produced. On the cheeks there is usually a good deal of diffuse erythema, much more than is shown in the portrait which I now exhibit.

In the boy who was the subject of this portrait(a) the disease affected the trunk as well as the upper limbs and face, but in most cases the eruption is limited to the face, neck, and upper extremities. The disease differs in some marked features from that known as "Hebra's Prurigo." *First*, the pruriginous element is very much less marked and the erythematous much more; *secondly*, the face is always affected, and the lower extremities less so than other parts; and *lastly*, whilst Hebra describes his form of prurigo as being always worse in winter, the reverse is the fact in this malady.

It would appear to have some alliance with acne, and on the face might easily be mistaken for that disease, but none of the spots ever pass into acne pustules, nor does it restrict itself, on the *trunk*, to the acne positions. Probably it has supplied part of the material from which the descriptions of *strophulus pruriginosus* were given by the old writers; and the *lichen urticatus* of Bateman may possibly have included some examples of this malady in its earliest stage.

The portrait which we have before us is that of a boy named Charles P., and was taken in August, 1867, when he was under my care in this hospital. At the conclusion of our lecture I shall produce the lad and show you that his skin disease has at length quite disappeared. He is now under my care for another malady. The portrait was taken when he was thirteen years of age. He had been the subject of an eruption almost from infancy. It was believed to have begun at six months old. For a long time it always got well in winter and relapsed in summer. He was covered from head to foot with the spots, all his extremities being affected, the palms of the hands and soles of the feet alone being exempt. The spots were everywhere scattered, not arranged in patches. They presented conical elevations of a light red tint, and in the centre of some of them were minute accumulations of fluid. Most of them might be described as abortive pustules, for they looked in the early stage as if threatening to become definitively pustular, whilst but few really did so. The skin when he first came to me was marked all over with very shallow white cicatrices which the eruption had left. He had never had small-pox. The eruption showed but little preference as regards different regions. It was, however, especially copious on the cheeks, forehead, and back of neck. He was thin, and his skin was somewhat harsh and brown, but he considered himself in good health. The eruption did not seem to occasion him any great annoyance; he said that it itched only at night, and gave him no trouble in the daytime. He asserted that usually it got quite well in the winter, only coming out in warm weather; but on the present occasion his attack had begun at Christmas, and had persisted during four months of cold weather. He did not notice any difference in his general health.

The following note records the state of the lad several years later:—

"He has grown well and appears to be in good health. The eruption is at present out only on the backs of his arms, slightly on the forehead and over the buttocks. His skin is everywhere spotted with small cicatrices, most of them very superficial, but so abundant that on his chest, back, and arms a marbled appearance is produced. His mother, who comes with him, states that the first outbreak in infancy occurred after measles, and was supposed to be a "measles rash." She says also that it has at times covered the whole surface of the body with the exception of the flexures of the joints and the palms and soles. He has always had it less on the legs than elsewhere, and the parts most severely affected have been the face, backs of the hands, and arms. He has had repeated bad attacks since the portrait was taken, although on the whole the disease appears to be getting milder. For two months at midsummer of this year the eruption was very freely out, and his legs were so much swollen that he was obliged to stay at home. As a rule he continues regularly at his work, and suffers but little inconvenience from his eruption. He complains somewhat of irritation when he is hot, and he habitually scratches, but he states that he is never kept awake at night by itching."

You will see from this that this case differs somewhat from the statements which I have made as regards the general facts as to this malady. It began very much earlier than is usual, and it has affected a greater extent of surface. The parts which were exempt are almost precisely the same as those which escape in "Hebra's prurigo," with the difference that in the present case the face and the back of the neck are severely affected. We must note also that whilst in the disease described by Hebra the skin becomes dense, hard, and thickened, and there is often a marked tendency to eczema, these phenomena are wholly wanting in this patient.

In further proof that the case does not fit with the Vienna malady, I now produce the patient. Hebra asserts in the most explicit language that the prurigo which he describes is absolutely incurable. This young man, however, although now only twenty-three, has got quite rid of his complaint. It had been slowly declining for some years, and at present his skin is quite free. It is, however, spotted all over with minute white scars, not so deep as those of small-pox, and producing a very curious appearance. He is now under care for strumous disease of both testicles. So much had his appearance altered by the cure of the eruption that I did not in the least recognise him until he reminded me of his identity.

The next case which I shall bring before you is one which in some respects approaches nearer to Hebra's type. In it we have a tendency to eczema, and the patient is as yet far from cured. Here again, however, we must note that it is a summer malady, and further, that it did not begin in infancy. The patient had a clear skin until she was eight years old. Her first menstruation had occurred before any spots showed themselves. Thus it would appear to connect itself with the adolescent period.

Case of very Severe Prurigo, which began at the age of eight, and has now persisted with increasing severity for five years—Summer Exacerbations; Tendency to Eczema; Face affected—Œdema of Lower Extremities.

Harriet S., aged thirteen. In this instance the history, which is given with great intelligence and clearness, is that the child had a perfectly clear skin till the age of about eight years and a half, that she was not liable to irritation from fleas, that she had had chicken-pox at five, and had had nothing unusual after it. When she was eight years and six months old she menstruated for the first time, and very shortly afterwards began to suffer from an eruption on her arms. At this time she was accustomed to have the arms bare. The weather was hot, and the first suspicion was that the eruption might have something to do with the heat. From the first it itched very much, so that the child's mother used to tie up her hands to prevent scratching. She got better in winter, but it did not quite leave her. It relapsed again the next summer, but continued for two years

(a) See Plate XXXVIII. of the New Sydenham Society's Atlas.

or more quite confined to the arms. Next it extended to the shoulders and trunk, and then passed over the body. It is only for the last three or four years that it has affected the face.

At the present time (October 30, 1875) she is very much better, partly in connexion, probably, with the time of year, and partly from treatment with the tar baths. During the past summer she was for two months in the London Hospital (under a colleague); the eruption was very bad, worse than ever before, when she went there; it had been getting worse every summer.

The eruption avoids the parts where the skin is thin. Thus, the flexures, the sides of the neck, and the adjacent parts of the chest, are free. It is very severe on the shoulders, backs of the upper extremities, the whole of the back, on the hips, and on the whole of the lower extremities excepting the popliteal spaces. On the face it is severe on the sides of the cheeks and below the ears, whilst it extends with slighter severity over the whole of the front of the face and forehead. It was formerly present severely on the backs of the hands, but is now nearly well there. It extends also on to the whole of the dorsal surfaces of the feet. It does not affect with any special severity either the fronts of the knees or tips of the elbows, though a few spots are seen there. The palms, soles, and scalp have always been quite free. The eruption is modified at such an early stage by scratching that it is difficult to say with confidence what its original type may have been. It consists at present of small papules with ill-defined borders, which are either simply abraded or covered by a thin adherent scab. Amongst these papules are everywhere numerous white superficial scars. The skin is discoloured and harsh, and at some parts decidedly thickened. On the lower extremities there is decided thickening of the subcutaneous cellular tissue, so that a line is seen where the tops of the boots press, above which the whole leg is equally swollen.

The spots have always been very liable to bleed when scratched. No evidence of pediculi now, but at one time she had some on the head, but without relation to the disease. There is no history of skin diseases in the family, and she is the only one out of seven children who has any eruption.

The child has been under much medical treatment, and three years ago was an out-patient for a long time at one of our largest hospitals. She has already derived great benefit from the use of a tar bath every night, and now sleeps fairly.

Her mother considers that the condition described in the above notes is the best that she has attained in the summer for several years past. Although much better in the winter, she has never got quite well.

This case bears in most respects a very close resemblance to that of the lad Charles P. It differs from that case chiefly in that the pruritus has been far more severe. In P., although the irritation was worse at night, he was never kept awake, and in the daytime he had no itching whatever. In P. the disease had begun in infancy, whilst in this girl it did not occur till the age of eight. In both cases the entire exemption of the palms, soles, and scalp, and the comparative freedom of the flexures and other parts where the skin is thinnest, are to be specially observed. Again, in both cases we have the strong statement that the disease is worst in summer and comparatively if not absolutely well in cold weather. In both the skin of the back is marbled over by superficial white scars. In both there has been a tendency to inflammatory œdema of the lower extremities when the eruption has been severely out. In Charles P.'s case it was suggested that the disease was consequent on measles, but in the case of the girl there is no such hypothesis, and the evidence is clear that it began on, and was for a considerable time restricted to, the upper extremities, and that it only spread after a considerable period to the rest of the surface. We may note that this latter fact is tolerably conclusive as to the disease not having begun from the irritation of lice, for it attacked the arms first—the parts which would almost certainly have been avoided by these parasites. The evidence in the girl's case is yet stronger than in that of the boy in favour of the supposition that the disease is a pure prurigo, and that the papules, pustules, scabs, and other evidences of inflammation of the skin, are secondary, and due almost wholly to the patient's scratching. In neither case has there been at any stage any tendency to the formation of wheals, as in urticaria. The degree of chronic thickening of the skin appears to be in proportion to the scratching, and is much more marked in the girl's case than in that of the boy.

I will now read to you brief detached notes of some other cases which illustrate my assertions respecting this class of affections:—

A sugar refiner from Whitechapel, named Samuel H., was under care in July, 1870, for a pruriginous eruption on the legs, forearms, and face, which he said always got well in winter. There were a few vesicles mixed with the prurigo spots.

Mary A., a married woman, aged twenty-nine, suffered for a second time during the summer of 1870 from a pruriginous eruption on the arms, chest, thighs, and legs. It affected her face slightly. It had been well in the winter.

William H., a coke dealer, aged twenty-four, came under care in March, 1870, having then suffered from relapsing prurigo for six years. The eruption was to some extent eczematous, and although it affected the backs of the limbs most severely, the flexures were not quite exempt. He considered that it was worse in spring and autumn, but it never got quite well either in winter or summer. The skin of the lower extremities was rough and dry, and the eruption bore evidence of much scratching. His face was free when I saw him, but it had formerly been affected. The eruption, which was almost general, was only slight on the chest. He asserted that the little red spots, which were the first stage of the eruption, became white when rubbed. A sister and himself had suffered from "bad heads" in childhood, but in the interval he had been quite well, and his sister still remained so.

I cannot state the termination of this case. In some features it resembles a case of pruriginous eczema which I shall have to relate hereafter, in which, after several years of suffering, death occurred.

A girl named Sarah S., aged fourteen, under care in 1869, had a symmetrical papular eruption covering the face, arms, and hands. It was just like Charles P.'s, and was more severe on the face than elsewhere, and affected the backs of the arms more than the fronts. The itching was only slight. It was quite symmetrical, and had been present with summer relapses for three years. It was stated that two of her brothers older than herself had suffered from a similar rash for about the same time.

This history might suggest the probable existence of a parasitic cause, but the severity with which the face suffered seemed to negative this. After two months' attendance under treatment by arsenic and the lead and mercury ointment the notes state that she was nearly well.

Robert S., a harness maker, aged nineteen, attended at the hospital in August, 1869. His eruption was a prurigo, and was, he said, always worst in hot weather and almost well in winter. It occurred chiefly on the arms, but was present also on the trunk and outsides of thighs. He did not wear woollen next the skin. The notes do not state how long he had suffered, but imply a duration of several years. We found pediculi on the head, but none in the clothes.

My next case is one of the longest duration which I have to mention, the patient having suffered for twenty years; still, however, it had not begun in infancy, and it was a summer rash, not a winter one.

Mary Ann W., aged thirty-three, a widow, applied in July, 1869. She had suffered from her eruption every summer since she was thirteen years of age. She was most positive as to the influence of season, asserting that she was always well in winter. She inherited gout, and had suffered from a single attack last winter. The eruption covered thickly the fronts and backs of the arms, backs of elbows, and backs of hands. There were some spots on the forehead, and a considerable number on the fronts of the thighs and legs. It did not occur at the flexures. The case differed from most others which I have seen, in that the face was but slightly affected. The woman described the itching as having been considerable at times, but the disease did not by any means appear to have embittered her life. She had been married and had borne children, and had never observed that the eruption was worse during pregnancy or lactation. She was stout, but not florid.

A girl named Jane B., aged twenty-two, was under care in September, 1869, for a copious eruption on the face, which had been much scratched, and which differed from acne in

that the whole skin of the face was more or less inflamed, whilst there were no comedones and no pustules. My notes state that it was exactly like Charles P.'s case. She had a few spots on the backs of the hands, and had formerly had it on the legs also. She had been liable to the eruption on the face for five years, and had always been much worse in summer. A year previously she had been under care at Guy's. At the time of her application at Blackfriars, the eruption was complicated by urticaria, the wheals of which were as large as halfpence (possibly from bites). She took arsenic, and used a lead and mercury ointment, and in a month was "a good deal better."

The following case, although an example of severe and long-persisting prurigo, differs from Hebra's type in that the face was first affected and always suffered most severely, that the eruption got almost well in winter, and that it did not begin till the age of eight.

Harriet A., a milliner, aged seventeen, first came under our notice on June 25, 1869. She was then suffering from an eruption which affected the face, arms, and to a slight extent the chest, but from which other parts of the body were free. It was stated to have first appeared when she was eight years old, and to have then shown itself on the arms and face. Her face was now covered by an eruption in part papular and in part eczematous, and it was raw from scratching. On the arms the papules looked exactly like those of prurigo senilis (from lice). No wheals could be found, but she stated that the spots "began as bumps." There were no vesicles nor any papules which were free from evidences of scratching. Her mother spoke positively as to there having been no eruption in infancy or after vaccination. Two other older children and seven younger had remained free from skin disease. As a rule, it was asserted the skin would become quite clear in winter, but during the last winter she did not quite lose the eruption. My notes state that the eruption exactly resembled Charles P.'s. There were no spots on the fronts of elbows, but few on the fronts of arms, and not many on the shoulders. On the backs of the hands it came as low as the knuckles. We were told that on one occasion she was two months at the seaside and got quite well. Arsenic, in three-minim doses, was prescribed, and a lead and mercury ointment, and was continued with intermission for more than a year. My last note is July 21, 1871, that is, two years after her admission. She considered that she had on the whole been better for the treatment, but she had varied much, and had never been quite well on the face. When the arsenic was given in six-minim doses the eruption improved, but the remedy disagreed with her stomach. Tar lotions and the bismuth lotion had also been tried. The eruption had always been at its worst in hot weather.

Catherine D., aged sixteen, came under care in June, 1871, with an eruption of "lichen prurigo," which affected her face, forehead, backs of forearms and arms, and front of chest. This was her second attack, and had lasted one month. Her first had occurred just a year ago, had lasted all the summer, and got well when the cold weather came. Her mother asserted that there had not been the least eruption in infancy or childhood. She attended until September, and took arsenic and used ointments. She was then much better, but not nearly well.

Mary H., aged twenty-two, has been liable to a relapsing pruriginous eruption for the last ten years. It comes out badly every spring and autumn, and when it leaves her, her skin becomes perfectly sound. The eruption resembles that of Charles P., but with a more decided tendency to urticaria, having sometimes "bumps or wheals as large as half-crowns." It affected chiefly the face and arms, but sometimes occurred on the back and chest and fronts of legs. Her first attack occurred very suddenly one summer, and came out freely. She remained under care from March 15, 1870, with intervals, till April 1, 1873, during which time she took arsenic, alkalies, quinine, etc., freely, and used a great variety of local applications. She was never wholly free from the rash for more than a week or two at a time, and there was no reason to believe that the arsenic did any good. She had taken it sometimes in six-minim doses, and her own impression was that it made the skin more irritable. She was always best in cold weather, and several times during winter her rash was reduced to a few isolated spots. The last note, on April 1, 1873, records her admission for a copious outbreak which had then lasted a fortnight, and states that she had been all but well. (I have no subsequent note.)

Eliza M., married, aged thirty-eight, has suffered from relapsing prurigo for five or six years. It affects the face, arms, body, and slightly the lower extremities. She had it first the first summer of her residence in London, and she states that she always gets rid of it if she goes into the country.

The following case supplies an example of Charles P.'s prurigo beginning on the face:—

Kate N., a girl aged eleven, admitted in May, 1869, had been subject to an eruption just like Charles P.'s for eighteen months. Her face was covered with papules, many of them scratched and capped by a blood-crust. It had itched much. It had never occurred in other parts than the face, and there it avoided the eyelids and was only sparingly developed in the forehead. It affected the ears, and the parts behind them. It was usually worse in hot weather. She was in good health, and there was no history of skin disease in her relations. She attended from May to July, and took arsenic, and used lead and mercury ointment, without any benefit.

I need not, gentlemen, trouble you with more cases. Those which I have quoted must, to those who have had patience to follow me, have sufficed to illustrate most of the assertions with which I commenced. You will, I think, sympathise with me in the difficulty in finding a suitable name. Although aggravated by heat and often quite well in winter, yet it is, as we have seen, by no means an exclusively summer malady. In its broad features, however, it contrasts strongly with winter prurigo, and thus the name suggested may be found appropriate, at any rate provisionally. You will see that we want more facts, that is, more completed cases—such cases, for instance, as that of Charles P.—extending over many years, and giving the final result. When these are collected we may be able to give a more accurate description of the malady, and to find, perhaps, a better name. In the meantime we will beware of forcing our facts into any artificial uniformity. No two cases are exactly alike, and for the obvious reason that in all mixed causes are at work.

A Wonderful Cripple.—Professor Weinlechner exhibited, before the Vienna Medical Society, a man devoid of all the four extremities. On the right side there was a very small stump of the upper arm, clothed with muscles, and admitting of the application of artificial apparatus. The man, twenty-seven years of age, was able to write, thread a needle, pour water out of a bottle, etc. He was in good health, married, and the father of two children. Professor Weinlechner was of opinion that this loss of the extremities arose from intra-uterine amputation.—*Allg. Wien. Med. Zeit.*, January 22.

Curious Simulation of Fracture of the Larynx.—The *Gaz. Hebd.*, February 8, quotes a curious case related by Dr. Mordillon in the *Bordeaux Médical*. A little girl, while knitting, fell down in the street, and was found to have received a slight contused wound in the thyroid region, which was accompanied by much pain and a little swelling. A half of one of the needles which she was using had also disappeared. As examination did not reveal the presence of a foreign body, no attempt at its extraction was made. A month later the child was brought to Dr. Mordillon, who found a depression in the thyroid cartilage running from its superior angle downwards, and from left to right towards the junction with the cricoid. This depression seemed to result from the imbriation of two lateral plates of the cartilage, and gave the same sensation as when the bones of the fœtal cranium are riding over each other during delivery. Crepitation was also felt, and pressure caused pain and suffocation. The presence of no foreign body could be detected. Respiration was normal, but there was a slight alteration in the voice. The lateral movements of the neck were natural and without pain, and there was no dysphagia. The diagnosis was oblique fracture of the thyroid, with, perhaps, the retention of the needle in the neck. At another visit, in about three weeks' time, it was found that an abscess was formed, and on this being opened a knitting-needle nine centimetres long was discharged, and all signs of fracture disappeared. All the signs of this accident were closely simulated; and it is remarkable that so long a foreign body could have remained for such a time without exciting any functional disturbance of the numerous vessels and nerves of the neck.

ORIGINAL COMMUNICATIONS.

THE STRUCTURE AND FUNCTIONS OF THE NERVOUS SYSTEM.

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THE SPINAL CORD.

(*Continued from page* 139.)

THE increased size and definiteness of the nerve-nuclei of the medulla, as well as the increase of the white substance, taken along with the connexions which it forms with the cerebellum, necessitates a rearrangement of both the grey and white substance of the cord. The central canal of the cord gradually approaches the posterior aspect of the medulla, until at the calamus scriptorius it is laid open. The posterior grey cornua containing the sensory nerve-nuclei undergo an outward displacement, while the anterior cornua are aggregated towards the middle line; so that on the floor of the fourth ventricle the motor nuclei are near the median raphe, and the sensory nuclei near the margins. With regard to the white matter, the pyramidal fibres of the lateral columns at the upper end of the cervical region of the cord pass forwards and inwards towards the anterior median fissure. These fibres decussate with one another in the medulla, so that those of the right side pass to the left, and those of the left to the right. The decussation frequently begins in the upper portion of the cord; while the homologues of the pyramidal fibres, which arise from the nerve-nuclei of the hypoglossal and facial nerves, cross separately in the pons above the decussation of the pyramids. The pyramidal fibres of the lateral columns during and subsequent to their decussation come forwards into the anterior median fissure, and push aside the columns of Türck, so that the latter form a prismatic bundle of fibres external to the former, which ascend without decussating with one another. These two sets of fibres constitute the anterior pyramids of the medulla; they can be traced through the pons, where they receive a large accession to their size, into the peduncles of the cerebrum. According to the researches of Flechsig, which my own sections confirm, the pyramidal fibres, after being separated into distinct bundles in the pons, come together so as to form one compact bundle in each peduncle. This bundle occupies about the middle third of the crust of the cerebral peduncle, and, contrary to what has hitherto been believed, it passes into the posterior segment of the internal capsule, lying between the lenticular nucleus and optic thalamus opposite the middle third of the latter. The pyramidal bundle is separated from the caudate nucleus by a layer of fibres, which ascend from the external surface of the optic thalamus to reach the corona radiata while it rests on the three successive segments of the lenticular nucleus, and reaches the corona radiata opposite to the third quarter of the caudate nucleus (reckoning from before backwards). Having emerged from between the basal ganglia, without anywhere communicating with them, the fibres of the pyramidal bundle radiate in all directions towards the surface of the cerebrum, and are mainly distributed to the central convolutions about the sulcus of Rolando, the so-called "motor area" of the cortex. The cardinal facts which concern us at present are, that fibres issue from the central convolutions of the cerebrum, which pass through the internal capsules without communicating with the basal ganglia; that the same fibres pass through the cerebral peduncles to enter the pons, where they at once begin to diminish in number. The fibres of this kind which pass through the pons collect together to form the anterior pyramids of the medulla, which also diminish in size from above downwards, showing that some of these fibres are lost in the medulla itself. The internal and by far the larger portion of the pyramids decussate with one another, and these portions pass backwards so as to form in the cord the bundles of pyramidal fibres in the lateral columns—bundles which extend the whole length of the cord, but gradually diminish from above downwards. The external and lesser portion of the pyramids pass directly downwards to form the columns of Türck—columns which dwindle gradually until they disappear, usually about the middle of the dorsal region. It is not yet proved anatomically how these fibres end in the cord; but other considerations render it probable that they end in the grey matter of the anterior horns and its continuation through the medulla, pons, and around the aqueduct of Sylvius. The pyramidal fibres, in one word, form an uninterrupted connexion between the central convolutions of the brain and the central grey tube of the cord.

Two masses of nervous matter are seen in the medulla, lying immediately on the outside of the pyramids, one on each side, termed the olivary bodies. The internal structure of these bodies is very similar to the corpus dentatum of the cerebellum, and somewhat similar to both of these is a reddish-grey centre in the upper part of each tegmentum—namely, the "red centre" of Stilling, or "superior olive" of Luys. It is very probable that the three structures are associated in their functions, and that they belong to the middle projection, or the compound co-ordinating system of the cerebellum.

The continuation of the anterior root-zones through the medulla and pons is somewhat complicated, but the leading facts may be described very briefly. The portions of these zones which are found in the anterior columns of the cord are first pushed aside in the medulla by the decussating fibres of the pyramids; but a little farther up they appear behind the pyramids, and in close relationship with the motor part of the grey matter as it gathers round the central canal. And when the canal opens out into the floor of the fourth ventricle, these fibres lie in front of the grey matter on each side of the central raphe, and are continued upwards in front of the grey matter surrounding the aqueduct of Sylvius. Throughout their whole course, therefore, the fibres of the root-zones in the anterior columns maintain a close relationship with the motor part of the grey matter of the medulla and pons. The portions of the lateral columns which belong to the anterior root-zones also maintain a close relationship with the nuclei of the motor nerves near the median raphe in the pons, and some of them appear as bands of fibres on each side of the grey matter around the aqueduct of Sylvius. Other fibres join the restiform bodies, and are continued into the cerebellum, while the remainder pass to the corpora quadrigemina. Some anatomists think that part of the fibres of the anterior root-zones pass through the crusta to join the lenticular nuclei; but a very important fact has been ascertained by Flechsig, which renders this doubtful. Flechsig found that in a nine-months human embryo the pyramidal fibres in the crusta are the only ones which have acquired a medullary sheath; and my own sections confirm this. But the fibres of the anterior root-zones in the cord are medullated at a very early period of development, and long before the pyramidal fibres have acquired a medullary sheath; hence it may be inferred that none of the fibres of the anterior root-zones pass up into the crusta or motor tract of the crura, although it is very probable that new fibres become developed, which connect the corpora striata and the cord, and that these pass through the crusta and become mixed with the fibres of the anterior root-zones. The close connexion which is maintained between the anterior root-zones and that portion of the central grey tube which is in immediate relation with the efferent nerves, seems to indicate that the former consist of fibres which co-ordinate the various segments of the cord longitudinally; and there are other grounds for believing them to consist of a series of looped fibres which originate and terminate in the anterior part of the central grey tube.

But some of the fibres of the anterior root-zones pass to the restiform bodies to join the cerebellum; and the union between these zones and the latter organ is rendered still more intimate through the intermediation of the olivary bodies. It may be noticed in passing that the higher centres act upon the periphery, not by means of an entirely new apparatus, but by fibres connecting them with the nervous mechanism of the cord; and it is not surprising that the cerebellum, which co-ordinates the muscular actions required for maintaining the erect position and for locomotion, should be intimately connected with the system of fibres which co-ordinate longitudinally the cells which are in immediate relation with the outgoing currents. Some of the fibres of the anterior root-zones also terminate in the corpora quadrigemina. Now, these bodies are homologous with the optic lobes in fishes; and they are the ganglia in which the impressions conveyed through the optic nerves

are first co-ordinated. And, in order that the eye may be of any service to even the lowest creature which possesses a rudiment of sight, all the muscular movements of the body concerned in locomotion must be duly co-ordinated with impressions made upon the retina; hence it may be expected that a close connexion will exist between the ganglia which give the primary co-ordination to the impressions received through the optic nerves, and the system of fibres which co-ordinate longitudinally the cells which are in immediate relation with the efferent nerves.

The posterior root-zones are joined in the medulla by the external lamellæ of fibres in the lateral columns, which are called the direct cerebellar fibres, and by some fibres from the anterior root-zones; and these together constitute the restiform bodies, which are continued upwards as the inferior peduncles of the cerebellum. The posterior root-zones are supposed to consist, like the anterior root-zones, of a series of looped fibres, which co-ordinate the various segments of the cord longitudinally on the side of the ingoing or afferent currents. The fibres of Goll are continued upwards in the medulla as the posterior pyramids. These fibres become associated with a large amount of grey matter in the medulla, and their further progress is not easily made out; but some anatomists think that they proceed upwards through the pons to the crura, while others imagine that they can be traced into the thalami optici. From their late appearance in the development of the cord it may be assumed that these fibres connect the grey matter of the cord with the higher cephalic centres.

To sum up, then: the spinal cord consists essentially of a tube of grey matter, which extends from the conus medullaris to the tuber cinereum, although it is greatly obscured at its upper end by its intricate connexions. From this tube two symmetrical masses of grey matter, called the posterior cornua, project backwards, which receive the terminations of the afferent nerves; and two symmetrical masses, called the anterior horns, projects forwards, from which issue the efferent nerves. At the outer margins of the posterior horns, two bundles of white substance form, one for each horn, consisting of longitudinally looped fibres, which co-ordinate the actions of the grey matter of these horns from below upwards; and similar bundles form at the outer margin of the anterior horns, which co-ordinate the actions of the grey matter from above downwards. These, then, are the fundamental parts of the cord as a centre, or rather a series of centres, of simple co-ordination; or, to quote the language of Meynert, as part of the outer system of projection. The remaining portions of the cord really belong to the compound and doubly compound centres of co-ordination, or to the middle and inner systems of projection.

Of the remaining portions of the cord, the direct cerebellar fibres of the lateral columns appear to be a special portion of the posterior root-zones, and to consist not of looped, but of straight fibres, which connect the upper half of the cord with the cortex of the cerebellum. The columns of Goll consist of straight longitudinal fibres, which, from their position in the posterior part of the cord, may be supposed to convey impulses upwards from the posterior horns to the pons or crura; while the fibres of Türck and the pyramidal fibres of the lateral columns convey impulses downwards from the cortex of the brain to the anterior horns of the grey tube; and the fibres of the anterior white commissure help to co-ordinate the actions of the anterior horns with one another in so far as these actions are subordinate to the cortex of the cerebrum. The purely spinal actions of the cord are co-ordinated by the transverse grey commissures.

So far we have followed the synthetic method; but the conclusions arrived at are confirmed by analytic methods of investigation. There are various methods of analysing the cord into its functional divisions, one of the most powerful being the experimental method adopted by physiologists. We shall pass over here the results obtained by this method, and make a few remarks on the analysis of the cord effected for us by disease. The systematic diseases of the cord decompose it into a certain number of distinct compartments, which closely correspond to the subdivisions indicated during its development. In infantile paralysis and the various chronic forms of spinal paralyses associated with atrophy of muscle, the anterior cornua are found to be affected. In these diseases there is not only loss of function of the nerve-fibres which spring from the caudate cells, but the latter degenerate throughout their whole course, and there is a corresponding atrophy of the muscular fibres to which they are distributed. No doubt disease of the posterior horns stands in a somewhat similar relation to sensation, by preventing cutaneous impressions from reaching the cerebrum, that disease of the anterior horns does to motion. There is this difference, however: the incoming currents pass into grey matter composed of round cells destitute of membrane and of processes, or at least in which the membrane and processes are not highly developed; hence the afferent are much more diffused than the efferent currents. The result is, that so long as a small portion of the grey matter remains healthy, complete anæsthesia is not produced.

Disease of the anterior root-zones is not readily distinguished from disease of the anterior horns. These zones cannot be extensively affected without producing disease of the efferent nerve-fibres which pass through them; and when the latter become diseased, paralysis and muscular atrophy will result. It is otherwise, however, with the posterior root-zones, disease of which gives rise to a very definite affection—locomotor ataxy. The very specialised mode of locomotion observed in the higher vertebrata, and especially in man, requires special organs for the co-ordination of the requisite muscular movements—organs which must necessarily be extremely complicated; but in such creatures as the amphioxus the simple movements required for locomotion are co-ordinated in the cord; and it may be expected that the fibres which connect longitudinally the segments of the cord on the side of the incoming currents will play a predominant part in this co-ordination. And in the higher animals the general and fundamental part of the nervous apparatus for co-ordinating the movements of locomotion called forth by cutaneous impressions are found in the cord; while the special apparatus which regulates movements under the guidance of the special senses are found in the cephalic centres: and of these the corpora quadrigemina and cerebellum are the organs which are more especially concerned in regulating the movements of the higher animals through space. Now, the general, being the first in the order of development, may act in an orderly manner without the special apparatus; but the latter cannot act harmoniously without the former. A decapitated frog, for instance, will execute the most complex muscular movements required for balancing the body, for removing irritants from the surface of its body, and for leaping; but if the posterior columns of the cord of an otherwise uninjured frog be divided transversely by incisions made at short distances from one another, and extending the whole length of the cord, the movements immediately become disorderly. In the latter case the general co-ordinating apparatus is injured, producing an incapacity for orderly movements; and the same is the case in locomotor ataxy. In this disease the special apparatus, under the guidance of the eyes, may, to some extent, supply the deficiency of the general apparatus; but when the eyes are closed, and cutaneous impressions have alone to be relied upon, locomotion becomes impossible.

Disease of the direct cerebellar fibres of the lateral columns has not been associated with any symptoms during life. Primary disease of the columns of Goll is also very rare, and the symptoms with which it is associated during life are not well known. Any injury to the fibres of Türck, and to the pyramidal fibres of the lateral columns, which completely interrupts their continuity, produces loss of voluntary motion; while lesser changes cause muscular tremor or spasm. So far, then, what is known of the diseases of the cord confirm our conclusions from the history of its development; but other remarkable facts are known in connexion with the pathology of the cord, which afford still further corroborative evidence.

If a mixed nerve be cut in its course, the peripheral portion degenerates throughout its whole course in a few weeks, but the portion attached to the cord does not degenerate. If, on the other hand, the sensory nerve be cut between its ganglion and the cord, the peripheral portions attached to the ganglion do not degenerate, but the small portion attached to the cord soon wastes. From these facts it is inferred that the motor nerves receive their nutritive influence from the caudate cells of the anterior horns: while the sensory nerves receive their nutritive influence from the ganglia of the posterior roots. But with respect to the fibres of the white substance of the spinal cord, it appears certain that the

degeneration takes place along the line of their conduction. When centripetal fibres are interrupted in their continuity by injury or disease, the portion above the lesion is found in three weeks degenerated until its termination in grey matter, while the portion below remains healthy. On the other hand, when centrifugal fibres are injured, the portions below the lesion degenerate, while the portions above continue healthy. This degenerative process is the reverse of what took place during development; and as during the latter process the medullary sheath was the last to be formed, so it is the first to disappear during the former. In the portions which have undergone degeneration, the axis-cylinders may be seen a long time after all trace of the medulla has disappeared; and as both the neuroglia and axis-cylinders become deeply stained with carmine, the degenerated or sclerosed portion assumes a much brighter tint than the healthy portions of the white substance; and it is also more transparent when sections are examined in glycerine.

If the continuity of the cord is interrupted, say, in the upper dorsal region, by the pressure of a tumour, or by Pott's disease of the vertebral column, and death supervene three weeks afterwards, the columns of Goll and the cerebellar fibres of the lateral columns will be found sclerosed above the lesion; while the fibres of Türck and the pyramidal fibres of the lateral columns will be degenerated below the lesion. The fibres of the anterior and posterior root-zones either do not degenerate at all, or only for a short distance both above and below the lesion. The degenerated fibres of Goll have been traced to the upper end of the medulla; but they have not been traced far into the pons; so that it is probable that they terminate in grey matter at the upper end of the medulla. The fibres of Türck terminate about the middle of the dorsal region, while the degeneration of the pyramidal fibres of the lateral columns extends from the lesion to the lower end of the cord. But a cerebral lesion, such as hæmorrhage into the corpus striatum or optic thalamus, which ruptures the pyramidal fibres in their passage through the internal capsule, is followed by sclerosis of these fibres in the lateral columns of the cord on the opposite side, and of the fibres of Türck on the same side. And a still more remarkable fact has been ascertained by Charcot. He found that a lesion which occupied nearly the whole depth of the cortex of the brain at a spot about the size of half-a-crown in the ascending frontal and parietal convolutions was followed by sclerosis of the pyramidal fibres of the lateral columns of the opposite side of the cord.

These facts afford the most striking proof that the pyramidal fibres form an uninterrupted connexion between the cortex of the brain and the anterior horns of grey matter of the cord. And the fact that the fibres of the anterior and posterior root-zones do not degenerate, except in the immediate neighbourhood of the lesion, also confirms the inference already made, that they consist of short looped fibres, which take their origin and terminate in the grey matter of the cord itself.

Nothing is known with regard to sclerosis of the fibres of the anterior white commissure. The fact that they appear late in the development of the cord suggests that they belong to the system of fibres which connects the central grey tube with the cephalic centres; and their association with the anterior horns of grey matter would seem to indicate that they belong to the pyramidal system of fibres, along which voluntary impulses are conveyed from the cortex to the cord. It is very probable that the anterior commissural fibres are so disposed that some of the impulses conveyed by the pyramidal fibres descending from one of the hemispheres of the brain are conveyed to both the anterior grey horns of the cord. The connexion of both the anterior grey horns of the cord with each of the hemispheres of the brain leads me to mention another mode of co-ordination effected in the cord. The law of this co-ordination was first discovered by Dr. Broadbent, and was stated by him as the bilateral association of the nerve-nuclei of muscles bilaterally associated in their action. This is only a specific example of the wider generalisation already stated, that fusion of function entails fusion of nerve-centres; but as the specific law has played an important part in the explanation of the phenomena of disease, it will be as well not to lose sight of the original statement of it by Dr. Broadbent.

These remarks make no pretensions to be exhaustive, and the consideration of the trophic and automatic centres of the cord, along with many other interesting questions with regard to its functions, must, for want of space, be passed over entirely.

(To be continued.)

CROUP—TRACHEOTOMY—RECOVERY.

By BENJAMIN WALKER, L.R.C.P.

Willie B., aged four and a half, a well-developed child of healthy parents, was seized with croup in the early morning of October 20, 1877. His previous history is one of health, with the exception of a slight cold at five months, when he had some difficulty of breathing. From this he quite recovered.

About a week ago he caught a bad cold, and suffered from hoarseness, so that he was kept from school, and confined to the house as much as possible. On putting him to bed on the night of the 19th, he complained of pain over the chest, and a linseed poultice was applied. About 2 a.m. he awoke with difficulty of breathing, and a crowing sound with each inspiration, which was soon very laboured; and he vomited some glairy mucous fluid. The parents, not recognising the urgency of the case (thinking it was bronchitis), did not summon medical aid till the morning, when he was seen at 9 a.m. The breathing was markedly characteristic of croup; at each inspiration all the extraordinary muscles of respiration being heavily taxed at the rate of about forty per minute. The blood was, however, fairly aërated. The tonsils each presented a slight coating of white membrane of the appearance of parchment, though there had been no complaint of sore throat, and a supper of solid food had been taken the preceding evening. An emetic of ipecacuanha wine was ordered, to be repeated in half an hour, and flannel wrung out of boiling water was kept constantly applied to the throat, and he was surrounded by a tent improvised with a blanket, under which steam was driven so as to supply a warm and moist atmosphere. At 12.30 p.m. he vomited copiously; skin acting well; general condition much the same. Takes fairly well of milk and beef-tea. At 2.30 p.m. I was summoned in haste, and on arrival was informed that the child was just dead,—that he had ceased to breathe three or four minutes, and had died apparently suffocated, as he was very black in the face. On placing the hand over the heart a slight fluttering was perceived. Being fortunately provided with bistoury, and trocar and canula, the head was placed across the knee of the operator, so as to render the front of the neck tense and prominent, and tracheotomy performed. Immediately the canula was *in situ* the chest was compressed, causing a semi-fluid discharge, which had a yellowish-white colour and half-solid consistence, like coagulated albumen or half-boiled white of egg. This was followed by one or two inspirations and by cough, and respiration was quickly re-established. There was considerable discharge before the trachea was cleared. Scarcely any blood was lost. The breathing quickly became easy, and the face assumed its natural colour. The patient was restored to the warm and moist atmosphere, and a pad of tarlatan (of about twelve thicknesses) wrung out of boiling water containing two drachms of carbolic acid to the pint, was kept constantly applied over the opening of the canula, and frequently changed to supply the lungs with moist and warm antiseptic air. Seen again at 6 and 10 p.m., patient was breathing tranquilly, though about 40 per minute; skin acting nicely. Coughs occasionally, when a tenacious discharge is expelled through the tube, which has to be cleared now and then with a feather. Has had two hours' sleep, and takes well of milk, and of egg, milk, and brandy mixture. As the skin was rather hot, one minim of Fleming's tincture of aconite was given. He had but one dose.

October 21.—Has had a good night, and slept fairly. The nurse had to clear the tube with a feather about every two hours. Cough much as before; discharge diminishing in quantity; over a pint of milk taken during night; skin cooler, acting nicely; pulse 130; respirations 36.

The subsequent progress of the case need not be given in detail. Suffice it to say that the patient continued to improve until the 25th, when the canula was removed (having been in a little under five days), the wound strapped, and respiration *per vias naturales* re-established without further difficulty.

Remarks.—This case is thought worthy of placing on

record for two reasons—firstly, to show how rapidly croup may prove fatal. Here is a child who goes to bed with a trifling ailment, which was thought no more than a severe cold, who is seized with croup at two in the morning, and despite active treatment is dead (apparently) in twelve hours and a half, asphyxiated. Trousseau, in his classic and exhaustive account of this disease, gives fourteen hours as the shortest duration recorded under his observation. Secondly—and this is infinitely more important—to show that in tracheotomy we have a remedy which, if used sufficiently early, will give in many cases considerable hope of recovery, by giving physiological and absolute rest to the diseased part, more especially when it is confined to the larynx. This child was at once relieved of all urgent symptoms, and never afterwards looked behind him, whilst there was an absence of all internal medication, at any rate. The danger of subsequent bronchitis or pneumonia will be reduced to a minimum if care be taken that the air entering the lung by the artificial opening is warm and moist, and possibly antiseptic also; for it was believed in this case that the discharge was quickly reduced in quantity by the use of carbolic acid, and it never had any offensive smell. The success attending this case should also impress upon us that in any case, however hopeless apparently, success may follow the operation. The father of this child, opposing what he no doubt considered a mutilation of the dead, forbade any surgical interference. The prohibition was, however, happily unheeded.

Spondon, Derby.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GUY'S HOSPITAL.

CASE OF PROTRACTED SYNCOPE UNDER THE ADMINISTRATION OF CHLOROFORM.

(Under the care of Mr. BRYANT.)

[Reported with notes by Mr. Tom Bird, M.A., Anæsthetist to the East London Children's Hospital.]

T. C., aged fifty-seven, suffering from disorganisation of the metatarso-phalangeal joint of the great toe on the left foot. History of three distinct attacks of gout.

The House-Surgeon commenced to administer chloroform on a "Skinner" of ordinary size, saturated with the anæsthetic. The "Skinner" had just been used in a prior operation of some length for epithelioma of the tongue. The patient soon began to struggle, not strongly, but in a spasmodic, tremulous way. More chloroform was then poured on the "Skinner," and the patient became quiet, when Mr. Bryant, who was about to operate, required him to be moved along the operating table. This was done in the ordinary quiet way, as used with people under an anæsthetic. Almost immediately the House-Surgeon noticed that the respiration had ceased. The patient was pulled back along the table, his head depressed, and artificial respiration resorted to. The femorals of both sides, as felt simultaneously by Mr. Bryant and Mr. F. Durham, had ceased to beat. The tongue was drawn forward, artificial respiration maintained about twenty-eight to the minute, Mr. Bryant assisting the Sylvester method by intermittent pressure on the thorax with the palms of both hands. The colour of the patient during this period was that generally noticed prior to sickness or heart-failure under chloroform. At this time (four minutes from the commencement of artificial respiration), no pulse at the femorals being apparent, four drops of nitrite of amyl, from a capsule freshly broken on lint, was applied to the patient's nose. Almost instantaneously the colour of the face improved, and the pulsation in the femorals returned; the patient came round very quickly, so as to be "lively enough now," as Mr. Bryant expressed it, and the operation was continued under ether, the pulse for some time beating well at 120, the respiration good, and quicker than normal.

Notes.—The case is a very instructive one throughout, as there was no doubt in the minds of all present that but for the means of resuscitation used the man would have died. The patient had urate of soda deposits in his fingers and toes, knee trouble of the same character, but otherwise seemed healthy. Subsequently his arteries were examined and found slightly affected. The chloroform was very pure (I have since tested it), administered fearlessly, and the efforts for resuscitation attended with complete success. Skinner's "inhaler" is convenient for hospital work, but the material used in it should be changed often. Struggling very often accompanies the administration of chloroform, especially if given boldly to strong, robust people. The struggling in this case was of that character noticed in persons addicted to stimulants. In either robust or alcoholic individuals is it right to continue the administration boldly? Most emphatically, No. The Edinburgh school may boast of immunity from death by their method, but I think their healthier patients and the purer air may explain much; but whatever it be, no one who administers chloroform to a purely London *clientèle* but will be driven by experience to give it most carefully. The patient should be moved as little and as gently as possible while under an anæsthetic, and also during recovery. In this case there was no excessive movement; the operation was on the foot; the patient had plenty of air. In operations about the jaw, in addition to the dangers consequent on the part, I have seen a difficulty arise from the pressure on the chest, of instruments, or a casual elbow or hand. Sylvester's method of artificial respiration is the best, with this modification: grasp the arm just above the elbow, instead of at the wrist. The reasons are obvious; and the respiration should not exceed twenty-five per minute. When sufficient assistants are present the artificial respiration can be much more efficiently performed by two—one standing on each side of the patient, and working one arm apiece. This is better than only one behind the head; the assistant that pulls forwards the tongue and keeps the lower jaw forward can then stand at the head. The tongue should be well pulled forward until the entrance and exit of air to the chest can be heard. The legs should be raised at right angles to the body; this assists the circulation, is an improvement (without interfering with the Sylvester) on the "hanging up head down" plan (which, however, is good in the case of children), and in addition relaxes the abdominal walls. There is no doubt of the efficacy of nitrite of amyl on the circulation; it is now prepared in hermetically sealed capsules, which can be obtained sufficiently strong to carry loose in the waistcoat pocket. I have broken only one so carried during the last twelve months. Those containing five drops are the most useful. I think the strength and frequency of the pulse after resuscitation on this occasion were entirely due to the amyl. Should the patient not come round in six or seven minutes, I should recommend immediate tracheotomy or laryngotomy, as I think the air passing direct through the tube is a stronger stimulant than when passing through the normal passages warm and already impregnated with chloroform vapour. If ice be handy, a piece put in the rectum can do no harm, and has been already noticed as of avail; it interferes in no way with the rest of the process. If the heart still continues beatless after the inhalation of the nitrite of amyl, I should feel inclined to puncture the pericardium, so as to reach the apex of the heart with an electric needle. This being unsuccessful, the substance may be pierced. In no case ought artificial respiration to be relaxed until the above measures have been tried, when, if the patient has undergone a very serious operation and a long anæsthesia, I trust the operating surgeon will always share the result with the administrator of chloroform.

ST. MARY'S HOSPITAL.

CASES OF EAR DISEASE.

(Under the care of Mr. GEORGE P. FIELD, Aural Surgeon.)

Case I.—Otorrhœa, Nine Years.

M. J. B., a little girl, aged ten, was brought to me at the hospital in August, suffering from a purulent discharge from both ears. Her mother stated that for nine years she had had a "constant running" from her ears, and that for the last four months the external ears had been gradually "ulcerating away." The smell from the discharge was so offensive that none of her schoolmates could sit near her. Her appearance was most repulsive, for the central portion of both ears was sloughing away from the constant irritation of the acrid discharge. She was very deaf on both sides. This case is typical of a class which is very common in aural

practice. The ears were dressed with calamine ointment, and the following treatment ordered:—Ears to be syringed six times a day with warm water, after which they were to be treated with a carbolic acid and sulphate of zinc lotion (five grains of each to the ounce); and a mixture of cod-liver oil and steel wine was to be taken three times a day. Her health improved rapidly under this treatment. In three weeks' time the discharge ceased entirely; shortly afterwards her hearing returned; and she left the hospital quite well. In some cases which give more trouble a weak solution of nitrate of silver (one grain to the ounce), applied by means of a probe covered with cotton-wool to the external meatus, has often a very beneficial effect.

Case 2.—Mastoid Abscess.

L. T., a young woman aged twenty-six, came to the hospital, November 7, suffering from an abscess behind the left ear. She stated that ten days previously she caught a bad cold, followed by severe ear-ache. Five days after, an abscess burst in her left ear, from which time she had had a very offensive discharge from the left ear. Two days before coming to me the discharge had lessened, and from that time she had suffered intense pain over the whole of the left side of the head, especially behind the ear. A deep incision was made over the mastoid, and the pus evacuated. She was sent up into the Manvers ward, and six leeches were ordered to be applied in front of the tragus, with the satisfactory result of entirely taking away all pain. A weak carbolic acid lotion was prescribed to be frequently syringed into the ear. The discharge gradually ceased, the perforation in the membrana tympani closed, and she was discharged November 28, well. This is one of the many cases showing the benefit that may be derived from—firstly, an early incision over the mastoid process; secondly, leeching freely; thirdly, constant washings with weak astringent applications.

Case 3.—Auditory Vertigo.

T. F., a postman, aged forty-one, was admitted into the Thistlethwaite ward, November 14, with a slight discharge from the left ear, and constant giddiness. If the ear was pressed he was seized with giddiness and vomiting, falling always to the right. He stated that when walking in the street attacks of the kind frequently came on; that he became giddy; but as he invariably fell to the right side he was able, in some measure, to guard against an accident. The discharge was treated with various astringent lotions, and he was ordered twenty grains of bromide of potassium three times a day, and counter-irritation behind the ear. Under this treatment he gradually improved, the attacks became less frequent, and in a month's time he left the hospital apparently well. According to Dr. Hughlings-Jackson, "There are two sets of symptoms: (*a*) vital (faintness, perspiration, irregularity of pulse, etc.); (*b*) locomotor (vertigo with or without reeling)." He attributes the former to disturbance of, or actual disease in, the cochlea division; the latter to disease or disturbance of the semi-circular canal divisions.

Case 4.—Pin in Eustachian Tube.

H. W. S., a clerk, aged twenty-one, came to consult me at the hospital on November 7. He stated that several years ago he injured the drum of his right ear with a piece of slate pencil. A few days ago he was picking the same ear with a small pin, when it slipped in, and he could not get it out again. The pin was seen distinctly by three medical men, who in endeavouring to remove it pushed it completely through the perforation in the tympanic membrane. It was then that he came under my notice. He complained of great pain in his throat at the lower end of the Eustachian tube, and occasionally, when his neck was touched, the pain became suddenly acute. As it seemed to be impossible to remove it, I suggested that he should eat a quantity of bread and swallow it in large pieces, with the hope that as the act of swallowing causes opening of the Eustachian tube (by contraction of the tensor and levator palati muscles), the pin might be released, and the bolus of bread assist to carry it onwards with comparative safety, at any rate, through the œsophagus. This treatment had the desired effect, for after a time he felt the pin move down his throat. He has never since suffered any inconvenience. The termination is not altogether satisfactory, for although the acute pain, made more intense by the slightest pressure, was altogether checked by the onward passage of the pin, nevertheless, as the patient has not wittingly passed it, its whereabouts is still a subject of speculation. This case shows how foreign bodies may pass through the tympanum, down the Eustachian tube, without giving rise to such severe symptoms as one would be led to expect. Instances are recorded of needles, the points of glass syringes, etc., passing through in the same manner. It is important to remember, in all cases of this description, that more harm than good is generally done by probing and by other violent attempts at extraction.

Case 5.—Hereditary Syphilis.

A large number of these cases, mostly females, have lately been under treatment at the hospital. A girl aged sixteen, now in the Manvers ward, is a typical case. Three years ago she suffered from an inflammatory affection of the eyes, followed shortly afterwards by ear disease—in fact, her eyes and ears have alternately been more or less affected. Her teeth are very jagged, and are highly suggestive of inherited syphilis. The medical man who sent her to St. Mary's informs me that she is one of a family of eleven, and that nine of her brothers and sisters died before they were four months old. The eldest child, however, is still alive and healthy. The father is described as being "very fast and wild." The tuning-fork is very indistinctly heard for a short time, and the watch only in contact with one ear. In cases of this kind various modes of treatment have been adopted without any satisfactory improvement. Mr. Hutchinson, seventeen years ago, in an admirable clinical memoir on "Certain Diseases of the Eye and Ear consequent on Inherited Syphilis," drew the attention of the profession to this subject. Many patients that I have treated, including the girl now in hospital, who seemed to be almost on the point of getting well, have rapidly sunk back again to a state of hopeless deafness. In some instances absolute loss of hearing takes place in a very short time; for hereditary syphilis is of all diseases the most rapid cause of complete deafness, and is also the least amenable to treatment.

Case 6.—Chronic Aural Catarrh.

Sergeant F., aged forty-two, in the Army Hospital Corps, was sent to see me, November 14, from Netley, by Surgeon-Major Porter. He stated that he was stationed at Halifax in the winter of 1868; the cold was intense, and he suffered very much from it. His hearing gradually became impaired, and he was sent home, but has been more or less deaf ever since. When he came to the hospital he could hear the watch one inch right, two inches left. The Eustachian tubes were narrowed, and the tympanic membranes considerably thickened, and there was a condition of general hypertrophy of the mucous membrane. He was ordered to take three grains of iodide of potassium three times a day; and a warm solution of the same drug (ten grains to the ounce of water) was injected regularly every morning until December 8, when he left for Netley, hearing fairly well again. Some days before he left he went to church and heard a sermon—the first time for seven years. He also heard perfectly well at the theatre, for his hearing distance had increased two feet on one side and three feet on the other. This case was a very favourable one for treatment, but it shows what good results are occasionally to be gained, when the membrana tympani is thickened, by repeated injections of fluids suitable to the case.

How to Introduce the Hypodermic Needle.—Dr. Allen writes—"Placing the palm of the left hand beneath the patient's arm or leg, with the thumb and fingers draw the skin tight over the upper aspects of the limb, in which state you have an unyielding integument. Then, holding the instrument with the thumb and index finger of the right hand, place the bevelled side of the point upon the place you have selected, at a proper angle with the surface; and, with a quick forward movement of the thumb and index finger only, keeping the hand immovable, thrust the point through the skin into the subcutaneous tissue. This manœuvre, if done quickly, will inflict little if any pain, and the patient will thank you, especially if he has previously been subjected to the almost universal method of pinching up a fold of skin for the puncture."—*New York Med. Record*, January 5.

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Medical Times and Gazette.

SATURDAY, FEBRUARY 16, 1878.

MANCHESTER AND THIRLMERE.

These are the days of gigantic water schemes. London—or rather the Board of Works—seeks to drain the home counties of pure water to put out fires; Manchester desires to tap one of our well-known and most beautiful lakes; and Liverpool wants to make a lake of its own. Nor is it likely that other towns will be behindhand in this race for filling the pockets of engineers and contractors. But Manchester could hardly be itself without an *arrière pensée*: its aim to civilise the world by means of adulterated cotton goods has now its counterpart in the attempt to sacrifice one of the loveliest of the English lakes for the exigencies of its neighbours and the welfare of its own finances. At all events, such has been the interest excited by the scheme put forward by the Manchester Corporation, that it gave rise, when the Bill came before Parliament for a second reading, to a debate which might be considered good even in these times of anxiety and unrest.

Let us try to put the issue fairly before our readers. We have long wished to do so, but have refrained until the proper opportunity arose. Now we think it has come, and we may speak our mind. Manchester, at the present time, including Salford and other more distinctly suburban townships, has a population of about 800,000, though Manchester proper, on the rates of which the money for the new scheme is to be raised, only contains about 360,000. Works are in progress, and will soon be finished, which will supply to this district, now covering eighty-four square miles, 25,000,000 gallons of water a day. Taking these figures as our basis, it is clear that at present Manchester has far more water than is wanted for such a population even as 800,000. True, say the Town Council, but in ten years' time Manchester will be very much larger, and will require very much more water, and so we desire to take time by the forelock and get our fresh supply of 50,000,000 gallons additional per diem from Thirlmere. Here we have to deal with something purely speculative—the enormous increase of Manchester that is to take place in the next ten years, and which is to demand a supply so much larger than that now afforded, must be entirely unprecedented; for even in recent years, when trade was at its best, Manchester did not advance very fast in point of population. Take a few more figures, and we may find out what is the secret of the demand. For water supplied as at present by the Corporation Waterworks the following were the sums to be paid in 1877:—

Public rate	£25,555
Domestic rate	24,976
Sold for trade purposes within the city	45,036
Sold for general purposes outside the city	72,838

These figures speak for themselves. The present water-supply is not consumed by the population, it is either used for trade purposes or sold outside the city for general purposes. What Manchester wants more water for is evident; the Corporation want to supply more customers. They have plenty of water for their own ratepayers; nevertheless, they would gladly saddle the ratepayers with the responsibility of a debt of four or five millions, in order that by a trading speculation they might supply more customers, make a greater profit, and so keep down Manchester rates. Were the present scheme allowed to pass, the Manchester Corporation would become one of the largest, if not the largest, dealers in water in the kingdom, and would acquire as an estate, with which they might work their will, one of the fairest portions of our country.

Next, as regards Thirlmere what can be said? The foundation of the opposition to the scheme is simply what we have said. Thirlmere is very beautiful; its beauty is a part of our national wealth, and should not be put at the mercy of Goths and Vandals. For Manchester says she is going to beautify Thirlmere; and if anyone will care to turn to our observations, made not so long ago, on Mancastrian ideas of beauty as exemplified in their latest buildings, he will have some notion of our dread of such improvements on nature as are proposed. These may be very briefly summed up thus: Manchester is to build a great dam—which will be irregular, after the fashion of nature—across the lower end of Thirlmere. This dam will raise the lake many feet above its present level during the winter, whilst in a dry summer it will be correspondingly lowered, leaving broad tracts of naked muddy beach all round the lake or reservoir. By way of compensation the Corporation propose to make the embankment more natural than life, and to form a new road round the lake. As yet we do not understand that a new hotel is actually included in the programme.

It has long been to us a serious question, how far it is just, in a country where water is scarce or plentiful, that one district should be allowed to tap the supplies of another, and allow its own to run to waste for the sake of avoiding all trouble in keeping its own supply pure. Anyone acquainted with Lancashire knows the plentiful supply of water afforded by its dripping clouds. Everyone knows, by report at least, the foulness of its rivers. Why not do something towards improving the water-supply for trade purposes by keeping these streams pure? At all events, in the district between Lancashire and Yorkshire are miles and miles of hill and dale, where water may be gathered *ad libitum*. These are the true sources of water-supply for the adjoining portions of the two counties.

It is fortunate that such schemes as that of the Manchester Corporation, and certain others we could mention, have to come before a body like Parliament, where something besides petty local considerations have sway. Were it not so, we should have just fears for all our lake districts, as well as for our ratepayers' pockets; but the scheme has been referred

to a special Parliamentary Committee, by which the whole question will be sifted; and, as one of the outcomes of its report, we hope we shall have then heard for the last time of the ominous conjunction of Manchester and Thirlmere.

MEDICO-LEGAL POST-MORTEMS IN SCOTLAND.

We have received a somewhat extraordinary printed document with the following heading:—

"Medical Post-mortem Examinations in Scotland. (*From the British Medical Journal.*)"

It is difficult to know what this exactly means, for if the word "medical" is not used here in contradistinction to the word "surgical," which we can hardly suppose to be the case, the title is sheer nonsense; it is just possible, however, that the title was meant to stand as it does.

But what are we to say to the sub-heading "(From the *British Medical Journal*)"? This is worse than nonsense, for it is untrue. On turning to the columns of that periodical of last week, we find a short article of a perfectly fair tone on the subject of "Judicial Post-mortem Examinations in Scotland," but it is distinctly stated in this article that the correspondence on which the article is founded is so lengthy that it was not possible to find room for it in the body of the journal, and we are not aware that any special supplement containing this said lengthy correspondence has been published. In point of fact, the whole thing has been, as far as we can see, copied from the *Aberdeen Journal* of Monday, February 11, which has also been forwarded to us. It is also perfectly clear that the communication of these matters to the *Aberdeen Journal* was the work of Dr. Angus Fraser, one of the correspondents in the dispute narrated; but we trust that it is not to him that is also due the circulation of this pretended reprint from the *British Medical Journal*. He could hardly have been the inventor of the title prefixed to the whole.

It is usually best in such cases to let each man tell his own story. Dr. Angus Fraser considered himself an aggrieved man because he had not been called upon to make a certain post-mortem examination which he had deemed necessary, and which had by the Procurator-Fiscal, or public prosecutor, been entrusted to other hands. Accordingly, he makes the following statement in a letter to the Procurator-Fiscal:—

"On the morning of December 5, I, being the family medical attendant, was sent for between five and six o'clock to see Robert ——, —— street, whom I found dead in bed, he having gone to bed the previous evening in apparently good health, and having been found dead a short time before I saw him, by his wife, who was sleeping beside him. She was not sure if he was dead, and therefore sent for me. I stated to the widow, on the forenoon following the death, that I thought it would be well for me to make a post-mortem examination to ascertain the cause of death, that I would do so on the forenoon of the 7th, and that I would see you as soon as I could, and explain the state of matters to you. I was not able to see you on the day of the death. The examination was made by Dr. Frank Ogston, although I am informed the remit was to 'Dr. Ogston,' by which of course is meant the oldest gentleman of that name in Aberdeen—viz., Dr. Francis Ogston, sen.; and I have not received any communication whatever either from you, or Dr. Ogston, or Dr. Frank Ogston, regarding the case."

To this, and a good deal more which need not be quoted here, Mr. Cadenhead (the Procurator-Fiscal) replied. He wrote thus:—

"This case was reported to me on the day of the death, viz., December 5, as one where a person who had retired to rest apparently in good health had been found dead in bed. It was stated that you had been called, had found the man dead, and could not certify the cause of death. It was not stated that you had seen him before his death at any time, or that you were his family medical attendant. It was at the same time verbally reported that you had spoken of the propriety of having a post-mortem examination, and that you might communicate with me in the course of the day.

"I accordingly waited till next day, viz., the 6th, and not having heard from you, I got a remit, and I proceeded with it in the usual way."

We are here face to face with a difficulty which is constantly cropping up on both sides of the border. One practitioner thinks he should have been asked to make a post-mortem examination, and accept the fee. The post-mortem is made by somebody else, who doubtless accepts the fee which would otherwise have gone to practitioner number one. We are afraid that, if we were to strip the affair of all circumlocution, we have here the gravamen of a common charge of misbehaviour against coroners and procurators-fiscal—viz., that they do not call in those who fancy themselves entitled to be called in to make such examinations and inquiries. In the present instance, however, Dr. Fraser puts it thus:—"My principal ground of complaint was that an unnecessary examination was made in a way very offensive to the feelings of the family of the deceased." Of course we are perfectly ready to accept this view of the case, though Dr. Angus Fraser himself, according to his own statement, considered a post-mortem examination necessary. He says so distinctly. We regret exceedingly that such a correspondence as this was ever laid before the public, especially through the medium of a local newspaper, however respectable; for though Dr. Fraser takes both broad and high ground in it, there is plainly an undercurrent of professional jealousy, as is shown when he dilates upon his superior standing in the profession to Dr. F. Ogston, jun. Such pettiness does not improve the flavour of the whole embroglio.

But this is not a question of professional standing at all. Either Dr. Angus Fraser has been contending for something justly his due, or for something not justly his due. In either case professional standing, provided there is due competency—about which there is not here the slightest question on either side,—has nothing to do with the matter. We should be loth indeed to go against the just rights of any member of the profession, but, as far as we can see, Dr. Angus Fraser has himself to blame for being overlooked on the present occasion, as is shown by the extract from Mr. Cadenhead's letter given above. Moreover, we hold most strenuously to the principle of having all such investigations conducted by one specially trained to the work, and this we believe has been the case with Dr. F. Ogston. We are also strongly of opinion that the practitioner who had been attending the patient should be associated in any such inquiry, but we cannot gather that Dr. Fraser had recently been in this position; and when a practitioner is only called in after death, he has by use and wont no claim or title to be employed in any further investigation. Where it is a rule to engage skilled examiners for such investigations, it is for the public good that this rule should be followed. It is a pity Dr. Fraser was not present at the post-mortem; but his own statement of his own conduct puts him entirely out of court, and the subsequent correspondence does not improve matters.

It may be all very well to get up a small sensation in a provincial town like Aberdeen, but, viewed by the calm light which distance lends, we cannot think that Dr. Fraser has improved his position by this protracted correspondence. We should have been glad not to be called on to comment either upon it or upon its mode and style of publication.

Truth, however, compels us to say that, with regard to this last especially, Dr. Fraser makes but a sorry figure. It is quite plain Mr. Cadenhead deprecated the idea of Dr. Fraser's publishing this correspondence, for it is equally plain that Mr. Cadenhead's letters were not written with a view to publication. However, Dr. Angus Fraser has kept his word, and the correspondence has been laid before the profession —through the medium of the *Aberdeen Journal*. Somebody has nevertheless been good enough to reprint and circulate it as extracted from the *British Medical Journal*. But there are journals and journals, even though both begin with a J.

ARMY MEDICAL DEPARTMENT REPORT.

Whether solely attributable to the diminished bulk of the volume we cannot say, but there would certainly appear to be more promptitude shown in the preparation of the annual Army Medical Department Reports than formerly; so that we have now before us the Report on the Health of the Army for the Year 1876, closely following, for the first time, the similar compilation for the sister service, and not dealing with a period so remote as was the case with each of the former volumes. The average annual strength of the troops serving at home and abroad in 1876 was 169,197 non-commissioned officers and men; the admissions into hospital in this force were 166,319, and the deaths 1921. The rates represented by these numbers are—for admissions into hospital, 983; and for deaths, 11·03 per 1000 of the average annual strength, the latter being calculated on a strength of 174,220, which includes detached men. As in the preceding year in the United Kingdom, the highest rate of admissions into hospital is that for the Eastern District; it exceeds the rate of the Home District, the next highest on the list, by 207 per 1000 men, and that of the Curragh, noticeable as having the lowest rate, by 522·7 per 1000. The admission rate of the Chatham District, which in 1875 was below that of any other, is the lowest but one in the present year. Compared with 1875 the Eastern, Western, Chatham, Aldershot, North British, and Channel Islands Districts have higher rates of admission, the remaining districts having lower ones. A carefully prepared table shows that in a group of fourteen stations under the working of the Contagious Diseases Acts there was a reduction of admissions to the extent of 2 per 1000 men on the corresponding rate for the preceding year; whilst in the contrasted group of fourteen stations unprotected by the Acts there was an increase of 3 per 1000 men. The results obtained by a different grouping of the station in the United Kingdom are shown in the following table:—

	Average annual strength.	Admissions into hospital for primary venereal sores.	Rate per 1000 of strength for admissions.
Fourteen stations under the Acts	48,620	1,622	33
All other stations	38,073	2,416	63

Moreover, in the reports of the medical officers in charge of the different districts, the working of the Acts is again highly spoken of in the localities where they are in force, and the want of them is greatly deprecated at such stations as are not protected by this wise piece of legislation.

One point in the Report for 1876 calls for special notice: some time since, on the recommendation of the medical staff, gymnasia were established at all large military stations, attendance being made compulsory on the part of young officers and soldiers, and during the year under notice this has not only been cheerfully complied with, but the gymnasia have proved places of attraction for recreation, and most of the principal medical officers of districts bear testimony to the great advantage which has been derived from them in developing the physical condition of the men, and invigorating their constitutional powers. It is much to be hoped that the testimony of experienced medical officers as to the inefficiency of the present meat ration for soldiers actively employed, will eventually be considered by the military authorities; we are distinctly told that when the bone has been removed from the three-quarters of a pound allowed per man, and the meat has been cooked, scarcely six ounces remain for the meal. This is certainly not sufficient for men in full employment, and, if only as a means of reducing the large ratio of admissions into hospital, would be well worth the attention of the Secretary of State for War and his advisers; added to which, a more liberal scale would certainly not have a deterrent effect in procuring enlistment.

Writing from the Eastern District, the inspecting medical officer says—"In last year's Report allusion was made to troops arriving at home from India in the depth of winter being sent to such exposed stations as Colchester and Warley, and further experience only tends to confirm the opinion then given—viz., the desirability, if practicable, of quartering them in more sheltered localities until the summer season has fairly set in." It will be remembered that the Indian trooping season commences in September and ends about March; consequently, all regiments relieved after their tour of Indian service arrive in this country at the most rigorous time of the year, and it would seem that the War Office would do well to consider the very sensible suggestion here put forward.

Turning to the reports from foreign stations, we find that at Malta a comparative table of diseases during the last five years shows a considerable reduction in the ratio of admissions during 1876, but an increase in the mortality caused by the greater prevalence of enteric fever. The ratio of invaliding has been considerably less than last year. No alteration is stated to have been effected in the generally defective condition of the drainage of Malta, but as the Imperial Government has consented to contribute towards the total expense, it is presumed that general improvements will be carried out, and on the Cottonera side these, it is hoped, will be completed in March of the present year.

The health of the troops in the Dominion of Canada was very good during the year 1876. Although the strength considerably exceeded that of the preceding year, the admissions to hospital were fewer, and the ratio of deaths due to disease was only 2·84 per 1000. The invaliding, however, exceeded that of 1875 by twelve men. Surgeon-Major Oliver, in his annual sanitary report, has called attention to a simple device by which all boilers, of either old or new pattern, in military kitchens, may be converted into "steamers"; by which means, also, the accumulation of steam in those places may be effectually prevented at a trifling expense.

The record of the West Coast of Africa for the year under notice tells its own tale; the average annual strength of the officers serving in the command was thirty-three, amongst whom there were fifty-seven attacks of illness, and one death; most of the former were due to paroxysmal fevers; the death was that of an officer from the Cape Coast Station, and was from dysentery. Six officers were invalided during the year, three on account of fevers, one from dysentery, one from hypochondriasis, and one from debility.

The prevailing disease at the Cape of Good Hope has been, as usual, venereal affections, causing nearly one-fourth of the total admissions to hospital during the year. No epidemic has, however, occurred amongst the troops, notwithstanding that influenza and cerebro-spinal meningitis have been prevalent amongst the civil population throughout the colony.

The health of the troops at the other stations abroad calls for no comment, and the sanitary statistics of India we

generally deal with separately; it only remains, therefore, to add that in the appendix to the report will be found papers on Hygiene with Analyses of Water, by Dr. de Chaumont; Operations and Cases at Netley, and Chloroform and Ether at Netley, by Surgeon-Major Porter; Fæco-Malarial Fever, by Surgeon-Major Donaldson; a case of Intestinal Obstruction, by Surgeon-Major Hensman; and several others, some of which we hope to notice in fuller detail.

THE WEEK.

TOPICS OF THE DAY.

At a recent meeting of the City Commission of Sewers, Dr. Sedgwick Saunders, the Medical Officer of Health, reported that during the week three cases of small-pox had occurred, two of which had proved fatal, two cases of fever, and five cases of scarlet fever. Many of these cases had been under the treatment of medical men attached to the dispensaries for some time before their existence was notified to Dr. Saunders, and occasionally his only sources of information were the weekly mortality returns. In his official capacity Dr. Saunders wished to point out the great inconvenience and possible danger to the general health of the City which this delay occasioned, and he hoped that something might be done in future by which such delay might be prevented. He also called the attention of the Commission to a dangerous practice which had arisen, of dustmen occasionally removing, from the dwellings of the poor, beds and mattresses upon which patients suffering from fever and contagious diseases had died, without any attempt at disinfection having previously been made. These articles, when thus removed, were mixed with the general refuse and taken to Letts' Wharf, where large numbers of persons were employed, all of whom were consequently exposed to the chance of contagion. He suggested that the Commission should issue an order discouraging the practice.

Some time since it was determined to form an Institute of Chemistry for Great Britain and Ireland, which should be to chemists what the Colleges of Physicians and Surgeons are to the medical profession, and the Institute of Civil Engineers is for civil engineers; and after many difficulties the first meeting was held on the 1st inst., at the rooms of the Chemical Society, Burlington House. It was at first imagined that the objects sought to be obtained might be secured by establishing a separate branch of the Chemical Society, but finally the present terms of the articles of association were agreed to, and, as incorporation with a charter was found impracticable, the Institute is enrolled under 30 and 31 Vic., chap. 131, sec. 23. The Institute has the power to appoint examiners as to the fitness of candidates for its membership, and there are already 225 members and 142 associates. Professor Frankland, F.R.S., who has been appointed the first President, presided at the meeting, and in the course of his address drew attention to the fact that under the Pharmacy Act of 1868 no one, not even the President of the Chemical Society, may call himself a chemist unless he is duly registered as a pharmaceutical chemist.

There seems to be some hope that we shall before long be well provided with volunteer ambulance trains, and bearers properly instructed and drilled for service in the field. This volunteer force is now undergoing practical instruction, and last week the Order of St. John of Jerusalem held a public meeting for the purpose of explaining the work already done in this direction. Sir E. Lechmere presided, and in opening the proceedings gave a short, and not altogether unnecessary, history of the Order, which he said was a branch of the order of the Knights of Malta. The most recent work which this branch had undertaken was that of ambulance aid in times of peace and war, and it aimed at creating throughout the country the skeleton of a body which in an emergency might be brought into working order at the shortest possible notice. There are at present three centres—viz., Sevenoaks, Woolwich, and Chelsea. In Woolwich the movement has met with signal success. The movement invites the aid of all classes of persons, both civil and military, and is said to have been heartily taken up by the ladies.

At Chester Assizes, last week, a woman named Heesom was put upon her trial for causing the death of her mother and two of her children by administering arsenic to them. We recently alluded to the case as one in which the then alleged crimes had been committed for the purpose of obtaining sums of money for which the unfortunate victims' lives had been insured. The bodies had all been exhumed, and at the trial the presence of arsenic in all three of the stomachs was proved, as much as fifteen grains having been found in one of the children; it was also shown that some years ago the prisoner had worked at a glass manufactory where white arsenic was used. The case was considered so important that the Treasury authorities undertook the prosecution, and on a verdict of guilty being returned, the judge, in passing sentence of death, remarked that it was a case of almost unparalleled atrocity. The prisoner pleaded pregnancy, a jury of matrons was empanelled, and it being found on examination that this was the fact, execution was delayed until she shall have been delivered.

The Town Council of Brighton have decided to adopt a scheme for improving certain areas in the borough, under the powers conferred by the Artisans' Dwellings Acts. The matter was originally brought before the Council by a report from the Sanitary Committee, which represented that the Act might be beneficially brought to bear on nearly fifty different courts and alleys. The district sought to be dealt with is situated at the eastern quarter of the town, and is principally occupied by persons of equivocal character and the very poorest classes of the community, the unhealthy nature of the dwellings having a very decided effect upon the death-rate. The consideration of the report had been adjourned to last month, but it has now been resolved that the report of the Sanitary Committee shall be adopted, and that the courts and alleys communicating with eight streets shall be dealt with.

The special correspondent of the *Golos* telegraphs from Tiflis, under date 30th ult., that, "according to the official report furnished by the Armenian Census Commission, the number of sick Russian and Turkish soldiers, chiefly typhus patients, in Asia Minor at the present moment is as follows:—Kars, 5000 men; Hassan Kaleh, 7000; and Erzeroum, 12,000. In Tiflis the typhus plague is increasing."

The fiftieth annual meeting of the Royal Free Hospital, Gray's-inn-road, was held last week at the Hospital. During the past year a new wing containing three large wards with accommodation for fifty additional beds had been erected, and comprising also an entirely new out-patient department. In addition to this the committee have resolved upon erecting a second block of new buildings, which will consist of nurses' rooms, isolated wards, etc. The number of patients received in the indoor department during the past year was 1369; but during the same period the number of out-patients had decreased owing to the extensive building operations which have been in progress. Legacies amounting to £14,037 were announced at the meeting as having been received during the year, and, if a rumour which we have heard turns out to be correct, the funds of this charity are likely to be enriched before long with the munificent

legacy of £40,000 bequeathed by a person of property lately deceased.

No one, of course, for one instant imagined that the proposed alteration in the method and management of the metropolitan water-supply would be allowed to become law without numerous expressions of assent and dissent, and last week an adjourned meeting of the representatives of London vestries and district boards was held at the offices of the National Chamber of Trade, Strand, to consider the subject. Bethnal-green, Lambeth, Kensington, St. James's (Westminster), St. George's-in-the-East, St. George-the-Martyr, Bermondsey, Islington, St. Martin's-in-the-Fields, Fulham, the Strand, and St. Giles's, were amongst the districts represented at this meeting, which had been adjourned from a former occasion in order that the delegates might have an opportunity of consulting their several boards as to the resolutions proposed. The following resolution was upon this occasion carried with only two dissentients:—"That, in the opinion of this meeting, it will be to the interests of the ratepayers and consumers that the undertakings of the several water companies should become the property of the Metropolitan Board of Works." A second resolution was next proposed and carried unanimously:—"That the scheme set forth in the Metropolis Water-Supply Bill is premature, and that it should not be proceeded with at present." A sub-committee was then appointed, which was empowered to request an interview with the Parliamentary Committee of the Metropolitan Board of Works with regard to the second resolution.

Our contemporary the *Globe* publishes a letter from an occasional correspondent at the Cape of Good Hope, containing the following statement:—"We are at our wit's end for army surgeons; there are not even sufficient for all the field hospitals, and the General has authorised the employment of any civil practitioners who can be got, at an expense of from, I believe, two to five guineas a day, so that the Government is put to an expense of about £7000 a year for the surgeons in the field at present." There is no doubt that the Army Medical Department is, at the present moment, short-handed, but we think it will be found on inquiry that there is no dearth of surgeons for the treatment of the regular troops employed at the Cape. It must be remembered that the force opposing the Kaffirs is largely composed of colonists and volunteers, and this portion of the force, having no regular organisation, may very likely be suffering from the want of medical officers. Will Mr. Hardy require many more proofs to convince him of the utter unpopularity of the Army Medical Service? Or will the resignation of Mr. Mullen, the Herbert prizeman, and the fact of only about half the number of candidates required to fill the forty vacancies recently advertised presenting themselves for examination, induce him at last to reflect that there must be something serious which requires alteration?

Meetings taking either side of the Russo-Turkish quarrel are among the topics of the day, and we may therefore record here the fact that the medical students of the metropolis amused themselves with holding an anti-Russian demonstration meeting in Trafalgar-square on Thursday last week. It is said that 3000 medical students were present, but we do not know who is responsible for the numbers given, nor who called or managed the meeting. The students, however, passed, with enthusiasm, a resolution in favour of war with Russia, and proceeded to Downing-street to present it to the Prime Minister. Finding that he had gone to the House, they also went there, and succeeded in obtaining an interview with the Home Minister, who was exceedingly courteous, and received their resolution; and moreover, we believe, gave the young gentlemen some very good advice, nearly, if not quite, in the immortal words of the great General Bombastes Furioso—"Begone, my brave army, and don't kick up a row!" The students wisely followed the advice given, and so "all's well that ends well"; but we hope they will not take to demonstrating—in that way, at least,—for once is quite, if not more than, enough. We must say, however, that, if we are to believe the Parliamentary reports, there was found in the House of Commons a member to exceed in foolishness the silliest of the medical students, for he, in condemning the resolution passed by them, insinuated that they desired war because it would give them professional work!

BREAD AS AN ARTICLE OF DIET.

In the Appendix to the Army Medical Department Report, Professor F. de Chaumont gives the results of several original investigations regarding the weight and relative proportions of the constituents of bread. Both from a physiological and from a hygienic point of view, the questions discussed are of great interest and importance, especially in regard to the rations of soldiers, or other dietaries of which bread forms an important item. The first point is, how to reckon the weight of bread with reference to the length of time it has been baked. This involves the question of the average loss undergone in cooling and the subsequent process of drying. Dr. de Chaumont finds that, on an average, an inside loaf of a batch, with only top and bottom crust, loses within the first three hours—that is, during the process of cooling—about 3 per cent. of its weight, and about 4 per cent. after the first five or six hours. An outside corner loaf, with four sides crust, loses 2 per cent. in cooling—*i.e.*, in the first three hours; and the loss is but a small fraction greater at the end of five hours. A cottage loaf, again, with the outside all crust, loses only about ¾ per cent. in cooling, and no more than 1½ per cent. in five hours. It is thus evident that the amount of crust has great influence on the weight—first, by preventing evaporation; and, secondly, on account of there being originally less water in the loaf. The practical conclusion is that the ration should be well baked for the two reasons—(1) that the soldier may get as much food as possible in a given weight of bread; and (2) that the loss of weight by drying may be delayed as long as possible, so that the bread may continue fresh and palatable. The second question, therefore, is already seen to be one of great importance—viz., the determination of the relative proportion by weight of crust and crumb in different specimens of bread. It used to be laid down that the crust should not be less than 30 per cent.; but this proportion seems to be seldom attained. Dr. de Chaumont found that such a percentage was reached only in the case of the four outside corner loaves of a batch with four sides crust; while in inside loaves, which have only two sides crust, and which form the great majority of the loaves in a batch, the mean proportion of crust was found to be as low as 16·8 per cent. of the total weight. Now, when it is borne in mind that the percentage of water-free solids, as has been determined by Dr. de Chaumont, is about 90 in crust, and only about 63 in crumb, it will be seen at once that, with equal quantities of bread, loaves containing the largest amount of crust supply the largest amount of nutritious matter. What has been found to be the average amount of crust is therefore much smaller than it ought to be, and the practical inference is that there is insufficient baking, or that the bread is baked in too large batches. On the whole, therefore, "there would be a clear gain to the soldier if his bread were more baked; he would get better weight, it would keep better, and would be more nourishing. On service the plan of preparing *pain biscuité* (as in the French army) might be advantageously adopted, it being

decidedly more palatable and digestible than biscuit." The amount of acidity in bread—a point of some interest, which has never before been definitely determined—has been investigated for the first time by Dr. de Chaumont. Taking a known quantity of bread, he digested it in a certain amount of water, and then treated with standard alkaline solution, cochineal being used as the indicator. This process showed an amount of acidity equal to 4·06 grains of crystallised oxalic acid, or 3·85 grains of glacial acetic acid, for each pound of (fresh) bread—an estimate of acidity which may be provisionally adopted as the standard proportion.

MORTALITY OF ENGLAND FOR LAST DECEMBER QUARTER.

Amongst the varied information contained in the Quarterly Return of the Registrar-General for the period ended December 31 last, one item at least is of a satisfactory nature—viz., that which refers to the mortality of England and Wales. During the last three months of 1877, 124,494 deaths were registered, equivalent to an annual rate of 20·1 per 1000 of the estimated population in the middle of the year. This death-rate, although a shade higher than the exceptionally low rate in the last quarter of 1876, was 1·8 per 1000 below the average in the corresponding quarter of the ten years 1867-76. The male death-rate was equal to 21·3, and the female rate to 19 per 1000 estimated to be living of each sex. In equal numbers living the deaths of males was as 113 to each 100 deaths of females; in the corresponding periods of 1875 and 1876 the proportion of the male to the female death-rate was as 112 to 100. In the principal urban population of England and Wales the death-rate in the quarter was equal to 22·2 per 1000, whereas in the rural population it did not exceed 17·2; the urban rate was 2·2, and the rural rate 1·4 below their respective averages for the corresponding period of the last ten years. In equal numbers living the deaths in the urban were as 129 to 100 in the rural districts; the average proportion in the ten preceding December quarters being 131 to 100. The return shows that the comparative excess in urban death-rates appears to be decreasing, and ascribes this result to be mainly owing to the marked decline of mortality in our largest towns. This piece of official information affords a convincing proof of the fact to which we have repeatedly called attention—viz., that sanitary legislation is undoubtedly beginning to be considered of importance by local authorities; and as it is in the largest towns that the marked decline of mortality is noted, so it may fairly be argued that in large communities the increase of intelligence and education is being brought to bear on this important subject, and leads us to hope that eventually the authorities of smaller towns will follow an example which must result in a much more nearly equalised death-rate for urban and rural populations.

LECTURES BEFORE THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

The second lecture of this year's course of annual scientific lectures was delivered in the large hall of the College of Physicians, Kildare-street, Dublin, on Monday, February 11, by Dr. Walter Smith. After adverting to the principal reasons for the pre-eminence now accorded to the galvanic current, the lecturer referred to the methods followed in the application of galvanisation, and the opinion was expressed that, from a clinical point of view, far less importance attaches to the influence of the direction of a current than is often taught. The lecturer next discussed the question of the direct action of electric currents upon the central nervous organs, and the arguments were detailed which demonstrate that it is possible to pass a galvanic current directly through the brain and spinal cord, and that the intensity of the current is greatest in the right line joining the two poles. In reference to galvanisation of the cervical sympathetic, Dr. Smith endeavoured to show that, as matters stand at present, the gravest doubts beset the possibility of directly irritating the sympathetic to any purpose, as well as the results to be gained from such a procedure under physiological and pathological conditions. A summary of the principal relations of the motor system to electricity was given, and the lecturer then proceeded to treat of the applications of electricity to diagnosis and prognosis. His remarks referred to four groups of cases:—(*a*) Central cerebral affections; (*b*) central spinal affections; (*c*) peripheral nerve lesions; and (*d*) myopathic lesions. In relation to spinal affections, attention was called to Charcot's recently published views as affording a clue to the seemingly perplexing diversities met with in the course of electrical examinations. The concluding part of the lecture dealt with the modes in which the beneficial action of electricity is exercised. These were grouped under four heads:—1, Counter-irritation; 2, modifying and sedative action; 3, direct and reflex stimulation; 4, trophic influence.

THE EXCISION OF HARD CHANCRES.

Professor Auspitz, of Vienna (*Vierteljahrschrift für Derm. und Syph.*, 1877), has excised the primary syphilitic induration, or hard chancre, in thirty-three cases, as first recommended by Hueter in 1867, with the following general results:—1. In a large number of the cases no further syphilitic symptoms appeared, although at the time of the operation there was almost invariably indolent enlargement of the inguinal glands. This fact Auspitz regards as a proof that the initial sclerosis is not a pathological result of a pre-existing general systemic infection, but a starting-point or an original depôt for the infective material by which syphilis is transmitted. 2. In those cases where no secondary induration appeared after excision in the seat of the former chancre, there were, as a rule, no further symptoms of syphilis. 3. In some cases excision was followed by secondary induration and a general outbreak of cutaneous and other syphilitic phenomena, but here the probability is that either the whole of the original chancre was not removed, or that the disease had spread too far along the neighbouring bloodvessels before excision was performed. 4. In four cases the hard chancre was preceded by a soft sore, and in none of these did general symptoms follow excision. 5. The operation can be recommended as a preservative measure against general infection where the induration has been of short duration, where no lymphatic glands are indurated but the inguinal glands, and no other syphilitic symptoms are to be detected; and where the chancre is favourably situated, and can be properly dressed and attended to after the operation. 6. Further evidence is required to show whether excision exercises any influence on the duration or severity of the general syphilitic symptoms in those cases in which it fails to prevent their outbreak, but there are grounds for believing that it possibly may. On the whole, Professor Auspitz's results are extremely encouraging, and deserving of serious attention. "Prevention is better than cure" is an adage which is certainly applicable to the treatment of syphilis.

HEALTH OF THE CITY OF YORK.

In considering the report on the health of the city of York for the year 1876, put forth by Mr. S. W. North, the Medical Officer of Health for the locality, we find that the death-rate has gradually fallen from 24·9 per 1000 in 1874 to 23·6 per 1000 in 1875, and 18·4 per 1000 in the year under notice. The deaths from the principal zymotic diseases also show a large diminution, due, in a great measure, to increased

supervisior, as Mr. North observes that special attention was paid to the localities where cases of typhoid fever occurred, and in nearly every case unwholesome conditions were discovered, which were at once removed or modified. The standing defect in the city of York, however, according to Mr. North, is the existence of the midden system over a large area. Many of the worst have now been abolished, and water-closets substituted, and, in the case of new houses, a somewhat improved construction of the ash-pits has been insisted on, yet the state of the city in this respect is still far from satisfactory. For some reason not altogether apparent, builders appear to be consistent opponents to sanitary improvements. Thus, Mr. North remarks that continual diligence and unbending determination are necessary to enforce the carrying out of the Local Board's instructions in the erecting of new buildings and the altering of old ones. As yet, he says, all parties concerned in the erection of houses seem, to a great extent, either ignorant of the requirements of sanitary science, or unwilling to adopt them; the subsoil drainage is much neglected, and there is still need to insist that floors shall not be laid in contact with the soil.

PATHOLOGICAL SOCIETY OF DUBLIN.

At the meeting of the Pathological Society of Dublin, on Saturday, February 9, Dr. J. W. Moore, and subsequently Mr. Jolliffe Tufnell, Vice-President, in the chair, Dr. T. E. Little presented a specimen of diaphragmatic hernia from the body of an elderly female (sixty or seventy years of age), of whose case there was no clinical history. There was marked angular curvature of the spine in the lumbar region. On raising the sternum a tumour as large as a small closed fist was found occupying the lower part of the anterior mediastinum. It was composed of a sac of peritoneum containing a portion of intestine, and of omentum. An opening, almost circular, and with well-defined, sharp, yet somewhat thick edges, existed in the diaphragm behind and to the left side of the xiphoid cartilage. The hernia was composed of some fifteen inches of the transverse and descending colon. There were no adhesions connected with the gut, but its surface was marked with two constrictions indicating the points where the intestine became involved in the hernia. Dr. Little observed that diaphragmatic ruptures had three modes of origin—namely, (1) congenital, (2) traumatic, and (3) acquired, from yielding of some weak point in the muscular structure in the diaphragm. The traumatic origin of the hernia in the present case was inadmissible. Very few congenital herniæ were found at such an early age; so that the case was one where a hernia developed at a point at which there was naturally a deficiency of muscular fibre in the diaphragm, namely, between its muscular attachment to the ensiform cartilage and the last true rib. A very interesting question arose as to the influence of the angular curvature of the spine in causing the hernia by upward pressure of the contents of the abdomen. It was also noteworthy that the hernial sac was in close proximity to three serous membranes—the pericardium, the pleura, and the peritoneum. After a brief discussion, the Secretary (Dr. E. H. Bennett) read a communication from Dr. Williams, of Liverpool, on a remarkable case of venous occlusion. The Society then adjourned.

BRITISH MEDICAL BENEVOLENT FUND.

The annual general meeting was held on January 10, Dr. Birkett in the chair. The report showed that during the year 1877, £1575 was distributed in grants of immediate relief to distressed medical men, widows and orphans; 169 persons being directly, and about 195 indirectly relieved, making a total of over 360 persons benefited. Eight annuitants were elected during the year. Mr. Webber, who had held the office of Honorary Financial Secretary for several years, being compelled by ill-health to resign, was unanimously elected a Vice-President of the Fund, and a special vote of thanks was most heartily accorded to him. Mr. Herbert W. Page, 28, New Cavendish-street, W., was elected to the office vacated. Votes of thanks were accorded to Messrs. Churchill for their kindness in supplying a committee room; to the auditors, Messrs. T. H. Hills and E. Parker Young; to the editors of the medical journals; to Dr. Jonson, as Chairman of Committee; to the Treasurer and Honorary Secretary; and to Sir George Burrows, the President.

CÆSAREAN SECTION.

Dr. J. Braxton Hicks performed this operation on Tuesday night, at Guy's Hospital, upon a patient whose vagina was occupied by a scirrhous mass, which involved the rectum and recto-vaginal septum. The placenta was found beneath the line of incision, and the fœtal head at the fundus uteri. However, the membranes were reached from the lower end of the uterine wound, the head seized, and brought out first. There was very little hæmorrhage. The uterus contracted firmly after the removal of the placenta. The uterine wound was brought together by interrupted silk sutures closely placed, and a large catheter retained in the uterus, passing through vagina, to prevent accumulations and to facilitate injections in case of need. The child, slightly premature, was living up to last account.

THE DERMATOLOGICAL CHAIR AT THE ROYAL COLLEGE OF SURGEONS.

Professor Wilson brought his course of lectures on Dermatology, at the Royal College of Surgeons, this year, to an end on the 8th inst., and, as we stated last week would be the case, he then resigned the chair he has so liberally endowed. In concluding the last lecture he said:—"Mr. President and gentlemen,—I have now completed the present course of lectures, the ninth which I have had the honour of delivering from this chair; and I have at the same time completed the agreeable task which I set myself at the beginning of my undertaking—namely, that of going through the whole series of cutaneous diseases in regular succession, beginning with eczema, and ending with the disorders of the glandular system of the skin. Of the manner in which the subject has been dealt with, I have only to say that I have done my best, whilst, at least, I cannot be accused of having shrunk from the duty, or from the labour, so long as it remained unaccomplished. I have always endeavoured to keep in my mind that dermatology is a branch of general medicine to be practised by all medical men, and, therefore, that it ought to be assimilated as completely as possible with the two great branches of practical medicine—that of the physician, and that of the surgeon. I have regarded dermatology as a study intended for the benefit of mankind, and not of individuals; as the study of an organ placed by nature more nearly within our reach than any other, and, therefore, as one which should, as far as possible, be thoroughly known. I have taught that there is nothing special in the structure and pathology of the skin, and, consequently, that there should be nothing special in dermatological practice beyond that which results naturally from familiarity and experience of the subject; and I have further ventured to suggest that the best key to a knowledge of the unseen organs of the body would be a thorough knowledge of that which is constantly under our observation, viz., the skin. I cannot, however, take my leave without expressing my most grateful thanks to the Council of the College of Surgeons for their enlightened assistance in the foundation of a chair of dermatology within these walls; and I am sure

that they will have reason to feel that they have not misplaced their trust. Dermatology is already illumined by several—I may almost venture to say many—ardent, honest, and thoughtful workers, men who will never allow the soil to be idle or waste from want of observation until undoubted perfection shall be obtained. And I trust that the perfection of dermatology, with a constant recognition of the public good, will be the ruling objects of all those who may have the honour of filling this chair. I have now, Mr. President and gentlemen, to wish you not a short farewell, a farewell for a season; but, in fulfilment of an obligation which by turns befalls us all, a lasting farewell as an occupant of this chair."

OUR FRESH MEAT SUPPLY.

In connexion with the Government Bill for restricting the importation of live stock, the annual trade report of the Fresh and Preserved Meat Agency (Limited) possesses some points of interest. During 1877 the Agency's preserved meat imports showed a marked increase, comprising 23,536 tons, valued at £1,438,909, as against 14,043 tons, valued at £884,273, imported in 1876. This increase, however, proves not to have been a commercial success, and is therefore not likely to be maintained. But in the fresh meat importations there has been a much higher rate of increase, and here there is every prospect of the speedy and successful development of an important trade. The improvements already effected in the refrigerative processes for fresh meat transport have given an immense impetus to the success of this department. During 1877 the Agency's shipments of fresh meat (beef and mutton) comprised 30,029 tons, valued at £1,670,249, as against 13,306 tons, valued at £748,398, imported in 1876. These numbers, large as they are, are much below the published statement of the total fresh meat exports from America alone, which are given as about 46,800 tons. Such enormous additions to our supplies, likely as they are to be still further augmented, cannot fail to affect the price of meat, and materially aid in its reduction. In view of the improvements already effected in the system of refrigeration for fresh meat transport, so that animal food can now be imported more economically as dead meat than as live stock, it is probable that the matter will soon settle itself upon a commercial basis independently of any legislative enactment.

GRANTS IN AID OF CHEMICAL RESEARCH.

We learn, from our contemporary *Nature*, that the following grants have been made from the Research Fund of the Chemical Society to aid the carrying out of the researches named:—£50 to Dr. Wright, of St. Mary's Hospital Medical School, for the continuation of his researches in chemical dynamics; £25 to Dr. Armstrong, for an investigation of camphor and allied compounds; £20 to Dr. Carnelly, of Owens College, Manchester, for a research on the hydrocarbons diphenyl, ditolyl, etc., and their derivatives; £10 to Mr. P. Phillips Bedson, of Owens College, Manchester, for a research on derivatives of phenyl acetic acid, and on the constitution of isatin; and £5 to Mr. J. R. Crow, of Owens College, Manchester, for a research on the action of zinc ethyl on the chloride of vanadium.

DEATH FROM CHLOROFORM.

A death from the administration of chloroform occurred at the Liverpool Northern Hospital on the 7th inst. The patient was a sailor named Michael Cain, aged forty-one, and but for the result of an accident which had been followed by loss of sight in one eye, and the threatened loss of sight in the other, appeared to be a healthy man. To prevent the further effects of the sympathetic irritation which had already been occasioned by the eye whose sight was gone, surgical interference was deemed necessary; but before the administration of chloroform had been completed the heart's action ceased. At the post-mortem examination incipient fatty degeneration of the heart was discovered. The verdict by the coroner's jury was to the effect that death occurred "from failure of the heart's action consequent upon the administration of chloroform, the said administration having been skilfully and judiciously applied."

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

At the monthly business meeting of the College, held on Friday, February 8, the President read a letter from the Under-Secretary to his Excellency the Lord Lieutenant, stating that the Government were disposed to grant a supplemental charter to the College, conceding the right of instituting an order of membership on the same principles as the similar order in the Royal Colleges of Physicians of London and Edinburgh; and the right of election to the fellowship by a majority by ballot, provided that measures were taken to prevent the enactment of restrictive by-laws as to the election of fellows. The College was also requested to submit a draft supplemental charter embodying the foregoing provisions to the law officers of the Crown.

WORCESTERSHIRE MEDICAL SOCIETY.

The annual meeting of this Society was held on February 7. The report of the Committee showed that the work of the Society continued in this the eleventh year of its existence to be successfully carried on. The number of members is fifty-six. The ordinary meetings have been fairly attended. Several new standard works have been added to the library, which is now a very valuable one. Mr. Walsh was elected President; Dr. Sherlock, Vice-President; Dr. Strange, Honorary Librarian; Mr. Hyde, Honorary Secretary. A large party of members and friends dined together at the Star Hotel in the evening.

MEDICAL PARLIAMENTARY AFFAIRS.

Factories and Workshops.—On the motion for the second reading of this Bill, on Monday, February 11, Mr. Tennant moved a resolution affirming the desirability of all trades and manufactures employing the same class of labour being placed on one footing as respects protective and restrictive legislation. Certain anomalies in the existing law required, he said, to be removed, as respects education of children, hours of labour, sanitary supervision, etc. The textile trades had been singled out for special legislation in sanitary matters. These trades were not carried on in more unhealthy districts or under worse sanitary conditions than other trades. Heat, vapours, and other causes very injurious to the health of those engaged, were common to many other trades for which no legislation had been provided. He compared the death-rate in textile with that in non-textile districts, and showed that there was a balance in favour of textile trades. We may look forward to the time when masters and workmen will be allowed to make their own arrangements for sanitary and educational supervision. Sir C. Forster complained that under the sweating system articles were given out for manufacture at the houses of the working-classes. In this way diseases of a contagious character were widely disseminated. He suggested that the houses where the working-classes do work should be subject to registration and inspection in the same manner as common lodging-houses. Mr. Wheelhouse alluded to the same subject. Mr. Mundella supported the Bill especially because he noticed that it was proposed to put workshops and factories under the same category for legislative control. Mr. Cross explained that, far from restriction being contemplated as the object of the measure, any change proposed would be in the direction of greater freedom. To introduce absolute uniformity would fatally interfere with the working of the Sanitary Acts. To put all on the same level would be extremely hard in working throughout the country. He thanked hon. members for the cordial support given on both sides of the House. He hoped that the result would be a better understanding

among the people of the spirit and intent of legislative control. The result of the present measure would be seen in the condensation and incorporation of about forty-five separate Acts, which had made it extremely difficult for the lawyers to understand the scope of each Act. Mr. Tennant withdrew his resolution, and the Bill was read a second time.

Contagious Diseases (Animals.)—In the House of Lords, on Tuesday, February 12, the Duke of Richmond introduced a Bill to amend the Contagious Diseases (Animals) Act of 1869. The Government, he said, drew no distinction between the interests of the producer and the consumer, because they believed them to be identical. In 1866 there were two Acts relating to this subject—one for Great Britain, the other for Ireland. The Royal Commission appointed to investigate the subject introduced an Act to regulate the importation of foreign stock. By it the Privy Council could prohibit importation from countries in which disease was known to exist, and regulate the ports of debarkation, and the precautions with reference to slaughter at the port and the removal of sound cattle inland. Since 1872 no live animals could be brought from Russia, Germany, or Belgium. The 411 different local authorities had made regulations with a bold disregard to uniformity, and it was needful to remedy such defects. Since 1873 travelling inspectors had been appointed throughout the country to see to the disinfection of waggons, ships, and pens; and penalties had been recovered from companies neglecting to carry out these regulations at the instigation of these inspectors. In 1877 cattle plague made its appearance at Deptford and Hull, and rapidly spread to the metropolis; and stringent measures were adopted by the Privy Council, and the disease was stamped out. The Government was strongly urged to prohibit importation of all foreign cattle; but this he considered undesirable. A Committee was appointed to inquire into the matter, representing all interests in the United Kingdom. It had been resolved to authorise the central authority to deal with cattle plague—*i.e.*, rinderpest—should such a serious disease appear. With regard to other diseases—such as foot-and-mouth disease and pleuro-pneumonia—these, though extremely disastrous to live stock, did not require stamping-out legislation. These diseases had been very generally prevalent throughout the country for many years; and though not so fatal, they had been more injurious to the country than cattle plague. The remedy needful to check the spread of the disease must be as mildly prohibitive as possible, and yet there was little doubt, judging from the experience of the restrictions in force during the prevalence of the cattle plague, that some such regulations would be required. If they could stop the movement of cattle throughout the country for twelve months, the diseases might be stamped out. But he was not prepared to ask for its adoption, on account of the inconvenience and loss attendant on such a measure. The Committee had recommended that "all movement of cattle be prohibited, except under licence, in every district throughout the United Kingdom where either pleuro-pneumonia or foot-and-mouth disease exists; that fairs and markets be placed under similar restrictions, and absolute prohibition of movement be enforced against infected farms for periods varying from two months in pleuro-pneumonia to twenty-eight days in outbreaks of foot-and-mouth disease"; and this principle was embodied in the Bill for infected districts only. With regard to foreign cattle, it might be the most effectual course to require that all the cattle from abroad should come to this country in the form of dead meat, but he did not think there was sufficient ground for making such a stringent regulation. Bearing in mind that about a million and a quarter of cattle are imported annually, one cargo might accidentally be overlooked, and spread the disease all over the country. The Bill provided a medium course—viz., that all foreign cattle imported should be slaughtered at the port of landing. About a thirty-seventh part of the whole stock in the United Kingdom is imported annually from abroad. From the evidence before the Committee he thought there need be no alarm at the effect of the restrictions in respect of supply. All the Acts for Great Britain and Ireland would be consolidated into the Act, which would come into operation in 1879. Pleuro-pneumonia would be compensated for out of local rates. A provision was also inserted for regulating dairies and matters connected with the milk trade. The Privy Council had the power to forbid importation from any foreign country where disease prevailed. They had three objects in view—consolidation, uniformity, and extinction of disease. The Marquis of Ripon criticised some of the proposals. The Bill was subsequently read a first time.

Water-Supply of Manchester.—In the House of Commons, the Manchester Corporation Water Bill was, at the suggestion of Mr. Sclater-Booth, referred to a Hybrid Committee, so that the petitioners against the Bill might be heard before the Committee, and to inquire into the whole scheme for supplying Manchester with water taken from lakes or otherwise. After a short discussion the Bill was read a second time, and ordered to be referred to a Hybrid Committee. In this way a compromise was effected between those opposing and those for the proposed supply.

Sale of Food and Drugs.—Mr. Sclater-Booth, in reply to Mr. Anderson, said he was not prepared to introduce an amending Bill to the Sale of Food and Drugs Act, to provide against a contingency by which five judges in Scotland had decided that no offence could be proved on evidence taken from any article specially bought for analysis, the buyer not having been prejudiced in the purpose for which he bought it. Two of the judges also said that Section 6 did not prevent tampering with an article to the deterioration of its quality if no extraneous matter were added.

THE SICK AND WOUNDED IN THE RUSSO-TURKISH WAR.

(*Continued from page* 122.)

Report from Assistant-Commissioner W. L. Stoney, dated Pera, January 25, 1878.

My letters of last week will in part have prepared you for the sad news contained in the letters of Mr. Biliotti and Dr. Denniston. I very much fear poor Ryan will not pull through. If he should, however, Stokes and Stiven will soon be with him, and their instructions are to bring the survivors out of Erzeroum at once, and return to Constantinople with them as quickly as their condition will allow. There is no use wasting more valuable lives in a pest-house. Since January 12 I have no news of the western sections, but suppose Sketchley's, Attwood's, and McQueen's to be falling back with Sulieman's army, which by latest report is supposed to be near Lagos, on the southern coast. Of Busby's sections you may perhaps have had news through Russian sources; we have had none. McIvor's party from Adrianople have arrived here, and will remain for a few days until it shall be determined whether we are to have further fighting or not. If a resistance should be made on the lines of Constantinople, they will go out as an ambulance party. Having heard that a large influx of wounded was expected at Salonica, I telegraphed to the British Consul there to know if assistance was required. His reply was—"Authorities say no need now of assistance for wounded soldiers." Drs. Hayes, Lake, and Beresford having transported their hospital fittings and patients from Rustchuk, have established themselves in a konak given by the Governor at Varna. In the event of peace being proclaimed I presume that such of our surgeons as can be spared may be sent home at once, and those actually employed in hospital work as soon as their patients can be conveniently transferred to the care of the Turkish doctors. I should like, however, to have definite instructions from the Committee on this subject. You will perhaps telegraph to me, either assenting to this arrangement or to give me other instructions. You are in a better position in London to know what is to happen here, than we who are on the spot. All kinds of rumours are afloat, and still the panic continues.

Report from Mr. Biliotti, dated Trebizonde, January 18, 1878.

I enclose you a letter which has just arrived from Erzeroum through a private messenger. I grieve to say that it conveys you sad news of your party in that town. Poor Dr. Pinkerton is dead, and Dr. Ryan very ill. I transcribe a paragraph concerning them from a letter from the American missionary now at Erzeroum. I was down with poor Pinkerton a little time as he was in the last fearful struggle with the king of terrors. He was delirious for the last four days. Now poor Ryan is sick, and I fear may not live. Only one poor lonely fellow, Dr. Denniston, is not

sick. The sick have been so delirious that he had to sit in his chair night after night, and get what sleep he could in that position. The sisters of charity assist him in the daytime. I wished to help him, but he would not consent, for my sake; says he has had typhus, so he shall not be in danger. Pinkerton was buried in the Protestant Cemetery at Erzeroum.

Dr. Denniston's Letter to W. S. Stoney, Esq., Assistant-Commissioner, Stafford House Committee, dated Erzeroum, January, 1878 (*received January* 23).

There is just a bare chance of this letter reaching you, but I will risk its escaping the hands of the Russians. I really do not know how to begin to tell you the sad news I have for you. You knew that Williams, Pinkerton, and Morisot were very ill with fever. In all the fever was very severe and dangerous, and in Pinkerton's case I am sorry to say it has proved fatal. He took ill on December 27, and the fever shortly afterwards developed itself into a malignant case of typhus. He died yesterday afternoon, having been unconscious for more than a day, and delirious for five days. I enclose a full report of his illness and death for the benefit of his father and brother-in-law, who, I believe, are both medical men. Will you kindly foward it? The only address I can find is that of his brother-in-law, Dr. Duncan, 4, Royal-crescent, Crosshill, Glasgow. On January 1, Dr. Ryan took ill also with typhus, and he is now very dangerously ill. I do hope that his strong constitution will be able to hold out, but the fever is also of a very bad type, and it will require all his strength to weather it. He is now raving wildly, and knows nothing of what is going on. Morisot has been very seriously ill, but is now, I trust, out of danger, though very weak. Williams, I am happy to say, is convalescent, and will be up in a day or two. I myself have had typhus, and have seen a good deal of it, so there is no fear of my being knocked over with that fever at any rate. The responsibility of taking care of so many serious cases is very great, and I asked the French Consul to recommend a doctor, and he sent an old gentleman who has seen a great deal of typhus, and who is a very good doctor I hear. He calls every day, and thus the responsibility is divided. Two sisters of charity come every forenoon while I am at the hospitals, and an old Roman Catholic priest sits for four hours every evening while I rest, and then I watch for the rest of the night, so that I think all the patients get every justice. We have plenty of beef-tea and chicken-broth, and that is the diet best for them. The only thing I want is milk, and that we cannot get in sufficient quantity for love or money. Poor Pinkerton was buried this afternoon beside Guppy. The French Consul and his cavast, with all the hospital people and a file of soldiers, were present. Mr. Cole (the American missionary) read the service. The hospitals are of necessity somewhat neglected at present. Of course it is impossible for me to do justice to 500 wounded, but I do all I can in the way of superintending the Turkish surgeon and distributing stores, etc. The Yeni Khan (Stafford House Hospital) is far too large for one man to look after, even though there are a lot of dressers; and when Ryan recovers, as I trust he will, I shall advise him to hand over the hospital to the Turkish doctors and join me in the English Hospital, where there is abundant work for two. Typhoid, and of a very malignant type, is very prevalent at the Stafford House Hospital, as it is indeed everywhere. About 75 or 80 per cent. of the doctors here are ill with fever, and mortality is about 50 per cent. I am going to pay pretty sweetly to get this letter out, I believe, and it may fall into Russian hands. I hope they will let it go on, though. We daily expect a bombardment. I do wish that the Russians were in, so as to be relieved of all this anxiety. If I have an opportunity I shall add to this daily till the courier goes off.

January 10.—A man will get away either to-morrow morning or next day, so I add a short line or two. Ryan continues very bad—rather worse, in fact. This is the tenth day of the fever, and in all probability it will go on for four days yet. He has been delirious for three days. Morisot and Williams are slowly gaining strength. I do not go to the hospitals at all, but remain constantly with Ryan.

January 11.—A man leaves in an hour, so I add this in great haste. Ryan remains as yesterday, very ill; the rest improving. My report on Pinkerton's death is not yet ready. I shall send it afterwards.

Dr. McIvor's Report, dated Adrianople, January 12, 1878.

January 5: Patients remaining in hospital, 213; admitted during week, 48—total, 261. Patients discharged during week, 250; died during week, 11—total, 261. January 12: Patients remaining in hospital, none. Operations performed during week: One excision of metatarsal bone of right foot, one partial resection of tibia, one partial resection of femur, one partial resection of astragalus, one amputation of toes. On Wednesday, January 9, we received official orders that all patients were to be removed from hospital next day, which orders were accordingly carried out, although we protested against the evacuation of some patients who were unable to undergo the journey. On Friday we received notice that 1500 wounded were at the station. We proceeded there with all our staff as quickly as possible in our ambulance waggon, and attended to between 400 and 500 men. Owing to the wounded having objected to being dressed with cold water, we have made arrangements that hot water will always be in readiness on their arrival. We have retained our full staff on account of the near approach of the Russians and the likelihood of early fighting; in the meantime I will utilise them as far as possible in attending to the wounded at the railway-station.

Dr. McIvor's Report, dated Adrianople, January 19, 1878.

January 12: Patients remaining in hospital, none. 19th: Patients admitted during the week, 130; discharged, 130. On Sunday, January 13, a train of 300 wounded at station was dressed by us. On Friday morning we received official information from Djemib Pasha that it would be necessary for us to leave as soon as possible, as no resistance was to be made to the enemy by the garrison. I had scarcely received this information when all our servants left with the regiment of soldiers quartered in another part of the barracks. I proceeded immediately to the Commandant (Ahmet Eyoub Pasha), and asked him for means to transport our wounded to the railway-station, a distance of three miles. He promised to send some if possible. After waiting two hours we sent a second time to him, receiving the same reply. As the day was now far advanced, and still no appearance of arabas, we were obliged to proceed to the surrounding districts to search for them, and after much difficulty succeeded in obtaining twelve; into these we put all those patients who were unable to walk, and conveyed the remainder on foot to the station. After having disposed of our wounded, we removed the greater part of our medical stores to the British Consulate, and it being now night we were unable to remove the remainder. For our ambulance waggon and horses we could not procure transport by rail, and at twelve o'clock at night we sent them by road in care of our personal servants. The medical staff, owing to the kindness of the Vali, were able to obtain places in the same carriage as himself, and after a journey of four days and five nights we arrived at Stamboul safely. At Tchorlou, Dr. Kirker performed a Syme's amputation of foot with instruments contained in a small pocket-case. The doctors went into the fields, caught the oxen, yoked them up, and then carried down the wounded from the wards themselves. All the Turkish staff had fled. Firing from windows on the flying Turkish population was going on, and pillage on all sides, as they left.

THE REGIUS PROFESSORSHIP OF PHYSIC, UNIVERSITY OF DUBLIN.—We understand that Dr. Hudson, Physician-in-Ordinary to her Majesty in Ireland, was yesterday nominated by the University Council for the Regius Professorship of Physic. The final election to the chair rests with the Board of Trinity College, Dublin.

DEATH OF PROFESSOR CLAUDE BERNARD.—Professor Claude Bernard, the most eminent physiologist of modern times, died last Sunday evening, having scarcely attained his sixty-fifth year. "His discoveries on the functions of the pancreas, and on the glycogenic function of the liver; his experiments on the production of diabetes by the puncture of the floor of the third ventricle; and his researches on poisons, especially on curare, have," says the *Union Médicale*, "rendered his name immortal; while an infinity of other studies and innumerable publications would have sufficed to render it celebrated." In a future number we shall allude to the events of his life.

FROM ABROAD.

The Therapeutics of Migraine.

Under this title Dr. Seguin, President of the New York Neurological Society, read a paper at the Academy of Medicine of that city (*New York Medical Record*, December 8), one of the objects of which is to state the results of his experience of the treatment of the disease by the long-continued use of cannabis indica, as recommended in an able paper by Dr. Richard Greene in the ninth volume of the *Practitioner* (1872)—a paper of which he thinks sufficient notice has not been hitherto taken. The results of frequent trials of the cannabis by himself and his friends, Prof. W. H. Draper and Dr. Kinnicutt, during the last five years have convinced him that by its long-continued use migraine or sick-headache may be cured, much relieved, or mitigated in severity.

After allusion to the symptomatology and probable pathology (which he believes may consist in some lesion of those parts of the pons and medulla oblongata which give origin to the sensory roots of the trigeminus) of the affection, he goes on to consider—

1. *The Treatment of the Patient* by the removal of all relievable exciting causes, and especially in the correction of acidity, giving nitro-muriatic acid and alkalies and greatly reducing the saccharine and amylaceous foods. In cases attended by anæmia, debility, and imperfect nutrition, tonics (including cod-liver oil) may be required.

2. *The Treatment of the Attack.*—First, quiet and semi-darkness should be secured, the attempt to "fight out" a sick-headache being nearly always in vain, and possibly injurious. It is best not to allow any food, not even liquids, until towards the close of the attack, or even not until the next day. Nothing is lost by this, and much wretchedness is avoided. Ice, or ice washed in brandy, is grateful. When the patient has a warning (the aura of migraine) before nausea or pain, much can be done to cut short the attack or diminish its severity by guarana, caffeine, or croton chloral hydrate. Dr. Seguin has found guarana, when given in the early stages of the disorder, very efficacious in preventing or cutting short the attack, nearly one-half of his patients having derived great relief, several of them having been enabled to go about the same day. He has also of late derived good from caffeine in doses of two grains repeated hourly until three or four doses have been taken. He has used, too, croton chloral hydrate in doses of fifteen to twenty grains, repeated every hour for four doses, or until relief is obtained. It is best suited to cases in which pain is the first symptom, or when the case is only seen when it is fully established. In a few cases he has permanently relieved attacks by hypodermic injections of morphia (one-third to one-half of a grain) and atropia (one-sixtieth of a grain); but he resorts to this procedure with reluctance from fear of engendering the opium habit.

3. *Treatment of the Disease.*—Dr. Seguin is not aware of any treatment of this kind having been employed prior to Dr. Greene's remarkable exemplifications of the success of the cannabis. The principle of the treatment is to keep the nervous system steadily under a slight influence of the cannabis for a long period of time—the continued dose, as Clarke and Amory term it, when speaking of the use of the bromides in epilepsy. Dr. Seguin gives to adult females one-third of a grain of the alcoholic extract before each meal, increasing the dose in a few weeks to half a grain. Males may generally begin with the half-grain, increasing it to three-quarters in two or three weeks. These doses must be taken with the greatest regularity—it being as well to exact a promise from the patient that he will take the pills regularly for three months. As a rule, no appreciable effect is produced by these doses, though lightness of the head and slight confusion of mind have resulted from an initial dose of half a grain three times a day. Under this treatment Dr. Seguin has found about one-half his cases have been relieved, the majority of these having obtained months of freedom from attacks while taking the remedy. He considers it nearly as efficacious in migraine as the bromides in epilepsy: both *may* cure, both *do* bring about remarkable interruptions in the series of attacks, and both must be employed in the "continued dose." Cannabis is inferior in efficacy to the bromides, but is superior in not producing unpleasant or dangerous effects.

In the discussion which followed, Dr. Hamilton expressed himself satisfied with a fair trial of the cannabis which he had made. He agreed with Anstie in regarding migraine as but the primary step which ended in some more extended process affecting the nervous system. It was a condition essentially of lowered vitality; and migraine, as well as other forms of neuralgia, is very common during such times as the general system is very much depressed, and when the processes of nutrition are severely taxed, as at and immediately after the time when puberty is reached. He believed it to be the most important indication to build up the general system. He had of late tried Dr. Weir Mitchell's rest treatment with great success. For the relief of the paroxysm he uses diffusible stimuli, such as aromatic spirits of ammonia in free doses, or the muriate in doses of twenty to thirty grains. Guarana may be given; and, last, not least, the galvanic current from fifteen to twenty cells has produced good results. Dr. Beard had not made much trial of Dr. Greene's method, but had derived good results from central galvanisation, associated with tonics and other remedies. He believed that change in occupation and scene does much in breaking up the tendency to the attacks. In treating the attack itself he has found caffeine and muriate of ammonia very useful, two-grain doses of the valerianate or citrate of caffeine being given at any stage of the attack. This can be carried on the person of the patient, and taken when the headache begins. Next to caffeine, muriate of ammonia is to be ranked, given in very large doses greatly diluted in water. Dr. Beard observed that a cause of the disease very commonly overlooked is excitement or irritation of the genital organs—sometimes so trifling as scarcely to attract the attention of the patient. Dr. Sell believed that there is a great variety in this disorder. In cases characterised by vomiting, he has given relief by means of guarana, or bicarbonate of soda with hydrastis canadensis. In the neuralgic form, especially the dental, the hydrate of chloral has proved of most use. In the melancholic variety the cannabis is indicated, and it may be beneficially combined with hyoscyamus; and for those who suffer from coldness during the attack there is nothing better than the nitrite of amyl.

The Coming Duties of the Accoucheur.

Prof. Gaillard Thomas, lecturing on a case of neglected prolapsus uteri, makes (*New York Medical Record*, December 22) the following observation:—

"The time is not distant when confinement cases will be treated very differently from what they are at the present day. This is a subject of the utmost importance. There is the most urgent need of a radical change in the practice of the majority of the profession, and the time is ripe for the appearance of a stirring and able paper on 'The Proper Management of Natural Labour,' which will awaken medical men to a sense of their duty in obstetrical cases. The physician should be expected and required to visit his patient from time to time all through her pregnancy, in order to see that everything is progressing favourably for a successful delivery, and to remove, if possible, any condition (as albuminuria, for instance) which is likely to interfere with this; and I am fully convinced that it will not be long before the accoucheur who does not pursue this plan will be held culpable. Again, he will be held equally culpable if he discharges his patient at the ninth day, or at the end of a fortnight, without making a physical examination, to ascertain that the parts have sustained no injury from the strain and pressure of parturition, and that the process of restoration to the normal condition is going on satisfactorily. A little attention paid at that time will often prevent the most serious consequences in the future. If the physician had made such an examination in this case, and had found the cervix lacerated, he might have waited a month, and then, ascertaining that trouble was resulting from it, he should have sewn it up, and also restored the perineal body which had given way. . . . All this could have been readily done in the second month after delivery, and it would certainly have been a great deal better to do it than to wait thirteen years before undertaking the operation. It is true that this woman has suffered comparatively little pain and inconvenience in consequence of the neglect of her physician, but this is a very rare exception to the general rule; and, as I said before, the

time is not far distant when the medical man will be held responsible for allowing such a condition to continue without interfering to prevent the evil results so sure to follow from it."

GENERAL CORRESPONDENCE.

THE TELEPHONE AND AUSCULTATION.

LETTER FROM DR. EDWARD LIVEING.

[To the Editor of the Medical Times and Gazette.]

SIR,—With reference to the subject of "The Telephone in Auscultation," I beg to say that having had the opportunity during the last month of experimenting with many pairs of telephones, in which the different elements in the construction had been experimentally varied with a view to obtain a maximum of sensitiveness, it occurred to me to try them in auscultation; but I completely failed to hear the sounds of the healthy chest. This I had anticipated, having previously found that the tick of an ordinary Geneva watch in contact with the receiving telephone was not audibly transmitted, although a loud whisper was perfectly heard with the same instrument, and through a length of wire offering the resistance of many miles of telegraph-wire. Dr. William Ord appears to have heard the sounds through his instrument, though not so well as with the ordinary stethoscope. I should like to ask him if there was any wooden connexion between the ear- and chest-pieces of his apparatus through which the sounds might have been transmitted.

I am, &c., EDWARD LIVEING.

32, Queen Anne-street, W., February 13.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, FEBRUARY 5.

CHARLES MURCHISON, M.D., LL.D., F.R.S., President, in the Chair.

RUPTURE OF THE AORTIC VALVES.

DR. BURNEY YEO showed the heart and aorta from a case of rupture of the aortic valves, of which the particulars *intra vitam* were communicated by him to the Clinical Society in May, 1874. At that time the patient had a very remarkable cardiac murmur. Three weeks before, the patient had fallen down a flight of nine stone steps, clutching at the hand-rail, and had alighted on his back at the foot. He had taken no further notice of the accident at the time, but the murmur referred to had soon made its appearance in his chest, keeping the patient awake at night. It was for the noise in the chest that the man consulted Dr. Yeo. The patient proved to be a muscular man of forty-five, a railway clerk, temperate. He had suffered occasionally from rheumatic pains, and from winter cough, but had had no serious illness previously. A very loud, deep-toned murmur could be heard all over the chest, and was audible at a distance of three feet from the body of the patient. The man had neither pain nor faintness nor much dyspnœa; and he continued to do his work, attending as a hospital out-patient. In two months the murmur began to change; at one time it was scarcely audible, then it became a loud, rough, double murmur. The patient then disappeared from observation till January, 1877, when he returned much worse; he was thin and pale; his hair was grey; and he had cough, dyspnœa, feebleness, ataxy, impairment of sensibility in the lower extremities, and incontinence of urine. The heart was found to be greatly hypertrophied, and there was a loud double murmur. The man was admitted, and was greatly benefited by three weeks' rest. Thereafter he was rarely seen, and evidently grew worse. On November 20 last he felt much worse, rose, and fell down dead. Post-mortem, the chest alone was examined. The heart was very greatly hypertrophied, and was beginning to undergo granular and fatty change. The aorta was atheromatous. Of the aortic valves, the right anterior and the posterior segments proved to be separated from the wall of the aorta for a distance of a quarter of an inch. It was probable that at the time of the accident the ruptured parts had moved freely in the blood-current. Deposits had then occurred, and modified the murmur. Some had argued that in such cases the loud musical murmur was not developed by the vibration of the detached part, but by the sharp unsupported edge of the portion left at the seat of rupture. If this theory were correct, the character of the murmur should not have changed, as it did in the present case. Dr. Yeo said that he had summarised all recorded cases of rupture of the aortic valves, and had found that death occurred in less than two years in all. The present case had, however, lived more than three years after the accident.

Dr. DOUGLAS POWELL asked what the condition of the pulse had been, and whether it altered to the mitral character towards the end. He had published a similar case in which the pulse had been at first regular and regurgitant, but towards the close had become irregular and mitral in character.

The PRESIDENT said that, if he did not mistake, the duration of life in such cases was said to be much greater than represented by Dr. Yeo.

Mr. NUNN asked what was the cause of death.

Dr. YEO replied to the various questions. The pulse had been full and collapsing from the first, and as long as the case was under observation. If cases of this kind did live longer, they were not on record. He had certified "Rupture of the aortic valves" as the cause of death.

PROSTATIC TUMOURS REMOVED DURING LITHOTOMY.

Mr. BRYANT exhibited specimens of prostatic tumours which he had removed successfully during lithotomy. The first specimen was from a man of sixty-seven, who was operated on in Guy's Hospital in January, 1875, after having suffered from symptoms of vesical calculus for eighteen months. The blunt gorget was used; the stone was caught, and found to be large; a resistance was felt, and discovered by the finger to be a prostatic tumour situated between the stone and the hinge of the forceps. The whole was removed, when the calculus proved to be one inch and a half in diameter, and the tumour to consist of prostatic tissue and muscular fibre. There was no hæmorrhage, and recovery was perfect. The second specimen was removed from a gentleman of seventy years, who had suffered from vesical symptoms for four years, and was extremely ill. Lithotomy was performed; the gorget had to be used; and the stone, when seized, could not be extracted. A portion of the prostate was then ascertained to be in the way, when, by rotation of the forceps and pressure backwards on the tumour, the hinge of the instrument caught the growth, and both it and the calculus could be extracted. The patient was perfectly well in six weeks. The growth consisted of prostatic tissue. Mr. Bryant said that in both these cases the patients had been relieved of stone and of another cause of distressing symptoms by a single operation. Convalescence was not affected by the operation. In other words, benefit seemed to have followed the removal of prostatic tissue. It appeared to him that in a similar case the surgeon might follow his practice, or even search for the condition; but he would hardly suggest operation for the relief of symptoms due to enlarged third lobe of the prostate. The operation had first been mentioned by Sir William Fergusson thirty years ago.

IMPACTED FRACTURE OF SHAFT OF FEMUR.

Mr. BRYANT also showed this specimen. A man of eighty-three fell down area steps, and believed that he alighted on his right knee. It was found that the right limb was shortened four inches; the position of the foot was normal; and there was crepitus to be felt above the knee. The diagnosis made was fracture in the lower third of the femur, and a splint was applied. The man died three weeks after of uræmia; and, post-mortem, there was found suppuration of the kidneys. At the junction of the lower and middle thirds of the right femur there was extensive fracture, and the proximal portion was driven one inch into the distal portion of the bone, causing a second fracture of the lower fragment above the condyles. Mr. Bryant said that this was probably the only specimen on record of the kind; and that the peculiar impaction was perhaps due to the patient's having fallen on the distal end of the bone. The condition explained why extension failed to reduce the shortening; and it suggested the advisability of letting parts alone under such circumstances, rather than run further risk, including the danger of vertical fissure of the bone.

The Bacillus Anthracis.

Dr. Ewart exhibited under the microscope specimens of the organism of splenic fever—the *Bacillus anthracis*—in the condition of growth and development. Dr. Ewart said that it was now certain that a bacterion was the cause of splenic fever. The first specimen showed the spores simply as small oval bodies. A few of these spores injected into the body of a living mouse caused death in some days; the capillaries of the lungs and of other organs becoming filled with minute rod-shaped bodies, beyond which the vessels were found empty, while in front of them the vessels were choked with corpuscles. If the rods were examined in aqueous humour they grew in the course of twenty-four hours into enormously long threads; in twenty-four hours more these threads presented minute specks at regular intervals, and these soon developed into very bright shining particles. These particles were spores; they grew, and the tube containing them broke into transverse pieces, each containing three or four spores: or the spores escaped singly. If these spores were inoculated into another mouse, they passed through the same stages. The results were therefore uniform, and the disease was splenic fever.

The President inquired how many generations of the organism could thus be cultivated, the poison remaining active.

Dr. Ewart replied that he had cultivated the third generation in this way.

Sir Joseph Fayrer asked where the original poison came from.

Dr. Ewart replied that it had been obtained from Breslau, and had been taken from sheep.

Cancer of the Tongue, Tonsil, Pharynx, and Larynx.

Mr. Lennox Browne brought forward four cases, illustrated by drawings and microscopic preparations, of (1) Primary Cancer of the Tonsil, (2) Cancer of the Tongue invading the Tonsil (living patient), (3) Pharyngo-laryngeal Cancer (living patient), and (4) Primary Cancer of the Larynx. He stated that cancer of the tonsil was of extreme rarity, only one previous case having been brought before the Society; and the disease was hardly mentioned in standard works on pathology or surgery. He had in the last eleven years seen six cases of primary cancer of the tonsil, which number, on a low computation, gave an average of one case to about every 5000 patients suffering from throat diseases. The variety of cancer in this region had been generally stated to be that of scirrhus, but his own experience had lately led him to believe that it was more frequently encephaloid. All his cases had occurred in male patients of between forty and sixty years of age. Probably the greater tendency of females, of cancerous diathesis, to disease of the mammary gland, and the greater frequency of cancer in the female organs of generation, accounted for this immunity of women from tonsillar cancer. The patient from whom the first specimen was taken was a man aged fifty-three, and was under observation from September 17 to December 24, 1877, the day on which he died. His case well illustrated the ordinary signs, symptoms, and course of the disease—namely, gradually increasing swelling of the affected tonsil and faucial tissues around, with corresponding infiltration and hypertrophy of the sub-maxillary and cervical glands; extreme dysphagia with constant ear-ache, both relieved on occurrence of ulceration, and by hæmorrhages, which were frequent, and which, as in this case, usually lead to death. Emaciation was also very rapid; this patient having lost twenty-six pounds in ninety-eight days, and seven pounds in the last fourteen days of his life. Relief had been given by removal on two occasions of portions of the tumour by the galvano-cautery loop, and this was the only surgical treatment which could be safely recommended. The second case was even still more rare. It was by no means unfrequent for the pharynx and floor of the mouth to be invaded by contiguity of epitheliomatous ulceration, but in this instance the disease was actually of the tonsil itself. The patient had suffered from one or two attacks of severe hæmorrhage, and the termination of the case would probably be the same as that of the former specimen. The only difference clinically was the greater unintelligibility of speech due to the lingual disease. The third and fourth specimens were shown, in connexion with each other, to illustrate the two most usual varieties of cancer of the larynx. In the living specimen it was seen on admission to commence on the pharyngeal border of the larynx, and so to press on the right arytenoid cartilage, the action of which was somewhat paralysed, and against the cricoid. The disease had now extended across the posterior wall of the larynx, concealing its posterior border and greatly diminishing the orifice of the gullet; later, the cartilage would probably undergo carious degeneration. In these cases the disease was almost invariably epithelioma. There might be only slight laryngeal symptoms, but dysphagia would be chiefly complained of, and death would happen by starvation. In the other case the disease had commenced actually in the cavity of the larynx, and was of much greater rarity. Here dysphagia was by no means extreme, and on post-mortem examination the body of this patient was seen to be covered by a good layer of fat; but the laryngeal symptoms were most severe. In conclusion, it was submitted that both these cases illustrated how difficult it would be by any radical operation to remove all the disease in this region, and, even if the patient survived its immediate effects, how slight was the chance of ameliorating the symptoms or of preventing recurrence.

The President inquired whether the cancer of the tonsil had been examined microscopically. He had lately seen a case of disease of the tonsil along with Sir James Paget, Mr. Prescott Hewett, and Mr. Cæsar Hawkins, and opinion was divided as to whether the disease was cancer or syphilis. The patient improved for a time under anti-syphilitic treatment, but died suddenly from erysipelas.

Mr. Browne replied that the difference between cancer and syphilis of these parts was marked. Cancer infiltrated all the tissues. There was extreme pain in the ear; and on two occasions he had been able to discover the malignant nature of the growth by examining small portions removed.

Mr. Butlin said he had lately seen a case of primary sarcoma of the tonsil in a man of forty-five who appeared stout and healthy. A tumour as large as a racket-ball protruded from the right tonsil; there was no infiltration. The growth was removed with the écraseur by Mr. Thomas Smith, and proved to be a round-celled or lympho-sarcoma. Three months after, the disease had returned, and the cervical glands were infiltrated. A projecting portion was again removed. The man had not been heard of since. In neither case did hæmorrhage follow operation.

Recurrent Sarcoma.

Mr. Nunn related the sequel of a case of recurrent sarcoma which he had brought before the Society eleven years ago. At that time the subject was a man of sixty-seven, and the tumour was removed from the shoulder, being twice as large as the fist. It was suspiciously like cancer, and the wound was cauterised. The disease returned, and was again removed. There was no second recurrence. A few days ago Mr. Nunn saw the man, now seventy-seven years of age, and found him perfectly free from the disease.

Intestinal Ulceration and Embolism.

Mr. Howse showed a fresh specimen of intestines in which ulceration was associated with embolism of the superior mesenteric and femoral arteries. A woman was admitted into Guy's Hospital on January 16, suffering from gangrene of the leg. Her health had been poor for six months before, and gangrene of the foot began three weeks before admission. No definite cause could be discovered for her condition, but it was believed that there was some ulceration of the intestine. The arteries of the limb did not pulsate below the popliteal. The gangrene spread, with intolerable pain, and the leg had to be amputated. Death occurred on the sixth day after operation. Post-mortem the femoral and external iliac arteries were found to be plugged, whilst the superior mesenteric artery was stopped by a fibrinous mass throughout its whole length. The intestines were extensively ulcerated. The ascending and descending colon was adherent in places, and ulceration had occurred between different parts. About the middle of the great intestine cicatrices occurred, pointing to old ulceration. The connexion between the intestinal ulceration and the plugging was obscure. Perhaps there had first been ulceration, as represented by the cicatrices; then thrombosis of the peripheral branches of the mesenteric vessels; extension of this process as far as the aorta; fresh ulceration of the intestine; and, finally, gangrene of the leg and plugging of the vessels of the limb from debility.

The President asked whether the ulceration was, then, the cause or the effect of the plugging.

Mr. Howse replied that the older ulceration was probably the cause of the plugging, while the more recent was an effect.

Dr. Legg asked what had been the state of the heart and of the upper part of the aorta. Plugging of the superior mesenteric artery was extremely rare.

Dr. Coupland suggested that the whole might have been embolic, and that a secondary clot from the mouth of the superior mesenteric artery might have been swept into the femoral.

Mr. Howse replied that this explanation was a very likely one. The specimen would be further examined. The heart and the aorta were quite healthy. There was some broncho-pneumonia. No blood had been passed by the anus, but the stools had been called "black." There was no embolism of the spleen or of other organs.

Caries of the Spine.

Mr. Barker exhibited a fresh specimen of advanced caries of the spine from a female child of thirteen. Till shortly before death the patient could walk with crutches. The disease began very high up, and extended to the level of the diaphragm, while an abscess extended from the diaphragm to the thigh. Another abscess was connected with either psoas; and there was another large abscess at the root of either lung, with double pleurisy. In the fourth lumbar vertebra the caries had advanced to such a degree that the nerves were exposed, yet the child could walk as described. The organs were amyloid.

Sarcoma in a Child.

Mr. Walsham showed for Dr. Marshall, of Nottingham, a tumour which had grown among the muscles of the right calf. The subject was a female infant of five months, and the leg was twice the ordinary size. The limb was amputated at the knee-joint. The growth proved to be a spindle-celled sarcoma. The early age was remarkable.

Congenital Obstruction of the Common Bile-Duct.

Mr. Morgan showed a drawing of such a case. A child, born of healthy parents, became jaundiced on the tenth day of life; the meconium had meanwhile been healthy, and there had been no hæmorrhage from the umbilicus. The jaundice steadily increased. When first seen, in the sixth week, the appetite was good; the motions were white, and no hepatic enlargement could be discovered. The child slept constantly, and there was no fever nor head-symptoms. A week later subcutaneous hæmorrhage suddenly appeared outside the knee, then on the upper extremities, and afterwards on the tongue and over the sacrum. The case was diagnosed congenital malformation of the bile-duct. Calomel and other purgatives were given, but some inspissated matter that was passed proved not to be bile. Hæmorrhage from the mouth, vomiting, and convulsions preceded death, which occurred in the middle of the tenth week. Post-mortem, all organs proved to be healthy except the biliary apparatus. The liver was enlarged; the capillaries of the capsule were full; the gall-bladder was not larger than a pea, and was empty. The ductus communis choledochus was completely obliterated for half an inch, or rather more. The umbilico-hepatic vessels were natural.

CLINICAL SOCIETY OF LONDON.

Friday, February 8.

George W. Callender, F.R.S., President, in the Chair.

Two Cases of Psoriasis—the one treated by Prolonged Daily Immersions, the other treated by an Ointment of Chrysophanic Acid.

Mr. Balmanno Squire exhibited these cases. The one was that of a gentleman aged thirty-two, who had been extensively affected with psoriasis for nine years. He was kept under treatment by prolonged daily immersion in tepid water for exactly six weeks, during which time he submitted on the average to five hours' daily immersion. The temperature most readily borne by the patient during a prolonged immersion was about 90° Fahr. By the end of six weeks, without other treatment of any kind, the patient had lost by far the greater part of his eruption, which presented now only a fiftieth, or at the most a thirtieth, of its original area, and had also got rid of the nocturnal itching which accompanied it. He was now treated with phosphorus "perles" and chrysophanic acid ointment; and in ten days' time presented only such insignificant traces of the disease that he decided to return home to his duties. Prolonged daily immersion in tepid water has for very many years been employed in the treatment of skin disease at Leukerbad in Switzerland, and at Baden near Vienna; but this case would seem to show that the less irksome ordeal of spending some hours daily in the bath could suffice to produce fairly good results. The other case of psoriasis was that of a gentleman aged thirty-four, who had been affected with the disease for twelve years. The eruption was chiefly massed over the belly and the loins. He was ordered the use of chrysophanic acid ointment, of a strength of twelve grains of the acid to the ounce of lard; and he was furthermore directed to take two phosphorus "perles" (containing each one-thirtieth of a grain of phosphorus dissolved in oil) three times a day. On the fourteenth day of treatment the patient conceived an impression that the phosphorus was impairing his mental energy, and accordingly he was permitted to discontinue taking the perles. By this time, also, the erythema excited by the chrysophanic acid had entirely subsided. The patient was therefore ordered to resume the use of chrysophanic acid ointment, now made stronger than before—namely, a drachm of the acid to the ounce of lard. In three days' time—that is to say, on the seventeenth day of treatment—all trace of the eruption on his body had completely disappeared, the chrysophanic acid ointment having again excited some erythema. On the twenty-fourth day of treatment the disease still existed on the arms and legs, local treatment with the chrysophanic acid ointment having been still persevered with to the limbs, although, since the seventeenth day of treatment, no further applications had been made to the body, inasmuch as every sign of the disease had gone from the trunk. The patient still exhibited traces of the disease on the limbs.

Dr. Tilbury Fox said that the case cured by immersion confirmed what was already known on that subject, but in private practice the method was hardly applicable. Few could afford the time necessary. The case recorded was one of indolent and chronic psoriasis, and the treatment succeeded, but generally failed when fresh crops were coming out. The other was similar in character, and more than one remedy would suit such cases. For instance, mercurial and carbolic acid ointments would do, so would alkaline baths, and so on. The earlier and more acute stages were more difficult to treat, and here a specific could hardly be sought for. For instance, one form was apt to occur in married women from over-suckling; others, again, in gouty subjects,—where totally different lines of treatment were demanded. Again, there was the rupioid form, tending to occur in children, where cod-liver oil suited best; and still again, the malady was apt to occur among over-wrought city men, where the digestion was the chief thing to be looked to. It was only in the essentially chronic form that chrysophanic acid could be said to do good, but it stained both the skin and the clothes, and patients did not like it.

Mr. Hutchinson said patients should be warned of the effects of the acid, for often severe erythema followed. What was the real meaning of the word "cure" in psoriasis? It ought to mean relief permanently, or else for a period of years. It was easy to get rid of the scaly symptoms for a period, but what of a longer time? Hebra used bathing, but not the bath referred to; rather a big one was employed, into which half a dozen patients might enter, and scrub each other with coal-tar soap for six hours or so at a time. Cures, as he called them, followed. He thought arsenic and tar, both externally and internally, did much good.

Dr. R. Liveing could confirm what had been said as to the objections to chrysophanic acid—patients would hardly put up with it. He himself had long used it for ringworm, but the patients complained of the dirty mahogany colour it gave to their hair. He had long used baths with soft soap and flannel, and on this method half an hour a day sometimes sufficed for a cure. Acute cases constituted the real difficulty.

Dr. Crocker had used chrysophanic acid for ringworm, but was forced to abandon it. The hair turned purplish, and the erythema following its use tended to spread, with desquamation of the cuticle, and the eyes often became swollen and painful; moreover, the treatment was not very successful. The system of bathing might be made much simpler. In

one very bad case a cure was effected by an alkaline bath two or three times a week, and the use of diuretics. In the early stages the use of chrysophanic acid might aggravate the disease.

Mr. Morrant Baker had used the acid, and thought it the most rapidly acting remedy for psoriasis, but it acted on other parts of the skin than those to which it was applied. This might in the end turn out a valuable property. One of the cases shown he could hardly call psoriasis, it seemed more like a parasitic disorder.

Dr. H. Weber referred to his experience of patients sent to bathe at Leuk (Louèche), where it was the custom to pass from four to six hours in the water in the morning, and again from two to three in the afternoon, in some cases. This lasted from four to eight months, but all his cases were of long duration. One only of his cases was cured, and that was the most recent. In all the others the malady returned within two years.

Dr. Whipham considered that the acid should be used with caution. In one girl who had suffered from psoriasis for five years the acid was applied to the eruption only, yet the face swelled up as in erysipelas. In a more recent case in the person of a flour miller, where the disease chiefly prevailed where there was rubbing, on the arms and legs, the ointment caused pustules and boils on the skin round about.

Mr. B. Squire, in reply, said he considered the balance was decidedly in favour of chrysophanic acid. He could hardly think it more easy to cure a chronic than an acute case, though the latter yielded better to internal remedies. He did not like the use of arsenic, but preferred external treatment. The acid, no doubt, required careful handling; but other things did the same. The hair only became discoloured after the use of soap and water, and the dye could readily be removed by means of benzole.

A Case of Eruption from Bromide and Iodide of Potassium.

Dr. Radcliffe Crocker read the report of this case. The patient, a labourer, married, aged forty-nine, was sent from Queen-square to University College Hospital on February 5, with a peculiar eruption for diagnosis. Recognising it at once as a bromide of potassium rash, Dr. Crocker obtained the following history:—He was treated at Queen-square four years ago for right hemiplegia with aphasia. He had never had rheumatic fever nor syphilis. On January 8, 1878, he was re-admitted as out-patient under Dr. Bastian, having had a fit of an epileptiform character the day before, which left slight weakness of the right side and dropping of the right angle of the mouth. For this, ten grains of bromide and five of iodide of potassium were prescribed three times a day. This was continued up to February 4 (*i.e.*, nearly a month), when it was changed for an effervescing mixture. The eruption began in the form of "pimples" on the cheeks on January 23, and developed into patches, as now seen, by the 27th. When Dr. Crocker first saw the case, on February 5, it presented the following characters:—On each cheek was an irregular, considerably raised patch about the size of a crown-piece, of a dull livid-red colour, giving a boggy, almost fluctuating feel to the finger. The central part was occupied by a brownish-yellow scab, but at the periphery numerous yellow points were observable, which, on close inspection, could be seen to be the apices of partially coalesced papules. On pressure, and examining the exuded fluid under the microscope, pus cells, epithelium, and sebaceous matter (dissolving in ether), with some blood-corpuscles, were seen. Smaller patches of evidently aggregated papules were present on the end and alæ of the nose, and a few discrete round pink papules a quarter of an inch in diameter, some of them with yellow apices and softened bases, were seen on the cheek, nose, and upper lip. As seen at the Society on February 8, the yellow points were no longer visible, and the composition of the patch, by the aggregation of papules, could not be made out. The right patch, which came out four days before the other, was now covered with a thick brownish-yellow and blood-stained scab, bleeding, which is described as spurting out as if cut by a knife, having occurred twice. On the left cheek, only the lower half had the crust upon it: the rest was livid-red and fluctuating, and the solitary pimples had also dried into crusts, while their bases were softened. There was no eruption on any other part of the body. Dr. Bell, of the Birkbeck Laboratory at University College, was kind enough to examine the urine, and found iodine, but could not detect any bromine; its specific gravity was 1030; it was very acid, contained much lithates, but no albumen or sugar. This case forms a pendant to that of an infant with a similar eruption which Dr. Crocker showed to the Pathological Society about a month ago. The following points were of special interest:—1. The moderate dose of bromide—only ten grains three times a day for a month. 2. The fact of iodide being given with it. 3. Absence of eruption on the limbs. 4. Its being really only an aggregated form of acne. 5. The absence of bromine in the urine. Dr. Crocker alluded to many other cases described by English and Continental observers, in many of which, when the rash appeared, it was believed there was some iodide present as an impurity in the bromide. But Dr. Crocker thought there was no doubt, from recorded cases, that bromide alone would produce it.

Mr. Nunn had never seen such a case, though he had given both bromide and iodide very largely. They could only be sure it was a bromide rash if it ceased with the cessation of the administering of the drug.

Dr. Tilbury Fox said there could be no doubt that the rash was a bromide rash. He had seen many such. Both the bromide and iodide rashes were of the same kind; but the rash was most likely to follow where both were given in combination.

Dr. Glover referred to the case of a child mentioned by Dr. Tilbury Fox. It was six or eight weeks old, and was not taking bromide; but the mother was, and had been doing so for a long time. There was no doubt as to the nature of the case.

Mr. Hutchinson also confirmed the diagnosis. He had seen some very bad cases, in certain instances coming on again and again. It was not a question of dose, but of idiosyncrasy.

Mr. Baker thought there was no doubt as to the nature of the case. There was no bromine or iodine in the urine that might help to account for it.

Dr. Mahomed referred to a case he had seen at St. Mary's Hospital. The patient died of chronic Bright's disease. He suggested that this man too had contracted kidneys.

Dr. Crocker was glad that there was a unanimity as to the nature of the disease. Idiosyncrasy was no doubt the clue to these cases, though probably the urine might have something to do with it, but it was not likely. In France the cases referred to were far more common and more severe, the dose given being apparently larger. It was not easy to separate bromine from urea.

Two Cases of Cancer of the Breast of Opposite Extremes of Duration.

Mr. Nunn read a paper on this subject. He commenced by referring to two cases of a parallel character, particulars of which were communicated to the Society on November 22, 1872, and to the questions, amongst others, that appeared to press for consideration, namely, What was it that rendered cancer cells stationary, and retaining them *in situ* permitted of their undergoing degeneration without encroaching upon and infiltrating contiguous parts? and what, on the other hand, caused their wide distribution and proliferation in distant regions? What share had inflammatory action in stimulating proliferation and promoting diffusion? The two cases now brought before the Society presented opposite features; one terminated fatally within eight months, the other continuing to live on after the lapse of six years, four of which had been spent in the Middlesex Hospital under the author's observation. Case 1, aged forty-five, had a lump form in the breast after a blow that had almost been forgotten; rapid solidification of the entire mamma, and brawny œdema of the side of the thorax and upper extremity followed, accompanied by excessive painfulness. The post-mortem showed that the whole mamma was the seat of cancerous deposit, that the axillary glands of both sides were affected, the right lung adherent, the left patched with cancer-deposit, the pleural cavity containing sixteen ounces of turbid fluid. Case 2. Admitted into the Middlesex Hospital in November, 1873, where she still remained. The tumour was about the size of a duck's egg, and no axillary glandular complication existed on admission. The tumour, after a year's residence in the hospital, inflamed; and then an axillary gland was found to have enlarged in April, 1877; and in January, 1878, acute necrosis destroyed first the centre and secondly a part of the circumference, of the tumour, a delicate

cicatrisation having covered the cavity left by the slough after the first attack. The author expressed his belief that, in cases of the early appearance of brawny swelling of the upper extremity, commencing at the side of the thorax and extending downwards, the *lymph-canalicular* system was the structure primarily involved. The observations of Köster of Würzburg were alluded to ("Die Entwickelung der Carcinome," 1862), and the criticisms of Waldeyer ("Sammlung Klinischer Vorträge," 1872) were mentioned. The author urged the importance of shielding a cancerous tumour, previous to operation, from all mechanical and other violence, and the adoption of such remedies and measures as would tend to obviate inflammatory action. And he submitted that when a cancer was brought in the very earliest stage to the surgeon, it was more judicious to watch it for a time, so as to avoid operating in those cases where, by the peculiar nature of the disease, operation could do no good, and would inevitably appear to the patient and patient's friends to have done harm. The author referred to the valuable statistics of Mr. Sibley and Mr. Morrant Baker, as affording us the average duration of life under varying circumstances in cancer; but he thought, nevertheless, the study of individual cases was requisite to be able to attempt or confidently declare a prognosis—prognosis having so often an importance beyond its scientific interest in making provision for the welfare and comfort of the patient.

After a few remarks from Dr. Glover and Mr. Maunder,

The President suggested that the clinical aspects of cancer might be a good subject to take up for discussion.

Specimens of Tendon Ligatures.

The President exhibited some specimens of the kind. It was certain, he remarked, that doubt existed as to the trustworthiness of catgut for the ligature of arteries in their continuity. A material that occasionally failed to arrest the blood-stream for a sufficient time to insure the cure of an aneurism could not be recommended with confidence. He hoped a more extended trial would confirm the promise that we have in fine tendon ligatures, that would resist the solvent action of their surroundings in a wound, so that, although they were eventually dissolved, they lasted longer than catgut. And these ligatures tied better knots than the catgut, and the knots did not slip. Their strength, too, was sufficient; and, as they dissolved slowly, they answered well for sutures, especially where some strain was put on them, catgut quickly yielding under such an influence. The specimens of ligatures handed round had been sent him by Mr. Hulme, of Guildford, who had received them from Mr. T. M. Girdlestone, Surgeon to the Albert Hospital, Melbourne. They were extracted from the tail of a marsupial, and were of various sizes as they grew. They had not been split. Mr. Girdlestone said they made very good sutures, but he had not used them on arteries. The natural tendons, however, had been freely used for ligatures. They were simply washed and dried. Before use they should be soaked in carbolic oil, and Mr. Girdlestone recommended that they should be softened in carbolic water just before use. As the supply of these tendons was distant, and as he (the President) was unable to find any precisely similar, of sufficient length, in this country, he was having prepared ligatures which were made from tendons of the horse. They had the same characters as the tendons from the marsupial.

Society of Arts.—At the rooms of the Society, John-street, Adelphi, on Wednesday evening, February 13, a paper on "The Systems of Cremation in use upon the Continent" will be read by W. Eassie, Esq., C.E., F.L.S. The chair will be taken at eight o'clock.

Bright's Disease in the Apparently Healthy.—In an exhaustive paper read by Dr. Segur, at the King's County Medical Society, which will bear a very careful perusal—but, consisting in the main of statistics, cannot be condensed—he comes to the conclusion that a large proportion of deaths recorded under the names of pleurisy, pneumonia, pericarditis, apoplexy, convulsions, diarrhœa, etc., have Bright's disease as their predisposing cause; and that while the appearance of albumen in the urine marks an advanced stage of kidney degeneration, the hyaline cyst is a very early and important means of diagnosis, as significant in its relation to the kidney as the mucous râle is in its relation to the lung.—*New York Med. Record*, December 8.

OBITUARY.

WILLIAM HALL, F.R.C.S.

We have to record the death of Mr. Hall, late of Hackney, and formerly of Chesterfield, in Derbyshire, which took place on January 14, 1878, in the eightieth year of his age. The immediate cause of death probably was cerebral hæmorrhage. About five years ago Mr. Hall had symptoms of a small cerebral hæmorrhage on the right side, from the effects of which he almost recovered, and was comparatively well, for a man of his age, to within a week of his death. Just one week before he died another hæmorrhage occurred; this time it was on the left side, and right hemiplegia and aphasia resulted. He died very quietly, full of years and of honours. Mr. Hall was one of the oldest members on the roll of the Royal College of Surgeons of England, having passed in 1821, and of the Apothecaries' Hall, his diploma dating back to 1820. He was a student of St. George's Hospital in 1819-21. He attended the lectures of Sir Benjamin Brodie on Surgery, and of Sir Charles Bell on Anatomy, and was well acquainted also with Michael Faraday, who was at that time assistant to Mr. Brande, the Lecturer on Chemistry; and it always afforded him great pleasure to look back on this time of his life. According to the practice then in vogue, he served a long apprenticeship before entering on his hospital work, to Dr. Elam—a gentleman of considerable reputation and mark at that time. Among his reminiscences of this period he used often to refer to the presence in Chesterfield of the French officers, prisoners of war, who were under the medical care of his master Dr. Elam, and with whom he naturally came much in contact. After qualifying, he joined Dr. Elam as assistant, and subsequently as his partner. Together they had a very large and varied practice, including a good deal of surgical work resulting from the mines and ironworks in the immediate neighbourhood. Mr. Hall's reputation as a practical surgeon was deservedly high, for his natural abilities in this branch of his profession had unusual opportunities of developing themselves. He was Surgeon to the Chesterfield Dispensary and to the Union Workhouse. In 1851 circumstances induced him to leave his native county and come to London, and he settled down in Hackney, where he soon had a large and valuable practice. In 1860 he was elected a Fellow of the Royal College of Surgeons, and somewhat later became Medical Officer to the Sceptre Life Insurance Company. Both in Derbyshire and in London he earned for himself great reputation as an accoucheur; and after fifty-three years of active practice he was justly proud of being able to say that he had never lost a single case throughout the whole of that lengthened period. He only relinquished practice about five years ago, and up to that time was active and vigorous both in body and mind.

Mr. Hall has passed away, and another link between the past and the present generation is thus broken. But he will long be remembered by a large circle of friends and patients, for he was a man of unwearying diligence in well-doing; and was ever ready, day or night, to render help and aid to those who required his services.

Whatever changes and improvements may have been introduced into medical education since the time when Mr. Hall was a student, assuredly these changes cannot produce a more kindly practitioner than the one whose death we now deplore, nor one whose life can be more blameless and unspotted than was his.

Warm Baths in Tetanus.—Dr. Zechmeister, in a communication to the Vienna Doktoren-Kollegium, states that of ten cases of traumatic tetanus which came under his care, he cured six by the exclusive employment of prolonged baths (from four to ten hours) repeated at short intervals.—*Wien. Med. Woch.*, January 12.

A Royal Recognition.—Dr. Guido Baccelli, the distinguished and learned Professor of Clinical Medicine in the University of Rome, who was called in in consultation during the fatal illness of the late King of Italy, has just been decorated with the Order of Saints Maurice and Lazarus, and has been appointed Honorary Physician to his Majesty King Humbert.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations, were admitted Licentiates in Dental Surgery at a meeting of the Board on the 12th inst., viz. :—

Alexander, Adolphus Benjamin, Hatton-garden.
Clements, Thomas, Colville-road, W., of St. Mary's Hospital.
Fort, James Wilson, Lancaster, of the Middlesex Hospital.
Gillies, David, Londonderry.
Gurner, John Robert, Brussels.
Hardie, Walter Jackson, Montrose.
Rodway, Leonard, Torquay, of the Middlesex Hospital.

Two candidates having failed to acquit themselves to the satisfaction of the Board, were again referred to their studies. The following were the questions on Anatomy and Physiology, and Pathology and Surgery, submitted to the candidates at the written examination on the 8th inst., when they were required to answer at least one of the two questions on both subjects, viz. :—Anatomy and Physiology: 1. Describe the Eustachian tube, its relations to surrounding parts, and its functions. 2. Describe the acts of mastication and deglutition, mentioning the muscles concerned therein, and the nerve-centres by which these muscles are controlled. Pathology and Surgery: 1. Describe the process of separation of a sequestrum in necrosis of the lower jaw, and the mode in which repair is effected. 2. Describe the characteristics of the chief forms of ulcer affecting various parts of the mouth, and their treatment. The following were the questions in Dental Anatomy and Physiology, and in Dental Surgery and Pathology, submitted to the candidates on the evening of the same day, when they were required to answer at least two out of the three questions on both subjects, viz. :—Dental Anatomy and Physiology: 1. Describe, in relation to human and comparative anatomy, the chief methods by which teeth are fixed in their place; and give examples. 2. Mention the changes which the lower jaw undergoes during the development of the teeth from birth to puberty, and account for its elongation backwards. 3. Describe the structure of the tooth-pulp in its earliest stages of formation, and in the adult tooth. Dental Surgery and Pathology: 1. Describe and give the reasons for the manner in which the operation of extraction should be performed on different teeth, and mention the chief reasons which may necessitate the operation. 2. State the symptoms, sequelæ, and treatment of dental periostitis: and explain in what respects they differ from those of inflammation of the dental pulp. 3. Enumerate the different irregularities in position which the inferior dentes sapientiæ may exhibit. State the symptoms which such irregularities occasion, and what treatment you would adopt.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 7 :—

Da Silva, Pascal Manoel, Tavistock-street, Bedford-square.
Gledhill, James, Peartree-street, Waterloo-road.
Jeram, James William, Waterlooville, Hants.
Lendon, Alfred Austin, Maidstone, Kent.

The following gentlemen also on the same day passed their Primary Professional Examination :—

Good, Frederick Thomas, St. Bartholomew's Hospital.
Williams, William, St. Thomas's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BLUMER, PERCY, L.R.C.S., L.R.C.P.—Senior House-Surgeon to the Sunderland Infirmary, *vice* Fred Ransom, M.D., resigned.

CARTER, WILLIAM, M.B., B.Sc., LL.B. Lond., M.R.C.P. Lond.—Lecturer on Materia Medica at the Liverpool Royal Infirmary School of Medicine, *vice* J. B. Nevins, M.D., resigned.

NAVAL, MILITARY, &c., APPOINTMENTS.

ADMIRALTY.—The following qualified candidates for the Naval Medical Service have been appointed Surgeons in her Majesty's Fleet, with seniority of September 29, 1877:—James Porter, M.A., M.B., Charles James Thomas Loane, M.D., Alexander William M'Leod, John Bellhouse Powden Triggs, M.B., George Robert Deighton Charlton, George Warner Bell, Francis Austen Jeans, Alexander William Watson Reid, M.B.

BIRTHS.

ATKINS.—On January 14, at Jullemaer, Punjaub, India, the wife of Surgeon-Major C. A. Atkins, L.R.C.P. Lond., of a daughter.

FELCE.—On February 11, at Kenmure Lodge, Elgin-road, W., the wife of Stamford Felce, M.R.C.P.E., of a son.

HENDERSON.—On February 8, at 26, Delancey-street, N.W., the wife of William Henderson, M.B., of a son.

MILLER.—On February 9, at Percy House, Percy-circus, the wife of John Alexander Miller, M.R.C.S. Eng., of a daughter.

WIGMORE.—On February 11, at 130, Inverness-terrace, Hyde-park, the wife of William Wigmore, M.R.C.S. Eng., of a son.

WILLIAMS.—On February 9, at Norwich, the wife of Charles Williams, F.R.C.S., of a son.

MARRIAGES.

ANDERSON—GRAY.—On February 7, at 15, Newton-terrace, Glasgow, Alexander P. Graham Anderson, second son of John Anderson, of Glen Tower, Argyllshire, and 3, Park-gardens, Glasgow, to Ina, daughter of James Gray, M.D.

CLARKE—LEWIS.—On February 6, at the parish church, Cardigan, Henry Clarke, L.R.C.P. Lond., M.R.C.S. Eng., Surgeon to the West Riding Prison, Wakefield, to Louisa Jane, second daughter of W. T. Lewis, of Cardigan.

DUNCAN—PLACE.—On January 30, at Great Casterton, Rutland, John Thornton Duncan, M.R.C.S. Eng., second son of the late Robert Duncan, M.D., F.R.C.S., of Hanover House, Tunbridge Wells, to Josephine Mary, youngest daughter of the Rev. Joseph Place, Rector of Great Casterton.

HEMMING—STRICKLAND.—On February 12, at St. James's, Norland, W., Wm. Douglas Hemming, M.R.C.S., of Notting-hill-terrace, to Harriet Isabella, daughter of Major Strickland, and grand-daughter and adopted child of Mrs. Major Dickson, of Notting-hill.

LAWTON—BROWN.—On February 12, at All Saints' Church, Hoole, Chester, Herbert Alfred Lawton, L.R.C.P. Lond., M.R.C.S. Eng., of Poole, Dorset, to Nessie Margaret, elder daughter of the late Edward Acton Brown, Esq., of Flookersbrook, Chester.

MORE—SANCTUARY.—On February 7, at St. Andrew's, Deal, Robert Hall More, M.D., Staff-Surgeon R.N., to Maud, eldest daughter of Commander Sanctuary, R.N., of Beachlands, Walmer, Kent.

PYE—RYAN.—On February 6, at St. Bartholomew's Church, Dublin, Charles Anthony, only surviving son of the Rev. Wm. Pye, rector of Sapperton, Gloucesterhire, to Josephine Jannette, fourth daughter of M. Ryan, M.D., of Norfolk-terrace, Bayswater, W.

RAHILLY—BISDEE.—On February 2, at St. Mary's Church, Hutton, Somerset, John Roche Rahilly, L.K.Q.C.P. Ire., Staff Surgeon A.M.D., to Sarah, only daughter of A. H. Bisdee, Esq., The Court, Hutton, Weston-super-Mare, and Sandhill, Tasmania.

DEATHS.

HUGHES, BEATRICE, daughter of T. J. Hughes, M.D., at 33, Albion-road, Woolwich, on February 6, aged 18.

MATTHEWS, MARY, wife of John Matthews, M.D., of 30, Colebrooke-row, Islington, N., on February 10, aged 49.

WICKHAM, EDGAR, M.R.C.S., late of Beulah-hill, Norwood, on February 5, at Clapton.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BIRMINGHAM (PARISH OF).—Assistant to District Medical Officer as Dispenser. Candidates must be duly registered under the Pharmacy Act, 1868. Applications, stating whether married or single and age, together with not more than three testimonials of recent date, to be sent to Wm. Gordon Coulton, Clerk to the Guardians, on or before February 23.

GENERAL INFIRMARY, NORTHAMPTON.—Junior House Surgeon. Candidates must be Members of the Royal College of Surgeons of England, and Licentiates of the Royal College of Physicians or of the Society of Apothecaries of London. Applications, with testimonials and a statement of diplomas, to be sent to the Secretary on or before February 26. The original diplomas must be produced by candidates on the day of election.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, QUEEN-SQUARE, BLOOMSBURY.—Resident Medical Officer and Registrar. Applications, with copies of testimonials, to B. Basford Rawlings, Secretary, on or before February 28, from whom further particulars may be obtained on application by letter only.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATION.

Carmarthen Union.—The Llanwinio District is vacant; area 24,503; population 3258; salary £13 8s. 4d. per annum.

APPOINTMENTS.

Central London Sick Asylum District.—Walter E. Hacon, L.R.C.P., M.R.C.S., L.S.A., as Assistant Medical Officer at the Highgate Infirmary.

Greenwich Union.—George Bate, M.R.C.S. Eng., L.S.A., as Assistant Medical Officer and Dispenser at the Workhouse.

Pontypool Union.—Frederick E. Pearse, M.D., L.R.C.P. Edin., M.R.C.S. Eng., to the Pontypool District.

THE Swiss medical students in the session of 1877-78 are—Basel, 74; Bern, 133; Geneva, 72; Zürich, 190.—*Deutsche Med. Woch.*, January 26.

Dr. Cornelius Fox, Medical Officer of Health for East, Central, and South Essex, was elected on February 7 a Fellow of the Chemical Society.

The Conjoint Scheme.—The Committee of Reference appointed under the Conjoint Scheme met at the College of Surgeons on Thursday, the 7th inst., to further consider the reports to the several medical authorities on the regulations for carrying out the Scheme. They had another meeting on the 11th inst.

Testimonial to Professor Schwann.—It is intended to present to this distinguished *savant* a marble bust, commemorative of the fortieth year of his professorship at Liége. His pupils, disciples, and colleagues invite the co-operation of all those whose pursuits enable them to judge of the importance of his investigations in biological and medical science, the promulgation of which at the time constituted a true scientific epoch. Communications are to be addressed, before March 1, to Dr. Romiée, Liége.—*Presse Méd. Belge*, February 3.

Fraudulent Lenses.—A decided impression has been created in scientific circles in this city by the discovery that one of our most noted opticians is in the habit of importing from Paris ordinary commercial lenses, remounting them after the English style, and palming off such inferior productions as lenses of the best makers. The fraud was discovered by one of our microscopic experts, who was called in to value the stand, lenses, and other microscopic appliances left at the death of a physician of considerable prominence in this city.—*New York Med. Record*, December 8.

Salicylate of Soda in Rheumatic Iritis.—Dr. Galezowski addresses a note to the Académie de Médecine, in which he observes that in *rheumatic iritis*, accompanied by plastic exudations and numerous posterior synechiæ, every new relapse becomes dangerous by favouring the obliteration of the pupil. In an eye attacked by this relapsing iritis there is often much difficulty met with in overcoming the inflammatory accidents. In eighteen cases treated by the salicylate he has obtained an amendment in all the symptoms, and often in three or four days, in the same patients, who, prior to its employment, used to be under treatment with similar symptoms for a month or six weeks. What is most remarkable is the immediate disappearance of the pain and redness, and afterwards the rapid diminution of plastic exudations. In two cases of *irido-choroiditis*, or *irido-cyclitis*, the salicylate arrested very promptly the inflammatory accidents, and immediately suppressed the violent pains which are ordinarily so obstinate as to render iridectomy obligatory. Excellent results have also been obtained in rheumatic inflammations of the sclerotic, and especially in ten cases of *scleritis* and *sclero-keratitis*. In these, wherein no other treatment gives satisfactory results until after several months, the salicylate produced an amendment, and even a cure in from one to six weeks.—*Bulletin de l'Acad.*, February 5.

Composition and Quality of the Metropolitan Waters in January, 1878.—The following are the returns (by Dr. Meymott Tidy) of the Society of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, etc.	Nitrogen As Nitrates, etc.	Ammonia.		Hardness. (Clarke's Scale).	
				Saline.	Organic.	Before Boiling.	After Boiling.
Thames Water Companies.	Grs.	Grs.	Grs.	Grs.	Grs.	Degs.	Degs.
Grand Junction ...	20·40	0·114	0·090	0·000	0·009	13·2	3·7
West Middlesex ...	21·20	0·142	0·126	0·000	0·008	14·8	3·7
Southwark and Vauxhall ...	21·40	0·080	0·126	0·002	0·009	13·7	3·7
Chelsea	21·40	0·053	0·150	0·002	0·009	14·8	3·7
Lambeth	21·40	0·073	0·150	0·002	0·007	14·3	3·7
Other Companies.							
Kent	27·40	0·009	0·345	0·001	0·004	18·8	5·5
New River ...	21·90	0·025	0·135	0·001	0·008	15·4	2·8
East London ...	20·90	0·047	0·060	0·000	0·006	12·6	4·2

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases but the following, when it was slightly turbid—namely, in that of the Southwark and Vauxhall, and the Lambeth Companies.

Abuse of Prescriptions.—The repeated dispensing of the same prescription, and the possibility of large quantities of dangerous drugs being thus obtainable by the public, brought prominently forward by Dr. Althaus in a recent number of the *British Medical Journal*, does not seem to be so effectively met by Austrian legislation as he supposes it to be. At all events, if such legislation exists, it would seem that it is easily evaded, for in the *Allg. Wien. Med. Zeit.* for January 22 we find an article loudly complaining of this very abuse, calling upon the authorities to pay attention to it, and to cease to consider it as a mere professional grievance. Energetic steps will probably only be taken after numerous accidents have been traced to this misuse of prescriptions. Apothecaries (that is, in Germany, dispensers) ought, the *Zeitung* observes, on no account whatever furnish a dangerous medicinal substance from an old prescription, unless a renewal is ordered by the prescriber—a mere *repetatur* not sufficing, but the date and signature being re-affixed. "The apothecaries are striving against free trade in pharmacy, and we are striving against free trade in prescriptions."

Professor von Hebra on Acne Rosacea.—In the *Wien. Med. Wochenschrift* for January 15, Prof. von Hebra figures two instruments which he has of late found very useful in the treatment of obstinate acne. One of these is a strong lancet-formed needle, cutting on both sides, and furnished with a stop in order to prevent its penetrating too deeply. With this he makes numerous perpendicular punctures (with a rapidity resembling that of a sewing-machine) for the purpose of destroying the capillary vessels which give rise to the red stripes or sinuous lines visible to the naked eye—proceeding from below upwards, in order that the bleeding may not obscure the progress of the operation. This is easily arrested by compressed wadding. The after-treatment consists in re-application of wadding if the surface remains dry, and in the use of simple ointments when there is suppuration. After the healing, if the destruction of the distended capillaries is not complete, the puncturing must be again performed. The Professor refers to six obstinate cases of acne in which he has found the process quite successful. The other instrument is a modification of Volkmann's "scraper," in the form of a small ear-shaped spoon with sharp edges (having lateral prolongations when intended for the deeper-seated products), fixed on a strong short stem with a long handle. This is used for the destruction of new formations in the skin, as in lupus, epithelioma, etc., or for the removal of infiltrations, as in sycosis and acne, and it must be continued to be employed until the whole of the diseased product is removed. The scraping is of no avail in superficial nævoid or acne rosacea, as, owing to the resistance of the cutis, only the epidermis instead of the diseased product comes away. Still, repeated scraping, with its attendant superficial suppuration, is followed by a diminution of the redness of the face, both in acne rosacea and nævoid—probably on account of the obliteration of the minute vessels of the cutis. The instruments may be had at Leiter's, Vienna.

Prize-Subjects of the Académie des Sciences.—The following from among the prize-subjects announced by the Academy may interest our readers:—1. The Grand Prize in the Physical Sciences of a gold medal (3000 fr. in value), for 1879, for an elaborate investigation of fossil bones of one of the tertiary deposits in France. 2. The Lacaze Prize of 1879, consisting of three sums of 10,000 fr. each, for the works or memoirs which shall be considered as having most contributed to the progress of physiology, physics, and chemistry. 3. The Jecker Annual Prize of 10,000 fr., for the work which is considered to have most hastened the progress of organic chemistry. 4. The Barbier Annual Prize in Medical Science of 3000 fr., for a valuable discovery in surgical, medical, or pharmaceutical science, and in botany in relation to the art of healing. 5. The Thore Annual Prize is awarded alternately for works on European cellular cryptogama, and for researches on the habits or anatomy of an insect. 6. The Annual Montyon Prizes in Medicine and Surgery, for inventions and discoveries tending to perfect medicine or surgery, or to diminish the dangers incident to various occupations or mechanical arts. 7. The interest of the Bréant (100,000 fr.) Prize, for the discovery of a cure of cholera, will in the meantime be devoted to rewarding the best works on epidemic diseases

and their causes. 8. The Godard Annual Prize of 1000 fr., for works on the genito-urinary organs. 9. The Serres Prize of 7500 fr. will, in 1878, be adjudged to the author of the best work on embryogeny. 11. The Chaussier Prize of 10,000 fr. will be adjudged in 1879 for the best work that has appeared during the preceding four years. 11. The Dusgate Prize of 2500 fr. will be adjudged in 1880 to the author of the best memoir on the signs of death, and the means of preventing premature interments. 12. The Montyon Prize in Physiology (a medal of the value of 764 fr.) will be awarded to the author of the printed or manuscript work which appears to have most contributed to the progress of experimental physiology.—*Gaz. Hebd.*, February 8.

ABUSE OF PESSARIES.—Dr. Gaillard Thomas makes the following observations in a clinical lecture, reported in the *New York Medical Record*, December 22:—"On making an examination, I found in her vagina the anteversion pessary which I now show you, which has a movable arm, and is called mine, but which I have long since discarded. Even if I still did use an instrument of this construction, I should never think of introducing one of this extremely large size. Now, I want to put you on your guard against the improper or careless use of pessaries, and particularly those designed for the relief of anteversion. In the present case a two months' sojourn of the pessary has resulted in completely cutting through the vagina. It was found deeply embedded in its walls, and could only be removed with considerable difficulty. Great furrows were found at the points where the instrument pressed, and the bladder itself was nearly cut through in one place. The points I desire to make here are these:—1. Always put in a pessary that is perfectly movable when it has been adjusted, or it will undoubtedly cut into or through the vagina. 2. Never leave any anteversion pessary in the vagina for two months at a time. 3. Never introduce any kind of pessary which the patient cannot take out herself. She should always be instructed as to the way of doing this, or else pelvic cellulitis or other serious trouble may possibly be set up before she applies for medical aid."

NOTES, QUERIES, AND REPLIES.

"He that questioneth much shall learn much."—*Bacon.*

THE GOLDEN-SQUARE HOSPITAL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—On recently paying my subscription to this Hospital, I was handed a receipt bearing the words "Patron H.R.H. the Prince of Wales" under the name of the Hospital. In your last week's number it was stated that the Prince of Wales withdrew his patronage seven or eight months since, after an inquiry had been held into the alleged mismanagement of the medical department of that institution. Any comment on the conduct of the managers of the Hospital in still continuing to keep his Royal Highness's name on their forms is superfluous, but it is as well that the public should be acquainted with the fact. I am, &c.,

February 12. A SUBSCRIBER.

*** "A Subscriber" is rather hard on the managers. They no doubt are simply having the formerly-printed books of receipt-forms used up, before ordering new ones; and economy in hospital expenditure is a virtue.

T. P. W., King's College.—Last Wednesday, the 11th inst., was the first anniversary of the death of Sir William Fergusson. We cannot tell you where to obtain the large engraving by Joubert; probably at Mr. Palmer's, in Golden-square.

Dentine.—The examination for the licence in dental surgery of the Royal College of Surgeons is just over; the list of successful candidates appears in another column. The Board of Examiners consists of the following gentlemen, viz.:—Messrs. F. Le G. Clark, F.R.S., chairman; W. S. Savory, F.R.S.; John Birkett, President of the College; S. J. A. Salter, F.R.S.; T. A. Rogers, M.R.C.S.; and H. J. Barrett, M.R.C.S.

Dr. Ayres.—We are requested to state that this person, whose advertisements so constantly appear, without any Christian names in order to identify the individual, is no connexion of Dr. P. B. Chenery Ayres, colonial surgeon, Hong-Kong. The only other gentleman of this name in the list of Members of the College of Surgeons must, if alive, be about eighty-two years of age.

Cuvier.—Professor Parker on Monday last commenced his lectures on the Morphology of the Batrachia.

G. G., Hants.—A local Government inquiry has been held before Mr. G. T. Harrison, a Local Government Inspector, respecting the application of the Bournemouth Commissioners for compulsory powers to procure land for purposes of a fever hospital. The inspector's report will, no doubt, soon be laid before the Local Government Board.

Cuisine.—A cookery centre is in course of construction at Stephen-street by the London School Board. Moreover, Marylebone School and the Works Committee have been authorised to bring up tenders for the erection of three additional cookery centres, in the Finsbury, Southwark, and Tower Hamlets divisions respectively. It is estimated that each centre will cost about £620, and each kitchen about £520.

A Confused Citizen.—There are fifty-six separate divisions of the metropolis for the purposes of the building Acts, thirty-nine for the purposes of local government, thirty-seven for the purposes of Metropolitan Board representation, thirty Poor-law unions and parishes, twenty-eight districts of the Superintendent Registrar, and twenty-one burial boards. Yes, there was a Metropolitan Commission of Sewers, comprisiug no less than 1065 members, empowered to superintend the drainage of London outside the City. In 1847 that Commission was reduced to twenty-three, then changed to thirty-four, afterwards varying between eleven and sixteen members. Of this Commission it has been said that "it was successful in heaping up debt, and little else."

Statistician.—It is no doubt as you state, but the disputes of statisticians in no way interrupt their work: the greater part of them go on combating and calculating all over Europe as if the two acts were inseparable. They take refuge from a fight in figures, rush back again from arithmetic to arms, and spend their lives between reckoning and reprisals. No one doubts that statistics are not all true, but they are sufficiently near the average truth to serve the purposes for which we want them.

A Non-Smoker.—By the code of laws approved in 1650 by the General Court of Connecticut as the laws of the Connecticut colonies, which remained in operation until 1686, and were nicknamed by the Americans as the "Blue Laws," it was ordered that no person under the age of twenty-one years, nor any other (however old) who had not already accustomed himself to the use of tobacco, should be permitted to smoke, or snuff, or chew, unless he brought a certificate from a *physician* that it was useful for his health. Anyone who smoked either in his own house or publicly in the streets was to be fined 6d. for each offence on the testimony of a single witness. It was ordered also that "such fines should be paid without gainsaying." This law remained in operation, so far as it applied to smoking in the public streets, until within living memory in the city of Boston and elsewhere, the fine for disobedience having been raised from sixpence to a dollar.

Dairy.—Mr. Phillips Day, in his recently published food papers, puts the total annual supply of milk to London at nearly 200,000,000 quarts. He states that this supply is supposed to be yielded by 25,000 cows giving a daily average or nine quarts of milk. He calculates the cost to the inhabitants at not far from two millions sterling.

Our Ashes.—The whole question of cremation in its historical aspect is discussed, and all that refers to the practice of it by our Anglo-Saxon and Scandinavian ancestors is given, in a treatise on "Fire-Burial among our Germanic Forefathers," by Karl Blind. The treatise is published by Longmans, Loudon.

INDIAN JOTTINGS.

The rate of mortality in Bombay, the week ending the 19th ult., was 44·22 per 1000. The total number of deaths was 561, including 197 from remittent fever. Small-pox is reported to be still very severe, both at Cawnpore and Lucknow. Half of the Buffs are out in camp by an epidemic of the disease at the former station. The disease has also broken out at Aden, having been carried there in ship from Jeddah. Dr. Elliott, a leading practitioner of Calcutta, and Principal of the General Hospital, died from cholera on the 13th ult., after nine hours' illness. A very serious outbreak of fever is reported among the gang of convicts (about 1200 strong) now working in the Neera Canal. There have been seventy deaths, and one-third of the whole number of men employed have been attacked. The gang has been broken up, and the men sent away.

BOOKS AND PAMPHLETS RECEIVED—

Sampson Gamgee, F.R.S.E., On the Treatment of Wounds (Clinical Lectures)—Dr. Masse, Typhus et Fièvre Typhoïde—Dr. Carl Götel, Die Offentliche Gesuodheitspflege in den Ausserdeutschen Staafen in Ihren Weseutlichen Leitstungen Geschildert—Dr. Michael Foster, F.R.S., On Medical Education at Cambridge—Dr. Albert Eulenburg, Lehrbuch der Nervenkrankheiten—Rickman J. Godlee, M.S., F.R.C.S., An Atlas of Human Anatomy, part 3—Edward G. Loring, M.D., Is the Human Eye Changing its Form under the Influence of Modern Education?—Beverley Robinson, M.D., The Mechanism and Treatment of Pulmonary Complications of Acute Cardiac Disease—James More, M.D. Edin., A Lay Sermon on Clubs and their Doctors—Francis Ogston, M.D., Lectures on Medical Jurisprudence—Reports on Diseases of the Chest, under the direction of Horace Dobell, M.D.—A Few Rules of Medical Etiquette, by a Licentiate of the Royal College of Physicians—Prosser James, M.D., M.R.C.P., Lessons in Laryngoscopy, second edition—Cyclopædia of the Practice of Medicine, edited by Dr. H. von Ziemssen, vol. xiv.—Diseases of the Nervous System and Disturbances of Speech—Henry A. Martin, M.D., Surgical Uses other than Hæmostatic of the Strong Elastic Bandage.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Dublin Journal of Medical Science—Temperance Record—Sammlung Klinischer Vorträge—Guy's Hospital Gazette—Sanitary Register—Richmond and Louisville Medical Journal—Boston Journal of Chemistry.

COMMUNICATIONS have been received from—

The Secretary of the National Provident Institution, London; The Secretary of the Medical Alliance Association, London; The Registrar of Apothecaries' Hall, London; Mr. W. A. Frost, Hartshill, Staffordshire—Mr. Samuel Hill, London; Dr. Meymott Tidy, London; Dr. Pearson Irvine, London; Mr. D. Tallerman, London; Mr. Evans, London; Mr. J. E. Ingpen, London; The Hon. Secretary of the British Medical Benevolent Fund; Dr. J. Braxton Hicks, London; The Secretary of the Society for the Encouragement of Arts, Manufactures, etc.; Dr. Carter, Liverpool; Dr. J. W. Moore, Dublin; The Honorary Secretary of the Harveian Society; Dr. Cornelius Fox, Chelmsford; The Secretary of the Royal Institution of Great Britain; The Honorary Secretary of the Worcestershire Medical Society; Surgeon-Major F. P. Staples, London; Mr. Jas. Startin, London; The Secretary of the Association of Surgeons Practising Dental Surgery; Dr. Edward Liveing, London; Mr. W. E. Poole, London; Dr. Thos. Barlow, London; Dr. Herman, London; Mr. John Chatto, London; Dr. J. M. Bauce, London; Mr. Jonathan Hutchinson, London; Mr. B. R. Wheatley, London; Dr. James Ross, Manchester; Mr. T. M. Stone, London.

APPOINTMENTS FOR THE WEEK.

February 16. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

Royal Institution, 3 p.m. Mr. R. Bosworth Smith, "Carthage and the Carthiginians."

18. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Mr. Balmanno Squire, "Two Cases of Flat Vascular Nævus successfully treated by Repeated Linear Scarifications." Mr. William Adams will exhibit Improved Instruments for the Treatment of Broken Nose; and Mr. Spencer Watson, Improved Instruments for the Treatment of Distortion of the Nose. Mr. Wordsworth, "On the Treatment of Squinting without Operation."

Royal College of Surgeons of England, 4 p.m. Professor W. K. Parker, "On the Morphology of the Batrachia."

19. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Pathological Society, 8½ p.m. Mr. Knowsley Thornton (for Mr. Taylor, of Guildford)—Tumours of both Ovaries. Mr. K. Thornton—Cysts from the Peritoneum. Mr. J. Wood—Cystic Disease of the Thyroid. Dr. Peacock—Malformation of the Heart. Dr. Samuel West—Thrombosis of the Vena Cava, with Secondary Thrombosis of the Portal Vein. Dr. Wickham Legg—1. Aneurism of the Right Auricle; 2. Melanotic Liver. Dr. Goodhart—1. Dilatation of the Aorta from Old Spinal Disease; 2. A Case of General Arterial Disease. Mr. Charles Coles—Worms in the Heart, Liver, and Larynx of a Dog. Mr. B. Squire—Drawings (1) of a Rare Form of Psoriasis, and (2) of a Case of Nævus complicated with Molluscum. Mr. Sangster—Case of Hypertrophic Lupus. Dr. Ord—1. Renal Calculus containing Indigo; 2. Renal Calculus of mixed Carbonate and Phosphate; 3. Spontaneous Disintegration of Calculi. And other Specimens.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

20. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Association of Surgeons Practising Dental Surgery, 8½ p.m. Mr. Lyons, "Observations on the Treatment of Compound Fractures of the Lower Jaw, with Notes of Cases."

Royal College of Surgeons of England, 4 p.m. Professor W. K. Parker, "On the Morphology of the Batrachia."

21. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

Harveian Society, 8 p.m. Dr. De G. Griffith, "A Case of Hydramnios." Mr. Knowsley Thornton, "On Unsuccessful Ovariotomy, with Cases."

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

22. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Quekett Microscopical Club, 8 p.m. Ordinary Meeting.

Royal College of Surgeons of England, 4 p.m. Professor W. K. Parker, "On the Morphology of the Batrachia."

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Prof. Odling, "The New Metal Gallium."

VITAL STATISTICS OF LONDON.

Week ending Saturday, Feb. 9, 1878.

BIRTHS.

Births of Boys, 1339; Girls, 1254; Total, 2584.
Average of 10 corresponding years 1868-77, 2424·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	900	913	1813
Average of the ten years 1868-77	791·7	773·5	1565·2
Average corrected to increased population ...	...	...	1675
Deaths of people aged 80 and upwards	...	...	82

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	6	4	...	2	19	...	5	2	3
North ...	751729	34	11	15	3	18	...	5	1	5
Central ...	334369	1	1	6	...	4	...	...	...	5
East	639111	5	8	6	1	19	1	3	1	4
South	967692	9	16	10	4	54	2	8	...	5
Total	3254260	55	40	37	10	114	3	21	4	22

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·338 in.
Mean temperature	35·1°
Highest point of thermometer	43·1°
Lowest point of thermometer	25·1°
Mean dew-point temperature	32·8°
General direction of wind	N.E., S.E., & S.W.
Whole amount of rain in the week	0·05 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 9, 1878, in the following large Towns:—

Boroughs, etc. Municipal boundaries for all except London	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Feb. 9.	Deaths Registered during the week ending Feb. 9.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2584	1813	43·1	25·1	35 1	1·73	0·05	0·13
Brighton	103923	44·1	71	4	44·0	27 0	36·3	2·39	0·05	0·13
Portsmouth ...	129461	28·8	76	47	...	...	...	...	...	...
Norwich	84620	11·8	59	67	46·0	28·0	38·2	3·44	0·00	0·00
Plymouth	73599	52·8	48	47	49·0	31·0	40·1	4·50	0·00	0·00
Bristol	206419	46·4	141	77	44·3	24·6	36·8	2·72	0·02	0·05
Wolverhampton ..	74240	21·5	6	39	43·5	27·3	35 3	1·84	0·06	0·15
Birmingham ..	383117	45·0	325	202	...	...	...	...	...	...
Leicester	121473	28·0	81	52	44·5	27·8	36·4	2·44	0·00	0·00
Nottingham ...	185267	16·6	121	88	49·8	25·1	37·3	2 95	0·00	0·00
Liverpool	542681	102·3	423	308	45·4	28·2	36·5	2·50	0·01	0·03
Manchester ...	360514	84·0	287	213	...	...	...	...	...	...
Salford	170251	32·8	131	110	49·4	24·5	33·5	0·84	0·00	0·00
Oldham	107366	28·0	90	52	...	...	...	...	...	...
Bradford	185088	25·6	131	7	44·2	30·0	37·5	3·06	0·00	0·00
Leeds	304948	14·1	213	138	46·0	29·0	39·3	4·06	0·00	0·00
Sheffield	289537	14·7	199	138	48·0	26·0	37·1	2·84	0·00	0·00
Hull	143189	59·8	127	60	49·0	27·0	37·5	3·06	0·00	0·00
Sunderland ...	112459	34·0	93	40	52·0	34·0	41·8	5·45	0·01	0·03
Newcastle-on-Tyne	144570	26·3	125	68	...	...	...	...	...	...
Edinburgh	222371	53·1	122	129	50·8	30·0	40·8	4·89	0·02	0·05
Glasgow	566940	94·0	427	325	49·0	31·0	40·1	4·50	0·00	0·00
Dublin	314666	31·3	202	199	54·7	25·4	40·7	4·83	0 05	0·13
Total of 23 Towns in United Kingdom	373953	37·5	6139	4345	54·7	24·5	37·8	3·23	0 02	0·05

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·34 in. The highest reading was 30·45 in. on Thursday morning, and the lowest 30·00 in. at the end of the week.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

CLINICAL LECTURE ON ULCER OF THE STOMACH.

By H. G. SUTTON, M.B., F.R.C.P. Lond.,
Physician and Lecturer on Pathology and Medicine, London Hospital.
[Reported by Mr. MITCHESON, House Physician.]

GENTLEMEN,—M., aged fifty-one, a patient in Gurney ward, is suffering from simple ulcer of the stomach. She says that she was quite healthy up to two months ago; that she has never had any ailment but epistaxis. In August last she began to suffer from pain in the lower part of her chest under the ensiform cartilage, the pain coming on not immediately after food, but about half an hour after. This pain was continuous, and about two hours after food it radiated to surrounding regions, and was felt under her right scapula: she describes it as a severe dragging pain, and says it was worst after she took hot liquids or solid food. These symptoms continued for six weeks, but were not bad enough to cause her to seek advice. Her pain was relieved by lying down. She had no vomiting—which is somewhat unusual. Her symptoms remained the same to within seventeen days before admission, when one day, after some exertion, she was suddenly seized with faintness, and brought up "a wash-hand basin full of blood." This blood was vomited, was of a blackish-red colour, and was not frothy. Twelve hours after, she again vomited blood, and for a few days afterwards she vomited a brownish liquid resembling beef-tea.

When first seen she was blanched and weak. On examining her, there were no evidences of disease in any organ except the stomach.

The symptoms of simple ulcer of the stomach are distinctly grouped and clearly defined, distinguishing it from all other diseases. These symptoms are pain after food—not immediately after, but from about fifteen minutes to an hour or even two hours after. The region of the pain varies: it may be directly under the ensiform cartilage, or under the left costal cartilages, or under the right costal cartilages. The pain generally extends to the back, under the scapulæ or in lower dorsal or upper lumbar regions. The pain is increased by food, and when the stomach contains no food there is usually no pain, and hence there is no nocturnal pain, thus distinguishing the disease from cancer of the stomach; the pain is also increased by movement of the patient. The pain is relieved by vomiting,—showing that it is due to the contact of food; it is also relieved by lying down. There is vomiting in about four-fifths of the cases, hæmatemesis in one-third of the cases; the hæmorrhage is generally profuse, and may occur more than once, and there may be profuse hæmorrhage into the stomach and no hæmatemesis, on account of the death of the patient or the passage of the blood by the bowls. Patients with gastric ulcer are nearly always anæmic.

For what may the symptoms of gastric ulcer be mistaken? For those of malignant disease of stomach. How distinguish between them? In the early stage it is difficult, sometimes impossible. In cancer there is a progressive failure in the patient's condition; loss of flesh and strength; the pain may vary much, and is generally present at night; in the late stages it is generally possible to make out the presence of a tumour in the epigastrium, and there are often signs of secondary deposits in other regions. In two cases in which diagnoses of malignant disease of stomach were made, the subsequent progress denoted extensive fibroid thickening round the ulcers, producing a tumour; the pain subsided, the patients gained flesh and strength, and their symptoms, excepting the tumour, disappeared. In cases of chronic catarrhal inflammation of stomach, especially in anæmic girls, the symptoms much resemble those of simple ulcer of stomach; but the pain comes on immediately after food, because catarrhal inflammation is usually most marked along the greater curvature of the stomach. There is vomiting, but the pain is not entirely relieved thereby; the pain is more or less continuous; there is no hæmatemesis. Then there is generally a recognisable cause of gastric catarrh, such as heart or lung disease, profuse menstruation, or other causes. According to some observers, the symptoms of gastric ulcer may be latent. In one case out of every eight there is perforation. In Dr. Sutton's experience, in cases of gastric ulcer there are warning symptoms, but they may be slightly marked, though hæmorrhage or perforation are imminent. When there is any doubt about a case he advises rest in bed and liquid diet.

With rest in bed and liquid food, the symptoms subside. The rest in bed is indispensable: the anæmia disappears; and rest favours the formation of adhesions, and promotes nutrition by aiding the heart's contractility. Medicine is not absolutely necessary. Occasionally a little Dover's powder (grs. v. bis in die) when the pain is very severe; or, on account of anæmia, some mild preparation of iron (the ferri et ammon. cit., or the ferri pot. tart.), and this treatment should be continued till food can be taken without pain and the patient can walk about comfortably, which is generally in about eight to twelve weeks. Any craving on the part of the patient for solid food or to get up should not be gratified, as too early indulgence in these respects may lead to relapses.

ORIGINAL COMMUNICATIONS.

NOTES ON THE SLOW PULSE SOMETIMES SEEN IN JAUNDICE.

By J. WICKHAM LEGG, M.D., F.R.C.P.,
Demonstrator of Morbid Anatomy in St. Bartholomew's Hospital.

IT has been known for many years past that in some cases of jaundice the pulse becomes slow. I cannot, however, say precisely by whom the symptom was first noticed. John Andrée certainly speaks of it in 1788, and mentions besides a case in which Dr. Hunter found the pulse as low as 37. The claims set up by Pouzol for Bouillaud, that he was the first (in 1846) to describe it, thus fall to the ground. John Andrée was a well-known man of his time, and it is said that he was the first to perform tracheotomy in England, or indeed in Europe.

It is, however, only of late years that an attempt to explain the phenomenon has been made. Röhrig made the first in 1863, and it is noteworthy that he came, with imperfect methods, to very nearly the same results as the latest observers have arrived at with all the modern appliances. He found that the bile is by no means the harmless agent that it is said to be when injected into the blood; the pigment and cholestearine do not cause a slow pulse when injected separately; but the bile acids, when separated from the rest of the biliary constituents, and injected into the blood, or introduced into the serum in which the cut-out heart of the frog is beating, cause the pulse to become slow. The pulse becomes slow in mammals, even when the vagi are cut; and this, joined to the well-marked effect on the cut-out frog's heart, caused Röhrig to believe that the action of the bile acids on the ganglia of the heart was the cause of the slow pulse. Such reasoning would not now be accepted by physiologists. The next year Traube thought he had found out quite a different cause for the slow pulse. It is well known that the bile acids dissolve the blood corpuscles. The bile acids, therefore, if injected into the jugular vein, destroy a large number of red corpuscles, and render that part of the blood incapable of being oxidised, for the red blood corpuscles are supposed to be carriers of oxygen. In the course of the circulation this damaged and useless part of the blood is sent through the lungs and brought round to the left side of the heart, and thence is supplied to the coronary arteries. The muscular walls, being thus fed with blood quite unfit for their nourishment, become unable to contract, and a slow pulse follows. Johannes Ranke also supports the notion that the slow pulse is due to the action of the bile acids upon the muscular tissue of the heart. He found that, when the bile acids were injected into the limb of a frog, the muscles became hard and rigid, and did not answer to electricity. He believes from this that the striped muscles are the only factors concerned in the slow pulse of jaundice.

Opinions being so greatly divided on this matter, I determined to undertake a research for myself, and the results of my observations were read before the Royal Society in April, 1876.

In considering this question it appeared that there might be three factors in the slow pulse—to wit, the action of the vagus, the muscular walls, and the ganglia of the heart,—and I began my undertaking by repeating the experiments of those who had gone before me. I have repeated Traube's experiments with the kymograph many times, experiments which are long, wearisome, rarely succeeding, and needing infinite patience for success. I arrived at nearly all his results, and his facts are very good, though I do not agree with his explanations. Traube's theory is destroyed by the fact that a frog's heart, fed with serum or even with saline solution containing bile acids, shows the same phenomena as if fed with blood: so that the red corpuscles are not necessary factors in the begetting of the slow pulse.

To return to the three factors of the slow pulse just mentioned. It became necessary to eliminate the action of the vagus, the inhibitory function of which is taught to all students. With this object a frog's heart was arranged in Bowditch's apparatus. (For explanation of this see Dr. Lauder Brunton's "Experimental Investigation of the Action of Medicines," page 72. Any influence exercised by the vessels is removed, as there is only an artificial circulation). This heart was fed with serum containing 0·028 per cent. of atropia, a body which destroys the influence of the ends of the vagus in the heart itself. Bile acids were a few minutes after introduced into the serum, and the contractions of the heart immediately fell from twelve to eight in the minute. These observations were repeated several times with the same result, so that it became clear that the slow pulse appeared when the influence of the vagus was removed, and could not therefore be due to any excitement of the vagus by the bile acids.

Fig. 1.

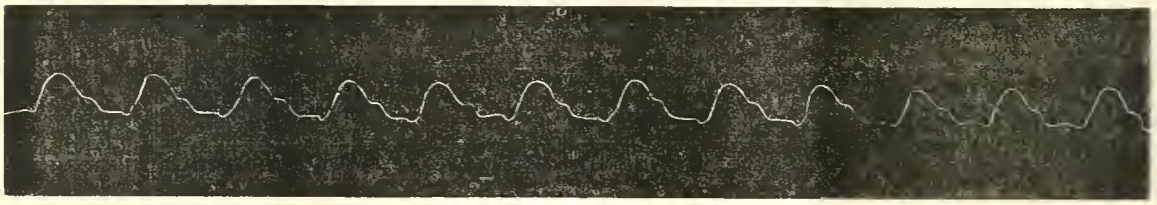

Fig. 1.—Normal tracing of frog's heart.

Fig. 2.

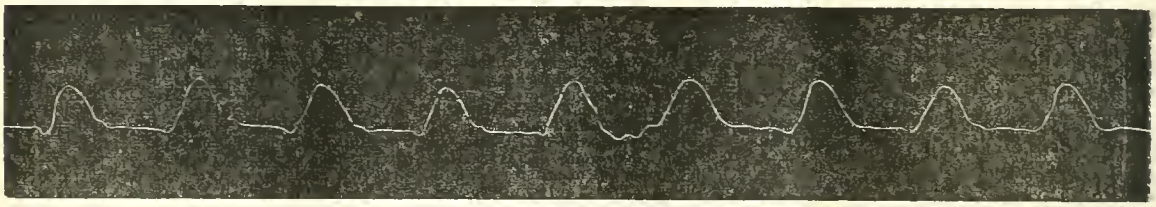

Fig. 2.—Tracing after adding atropine.

Fig. 3.

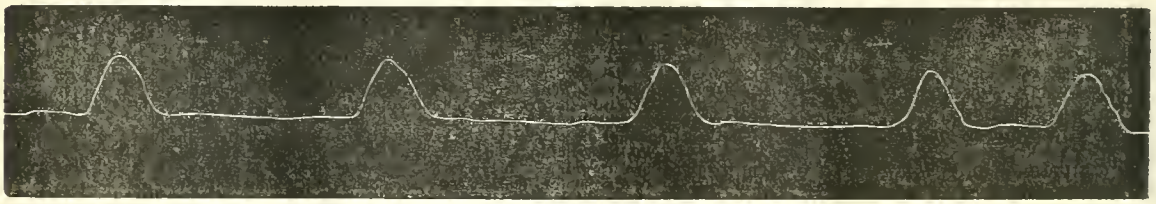

Fig. 3.—First effect of the bile acids.

Fig. 4.

Fig. 4.—Later effect of the bile acids.

The next factor that remained to be dealt with was the muscular wall of the heart. Johannes Ranke, it has been stated, believes the slow pulse to be due to the action of the bile acids on the striped muscles, and it thus became necessary to repeat his experiments. If, as Ranke has done, a 1 per cent. solution of the bile acids be injected into the aorta of a frog, the limbs show irregular contractions and the muscles become stiff and hard, and electricity applied to the sciatic nerves causes no contraction. The explanation of this seems to be a chemical rather than a physiological one. The bile acids have the power of coagulating albumen, and it is to the action of the bile acids upon the myosin that the hard and stiff appearance of the muscles seems to me to be due. By introducing the bile acids so as not to bring them directly into contact with the muscular fibre, but to allow them to act slowly by the natural process of absorption, I found that the bile acids had no action on muscle. The ordinary telegraph lever myograph was used, doses varying from 0·05 to 0·3 gramme were given, and the muscles tested from one minute after the dose to an hour or more, until the death of the animal, without any change in the character of the curve being observed.

It would appear, then, that the bile acids have no physiological action upon striped muscular tissue. But I thought it desirable to make some observations on the ventricle of the frog's heart, separated from the ganglia by ligature or by division. No change in the number of beats after the introduction of bile acids into the serum was noted. I also made some observations on the hearts of snails, which Dr. Michael Foster has found to contain no nerves; but I was unable to

perceive any change in the number of their contractions after poisoning the animal with bile acids.

If the slowness of the pulse be not due to the influence of the vagus, nor of the muscular walls, there remains only one other cause which may beget a slow pulse, to wit, the ganglia of the heart. If it be allowed to reason by way of exclusion, the cause of the slow pulse in jaundice must then be the action of the bile acids on the ganglia of the heart.

The bile acids have no influence on the lymphatic hearts of frogs, but the reflex irritability is greatly decreased.

The slow pulse is not very common in jaundice. Within the last twelve months I have had twenty-seven patients with simple jaundice at St. Bartholomew's, and only four showed at any time a slow pulse. The lowest observed pulse in the four cases was 17, 15, 17, and 18 in the fifteen seconds; so that in none was the pulse very slow. The patients were all made to lie on their backs for ten minutes before the pulse was counted. I have, however, seen the pulse as low as 50, and once as low as 40. Frerichs says he has found it as low as 21 beats. In my cases it has always been quite regular, though by some it is said to be irregular. Slowness disappears if the patient get up and walk about.

The slow pulse is seen in any kind of jaundice. I have under my care now a man who has been a great drunkard, with a large liver, and who has been jaundiced for three months. His temperature is sometimes as low as 95° Fahr.; and his pulse varies from 64 to 68.

Henoch remarks that he has never seen the slow pulse in the jaundice of children. Even in cases absolutely free from fever the pulse was always 100 to 120. He believes that this is due to the great irritability of the child's nervous system, and especially to his fear of the physician. Rehn has, however, in an epidemic of jaundice seen a slow pulse in two children.

The reason that the slow pulse is so seldom seen in jaundice is, no doubt, that very little of the bile acids enters the circulation. This is shown by the small amount of bile acids in the urine. Besides, any large amount of bile acids in the blood would certainly act as a powerful poison, and stop the action of the heart altogether. It cannot be, then, that any quantity of bile acids circulates in the blood. The cause of this small quantity is somewhat hard to explain, as in health the liver secretes a large amount of bile acids daily. Probably in jaundice the functions of the liver become very torpid. I have shown that in biliary obstruction the liver ceases to secrete glycogen, and it seems likely also that its other functions are seriously disturbed.

ANALGESIA AS A DIAGNOSTIC TEST OF HYSTERIA.

By THOMAS BARLOW, M.D., B.S.,
Assistant-Physician to the London Hospital, and to the Children's Hospital, Great Ormond-street.

Charcot's researches on perverted sensation in hysteria have now been before the profession for twelve months. Many English physicians have seen for themselves the Salpêtrière cases, and a few similar ones have been reported in England. I venture to believe that those who have taken the pains to investigate it have found analgesia in some form and degree a very frequent condition in hysteria. Leaving for after-consideration the question whether this analgesia is true or feigned, I wish (1) to draw attention to it from a practical point of view, as a help to diagnosis in *doubtful cases* of hysteria.

The following difficulty must have occurred to many engaged in out-patient practice:—A young woman gives a history of fits. It is difficult to get a proper account of them in her own words, but on being questioned she says she has bitten her tongue, lost her senses, felt sleepy afterwards, and so forth. It is hard to decide between hysteria and epilepsy, and one beats about for "interparoxysmal" or collateral signs, like "globus," etc., which, however, may not be forthcoming.

All diagnoses depending only on the statements of patients, especially in reply to leading questions, are unsatisfactory. In such a case the discovery of analgesia is a most valuable help. If, whilst the patient's attention is directed to something else, a needle be introduced into the forearm and no wincing occur, there is the strongest presumption that we have to do with a case of hysteria. In at least seven cases this test has been of value. Of course the possibility of organic brain or cord disease must be mentioned, but if there are no motor signs, practically it may be set aside. M. Magnan has drawn attention to the occasional occurrence of hemianæsthesia of the hysterical type in cases of chronic alcoholism, and this is of interest because of the frequent similarity in other ways of these two conditions.

It has been long known that hysterical patients are often extremely tolerant(a) of laryngoscopic examination. Great advantage will be found in examining a presumed hysterical patient's larynx, and thus fixing her attention whilst somebody at the same time inserts a needle into her forearm. Absolute tolerance of these two simple methods of examination is, I believe, quite decisive. I will mention another difficulty which the analgesia test has helped to solve.

A girl of seventeen was brought to the London Hospital by her mother on account of her catamenia being excessive. As an empirical remedy some tincture of cannabis indica was ordered, the use of which was said to be followed by improvement. In another fortnight the girl complained of repeated vomiting. For this no obvious reason was forthcoming, and various remedies were tried in succession without the slightest benefit, the girl, notwithstanding, keeping up her flesh the while. I suspected that the vomiting was hysterical, and the analgesia test on both forearms did not fail. She was taken into the hospital and treated with nutritive enemata for three days, until she begged for food, and, needless to state, has not vomited since.

2. As to the *nature* of hysterical analgesia, it has been contended that it is the result of some inhibitory power possessed by the patient. This view seems *à priori* hardly consistent with the definitions of hysteria, which, however vague, generally include amongst one of the "notes" of the disease a defect of volition or lack of control. However, I am willing to concede that a patient might allow the introduction of a needle into her forearm without flinching, she having previously "set" herself so to do. For this reason I should be unwilling to cite in evidence as to the genuine nature of this condition, any experiments made *after the first*, or indeed where the element of "expectant attention" could enter at all. But in the cases to which I have referred above, and others, the first puncture has been carefully made with all precautions that could be adopted for preventing the patient knowing what was going to be done.

The youngest girl in whom I have yet observed this condition was a child aged three years. The mother gave a rather vague account of her. She had been at some nursery, where she was assumed to have been "upset," or "frightened." She was taken home; was very pale; screamed in the street; and after she got home had several fits. In these attacks she became stiff, threw her head back, rolled her eyes about, worked her eyelids a great deal, clenched her hands, and screamed "Mammy" the whole time. When she was brought to me at the Children's Hospital, a needle introduced into one forearm caused no start at all. Whilst it was being introduced into the other, the child slowly looked round at it, but did not withdraw her arm, and did not cry. With the exception of a little occasional quivering of the eyelids in a characteristic hysterical way there was nothing remarkable about the child. She was a little querulous, and looked pale and thin. Five days after, the analgesia was not absolute; she was still exceedingly tolerant of the pin-pricks, although her attention was more readily roused. She had had some more fits, but they had not been "so bad." A few days after this she had chicken-pox, which stopped her fits,(b) and she then started to a pin-prick like an ordinary child.

Is it conceivable that a fretful child of three years old could "set" herself to prevent any manifestation of pain on the introduction of a needle into her forearm without having any chance of knowing what was about to be done? In a girl aged five years and a half who had had an anomalous fit three weeks before, there was, when brought to me, absolute analgesia of the limbs: when the face was pricked a very

(a) Hyperæsthesia of the fauces is often as marked a feature in women the subjects of chronic alcoholism as anæsthesia of the same region in hysterical people.

(b) This is quite in accordance with the aphorism of Hippocrates, that "fever supervening on spasm removes it."

slight movement occurred, but the child did not draw her face away, and did not cry. Strong faradism, however, after a little while made her wince, and after this she started to pin-pricks as an ordinary child would. The mother was not at all surprised at the child's lack of feeling to ordinary stimuli. She volunteered the information that the day before, owing to the tilting of her chair, the child had fallen with her arm against the bar of a fire-grate, and had scorched it without crying at all. I saw the burn; it was superficial, but the cuticle was brown for four inches long and for a quarter of an inch broad. On a former occasion some broken pottery had cut the child's leg very badly indeed, and she "had only cried a very little." "She was a queer child—didn't feel like other children did."

It appears to me of importance to note that the analgesia in the cases of which I have spoken varies not only as to distribution but as to degree, and from day to day. The term "anæsthesia" is quite unsuitable, for, at all events in some of the cases, there was ability to localise where the pin-prick had been. The view which I take about this analgesia is that it is a real analgesia, and not a sham or the result of self-restraint. It seems to me one manifestation of the general torpor of the sensory functions which belongs to the hysterical diathesis.

It is in accordance also with Duchenne's rule, which has never received half the attention which it merits—viz., that in hysteria there is deficient sensibility to electrical stimuli, whilst the contractility is normal.

In several cases the first application of strong faradism has not been attended by expressions of pain or withdrawal of the limb, even though the muscles have been thrown into strong relief. Only after persevering for a few minutes has the patient become thoroughly "wakened up."

Between pathological and physiological conditions there is no broad line of demarcation. We constantly recognise in daily life differences as to degree of "responsiveness" to painful stimuli in different people. Some persons bear an operation well because they have strong wills and can control their expression—that is, control certain movements. Other persons bear an operation well because they do not feel much.

I have not referred to the affections of special senses which I believe several of my patients have had, because the testimonies with respect to them come from the patients themselves, and would therefore be inadmissible to those who dispute the genuineness of this set of symptoms. But surely it is very noteworthy that time after time, without leading questions, such statements as these are volunteered by the mothers:—"My child has had another of her blind fits; she groped her way about the whole day." "I gave my child something to eat yesterday, and she said she could not taste it."

It is certainly a "folly of the wise" to accept "mere statements as facts." Is it not also a "folly of the wise" to ignore the independent statements given even by hysterical girls when there is a certain order and definiteness about the way in which they state their experiences? It is very noteworthy that these alterations all point to a degradation of the sensory functions which might well be conceived to accompany defective volition. In the mild cases of hysteria with which I have been concerned, analgesia has not appeared worth treatment. I have not seen the need to resort to metallo-therapy. For the time at least strong faradism has been sufficient, though I have no doubt that afterwards the analgesia has recurred. Only in one case to which I have referred has this defective sensation appeared to result in inconvenience. I have not felt justified in testing for analgesia in the same patient on more than two or three successive occasions. If the view which I have taken is correct, the analgesia is part of the degraded or defective organisation of the hysterical patient. Any means which will evoke or develope the power of self-control will, I can well believe, help to raise the sensory function to the normal standard.

10, Montague-street, Russell-square.

From a return recently presented to the Leeds Board of Guardians by Mr. Thomas Holmes, the Vaccination Officer, it appears that 88·8 per cent. of the children born in his district during the half-year ended June 30 last have been successfully vaccinated.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ST. MARY'S HOSPITAL.

SKIN-GRAFTING UNDER UNFAVOURABLE CIRCUMSTANCES.

(Under the care of Mr. HAYNES WALTON.)

[Reported by Mr. A. B. Prowse, House-Surgeon.]

A healthy-looking girl was admitted into the Beverley ward. Her history is that three years ago she was brought to St. Mary's with a comminuted compound fracture of the right leg, the soft parts over and about the tibia being very much lacerated. Erysipelas attacked the wound, and some sloughing of the skin ensued. She left the hospital at about the end of six months, with firm bony union, yet without the surface being healed. For a space of about two inches long and three-quarters wide over the place of fracture was a granular ulcer, projecting somewhat because it lay on the piece of comminuted and slightly displaced tibia. Six months later she went to Ramsgate, where the wound healed. After many months a blow on the scar caused ulceration of the cicatrix, and all attempts to heal the new breach failed,—in which trial months of rest were included. When admitted here, the ulcer was three inches long and an inch and a half broad, the greater portion of which was over the tibia. Around it was a broad belt of dense, shining cicatrix, a great deal of which was adherent to the bone, so that it was impossible to pull the skin towards the ulcerated spot. The disadvantage of this physical condition was pointed out by Mr. Walton. He showed that as during the process of healing by granulation the breach was filled up by the contracting granulations pulling the skin together from around, as by the formation of new cicatricial tissue, a more unfavourable condition for repair could not exist, since not a particle of skin could be transposed, and that it was just the kind of ulcer that might never heal. He determined that so soon as the ulcer seemed healthy he would graft skin. This operation was accomplished. Twelve grafts taken from two students were planted; nine succeeded. Cicatrisation spread quickly, and in twelve days the wound was healed. There is nothing worthy of remark about the grafting, beyond that the majority of the grafts were placed on the ulcer rather close to the margin, and that it was from the circumference the healing set in quickly. An unlucky blow damaged the new cicatrix, set up inflammation, and destroyed some of the cicatrix. Again grafting was resorted to, and most effectually. The girl left the hospital in six weeks, with a firm insensitive cicatrix, necessarily raised above the level of the surrounding parts from the disposition of the fractured bone as above described. She was advised always to wear a pad over the seat of injury.

GREAT NORTHERN HOSPITAL.

A CASE OF COLLOID CANCER OF THE FEMALE BREAST — REMOVAL — NO RETURN OF THE DISEASE ONE YEAR AFTER THE OPERATION.

(Under the care of Mr. W. SPENCER WATSON.)

The chief interest of the following case arises from the extreme rarity of colloid cancer in the part affected. One specimen of scirrhus of the mamma, with partial colloid infection, is preserved in University College Museum; and another is related as having occurred in the practice of Mr. Timothy Holmes, in his "System of Surgery." All surgical authors, however, are agreed in regarding this affection as being so rare as hardly to be taken into account in forming a diagnosis as to the nature of a tumour in a given case of supposed cancer of the breast. Hence, a careful consideration of the following case may not be without clinical interest:—

History.—Charlotte T., a spinster, aged forty-two years, came into the hospital in January, 1877. She was somewhat fat and inclined to corpulence, fair-haired and slightly grey, cheerful and talkative, with a somewhat florid complexion. Her health had never been good, and she had on one occasion had a severe attack of pleuro-pneumonia.

About fourteen years before, she noticed a small lump in the left breast. It gave her no pain and remained stationary until four years ago. Since that time it has continued to increase in size, more especially during the last two years. It has been latterly rather painful, especially at night. There is no history of cancer in the family. Her father died of phthisis, and her mother of apoplexy. Her sister is a healthy married woman with two children, the latter, however, somewhat delicate in their lungs.

Present Condition, January 31, 1877.—There is a hardened nodular mass in the left breast, prominent above and to the axillary side of the nipple, which is slightly tucked in on the same side. The integument is somewhat adherent at one or two points near the nipple, but the tumour moves freely over the pectoral muscle. No glands can be felt in the axilla. The tumour is scarcely tender to the touch, and is only occasionally painful; it seems to be about the size of a hen's egg. The patient has not lost flesh, though her health has been very bad in various ways; occasional diarrhœa and abdominal pains, with tenderness over the hepatic region, having been her principal ailments. She is a little hysterical occasionally.

Operation, January 31, 1877.—Ether having been administered by Mr. Eastes, two semilunar incisions were made above and below the nipple respectively, including an oval piece of integument. The deep dissection was carried to the fascia of the pectoralis major, and the whole breast removed. Very free arterial hæmorrhage occurred, and was stopped by ligatures of the vessels in the axillary angle of the wound. Collodion tissue was applied along the line of incision, and fixed in its place by means of liquid collodion. A layer of lint, saturated with carbolised oil, was applied outside the collodion tissue, and a pad of lint adjusted below the under lip of the wound, and kept in position by a strap of sticking-plaster.

February 1.—Slept well after a chloral draught. No pain. Pulse 88; temperature 99·4°.

2nd.—Hæmorrhage from centre of wound necessitating removal of part of the dressings. The wound was syringed out with iced water containing a small quantity of liquid chloralum. The bleeding, which was venous in character, soon ceased.

4th.—Pulse 120; temperature 102·2°. Slept badly. Free suppuration from the wound.

5th.—Pulse 122; temperature 101°. The odour of the discharge being slightly offensive, the wound was syringed several times daily with solution of permanganate of potash, and dressed with aqueous solution of carbolic acid on lint. From this date the wound gradually healed with few complications.

March 5.—An unhealthy greenish appearance of the axillary end of the wound was noticed with great subcutaneous thickening. This was touched daily with a solution (saturated) of chloride of zinc. Morphia draughts were given occasionally to procure sleep.

20th.—Wound healing; less hardness of the unhealthy part near the axilla, where, however, there is still a suspicious induration and no granulations.

April 26.—Soon after the last note the whole of the superficial granulations cicatrised, and the hardness mentioned entirely disappeared.

January 30, 1878.—The cicatrix remains sound, and there is no induration nor any enlargement of the axillary or cervical glands. The general health has been better than for several years past. The left arm is, however, stiff, and cannot be raised above the level of the shoulder without pain. The patient is gaining flesh and strength, and is very cheerful and contented with her present condition.

Remarks.—The first dressings applied after the operation were used with the hope of getting immediate union, but the unfortunate occurrence of venous hæmorrhage frustrated this hope, and hence the protracted subsequent healing by granulation. The very great induration of the axillary end of the wound seemed suspiciously like a return of the disease, or a sudden growth of some portion of the tumour not removed at the time of operation. The subsequent disappearance of this hardness was a proof that this suspicion was unfounded. Great benefit seemed to result from the repeated application of the solution of chloride of zinc; and, strange to say, the patient hardly ever complained of its being painful. There seemed to be a morbid anæsthesia of the non-granulating tissue; and the caustic action of the chloride expended itself, as it seemed, entirely on this insensible material, without penetrating to the nervous elements below. The chloride of zinc was used in preference to any other caustic, as being slower in its action than nitrate of silver, or nitric acid, or pernitrate of mercury, and as being therefore more likely to penetrate the interstices of the indurated tissue. A section of the tumour displayed to the naked eye a greyish translucent surface, subdivided by less translucent septa, with a distinct capsule and nodular surface towards the surrounding fat. Towards the nipple, however, the disease was indistinguishable from the normal tissues. The proper gland tissue had almost, if not entirely, disappeared. Microscopically there were a number of rounded spaces (alveoli) surrounded by fibroid translucent tissue, and in some parts filled with a sort of glandular tissue, in others being filled up by fibroid tissue. Dr. Goodhart, who examined the tumour at the College of Surgeons, considers it distinctly "Colloid cancer, the stroma very alveolated and fibrous," "with no villous processes." "This," he says, "is really a scirrhus, with gelatinous material in its alveoli, and also much fatty matter."

[Part of the notes of the above were made by Mr. Gillam, House-Surgeon of the Great Northern Hospital.]

NORTH STAFFORDSHIRE INFIRMARY, STOKE-ON-TRENT.

OSTITIS OF FEMUR, TERMINATING IN SCLEROSIS.

(Under the care of Mr. ALCOCK.)

Paul O., aged twenty-two, a miner, was admitted on March 22, 1877. Six weeks before admission, after getting wet, the patient was seized with a severe aching pain in the left thigh and knee; this, with slight intermissions, continued until the time of his admission. The pain was greatly increased in severity at night, and also slightly in damp weather. There was no history of syphilis, rheumatism, or injury.

State on Admission.—A well-developed man, but with a very anæmic aspect and an anxious expression. Appeared to be suffering intense agony. Tongue coated; temperature 101·4°. Left thigh in its lower half was uniformly swollen and extremely tender, but was not perceptibly hotter than corresponding part of opposite thigh. No effusion in knee-joint.

Suppuration being suspected, a puncture was made with a narrow knife, reaching to the bone. Nothing escaped, however, but a few drops of blood, and no relief was afforded. Was ordered—R. Tinct. opii ℥x., pot. iod. gr. x., pot. chlor. gr. vj., three times a day; and milk diet. Frequent hypodermic injections of morphia were given, and these alone seemed to give relief. The temperature exhibited an evening rise throughout, the average difference between the morning and evening observations being 3·2° Fahr. The height of the temperature did not, however, bear any obvious relation to the severity of the pain. From March 24 to March 30 the mean morning temperature was 99·6°, evening 102·3°. On the mornings of March 31 and April 5 it was below normal; excluding these, the mean temperature from March 31 to April 6 was—morning, 99·3°; evening, 101·9°. From April 7 to 18 the average morning temperature was 98·9°; evening, 102·3°; on evening of April 14, 104°. Excluding this, the average morning temperature from April 14 to 20 was 98·9°; evening, 101·9°. After this it gradually fell, and after April 24 continued normal.

March 30.—Pain since admission very severe, except when patient is under the influence of morphia. Twelve leeches were applied, and gave marked relief for several hours. The following morning the temperature was normal for the first time since admission. Fomentations of poppy-heads gave temporary relief at first, but were afterwards ineffectual.

Continued much the same till April 5, when the morning temperature fell to below normal, but rose in the evening to 101·8°. With the exception of occasional twitches he remained free from pain for five days.

On the evening of April 9 the temperature rose to 103·4°, and on the following morning the pain returned with great severity. He was ordered—℞. Quin. sulph. gr. ij., p. digitalis and p. opii. āā gr. ss., three times a day. Appetite having improved, he was allowed fish diet. The pain continued for three days; it then passed off, and did not return.

On the evening of April 14 the temperature rose to 104°, but there was no pain.

April 22.—No pain or tenderness; lower end of femur hard and thickened, the circumference of the thigh being two inches and a half greater than that of the opposite side. Very anæmic; bowels constipated. A mixture containing magnes. sulph., acid. sulph. dil., and ferri sulph. was ordered.

May 8.—Discharged.

Remarks.—I have postponed until now the publication of the above case, in the hopes that I might have had an opportunity of seeing the patient and ascertaining his present condition: in this I have been disappointed, but as the man appeared gratefnl for his treatment I have little doubt that he would have returned if any fresh symptoms had occurred. The case is interesting from its favourable termination, notwithstanding the great constitutional disturbance as shown by the temperature. From the severity of the symptoms, the first diagnosis was that of diffuse periostitis of the femur (although the age of the patient and the duration of the symptoms were against this). A puncture was accordingly made, in the expectation of finding pus between the periosteum and the bone. Suppuration being absent, it was concluded that the case was one of ostitis, and that the periosteum was only secondarily, if at all, affected. Although the result was in the end satisfactory, it was at the cost of enormous suffering, and the risk of necrosis must have been imminent; nor is it impossible that partial necrosis may have ensued, the sequestrum being encased in living but sclerosed bone, and not giving rise at present to any symptoms. The question arises, whether the suffering would have been alleviated, and the risk of necrosis lessened, by a free incision into the bone by means of a Hey's saw, as recommended by Erichsen. When it is considered that the bloodvessels are being surrounded and compressed by inflammatory exudation, whilst the canals in which they lie only allow of very gradual dilatation by absorption of their walls, it would seem to be rational treatment to relieve the pressure by an incision which would allow some of the products of inflammation to escape. At the same time it must be admitted that this particular case furnishes by its result (as far as it is known) an argument rather against than in favour of operative interference.

A Generous Bequest.—The late General La Marmora has left to St. John's Hospital, Turin, in consequence of the report made to him by Prof. Bruno on the poverty of its resources, the magnificent sum of 240,000 lire (£9600). The municipality has resolved to erect a monumental stone in testimony of its gratitude for so generous a gift.—*Allg. Wien. Med. Zeit.*, January 29.

Case of Third Dentition.—Dr. Forster, of Charlestown, furnishes the particulars of the case of a man, aged seventy-seven, who twenty years since had all the teeth remaining in his upper jaw removed on account of neuralgia. About ten years ago two teeth appeared where the upper right central and lateral incisors had been. These were smooth, thin, and transparent, and becoming loose were removed by the fingers a year or two after their appearance. A left incisor made its appearance about four years ago, and is still serviceable, but its owner feels as if he should soon lose it.—*Boston Med. and Surg. Jour.*, January 10.

An Enthusiastic Admirer.—Dr. Reiter, of Pittsburg, detailing some cases of diphtheria treated by calomel, says (*Philadelphia Med. Times*, January 6):—"The *modus operandi* of calomel, for which I had conjured up a hypothesis, is now clearly demonstrated in the invaluable work of that profound and illustrious physician, Dr. Murchison, of London. His teaching is not only making the pathway to success more plain and clear to the faithful and earnest student in the art of healing, but he is casting a grand halo of glory on his profession. His last work, 'Functional Diseases of the Liver,' has solved every obscurity in understanding how calomel cures diphtheria. I would say to any young physician embarked in the perilous enterprise of fighting disease—read this book, study this book, ponder its contents, and pray Almighty God, the source of all light, truth and power, to enable you so to appreciate its teaching, that you may go forth to your fearful, solemn, and responsible work at the bedside of the suffering, armed with the panoply of truth, and with a bold and fearless heart."

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Medical Times and Gazette.

SATURDAY, FEBRUARY 23, 1878.

THE DENTAL PRACTITIONERS BILL.

The second reading of the Dental Practitioners Bill was moved by Sir John Lubbock on Tuesday night, but came before the House so late that it was postponed until March 5. Sir J. Lubbock observed that the law very wisely provided that any person pretending to be a physician or surgeon without being properly qualified was made liable to a severe penalty; and that chemists and druggists are not allowed to pursue their respective callings unless their qualifications have been tested by examination; and that therefore it is very anomalous that anyone may call himself a dentist without possessing the slightest qualification. And so far we entirely agree with him, but we must nevertheless say that the Dental Practitioners Bill cannot be allowed to become law as it at present stands. Sir John Lubbock claims support for the Bill because vested interests are respected by it, and because it will not prevent anyone from pulling out teeth and acting otherwise as a dentist, but will only forbid his using a title which would imply that he had special qualifications. But we say, in the first place, that the Bill does interfere with vested interests to a most extraordinary extent; and secondly, that the Bill actually proposes to make it legal for persons registered under it to use a title implying their possession of a special qualification when they do not possess it. By Clause 3 of the Bill it is proposed to enact that from and after the first day of August, one thousand eight hundred and seventy-nine, a person shall not be entitled to take or use the name or title of "dentist" (either alone or in combination with the word "surgeon" or with any other word or words), "dental surgeon," or "dental practitioner," unless he is registered under this new Act; and Clause 5, which defines the titles to registration, runs thus:—"Any person who (*a*) is a licentiate in dental surgery or dentistry of any Royal College of Surgeons in the United Kingdom, or of the Faculty of Physicians and Surgeons of Glasgow; or (*b*) is at the passing of this Act *bonâ fide* engaged in the practice of dentistry, either separately or in

conjunction with the practice of medicine or surgery, shall be entitled to be registered under the Act." No definition is given of the phrase "*bonâ fide* engaged in the practice of dentistry"; but the effect of these clauses would most probably be that after August 1 next year, everyone throughout the United Kingdom who has been in the habit of drawing teeth, would, if he chose to pay £2 to be registered under the Act, be entitled to call himself surgeon-dentist or dental surgeon; and certainly that everyone possessing a licence in dentistry from one of the licensing bodies named in the Act, and registered under it, would have a legal right to use those titles; while any fellow or member of a College of Surgeons, who chose to confine his practice to the speciality of dentistry, would be forbidden to use them unless he was also a licentiate in dentistry, and registered. Now, so far as dentistry is a profession, and not merely a trade, it is a department of the profession of surgery; and to enact that a legally qualified surgeon cannot, if he likes, call himself a dental surgeon or surgeon-dentist, must be regarded as a most grave infringement of rights. Curiously enough, the Act graciously proposes to allow "a legally qualified medical practitioner" to recover any fee or charge for the performance of any dental operation, or for any dental attendance or advice; and it is supposed probably that this sop will satisfy the surgeons for the deprivation of the rights above mentioned. But though surgeons practising dentistry may not much care to publicly call themselves surgeon-dentists or dental surgeons, we are much mistaken if they do not very strongly protest against being deprived of their right to do so if they like. This part of the Bill is objectionable enough, but much worse is the proposal to confer the titles of surgeon-dentist and dental surgeon on men who are not *surgeons*, but only *licentiates in dentistry*. It may be said that there can be no real objection to those who are licentiates in dentistry having an exclusive right to entitle themselves "dentists," and that surgeons should only use that title when they are also duly qualified licentiates in dentistry. But no one can reasonably maintain that it is right to allow those who are merely possessed of a dental diploma to use the title of "surgeon" in any form or combination without being also possessed of a surgical diploma. This would be simply misleading instead of protecting the public, for they will certainly think much more of the word "surgeon" than of the word connected with it, and will suppose that every such surgeon-dentist or dental surgeon is a surgeon as well as a dentist. The Bill, so far as it is intended to improve the education and status of dentists, is a very praiseworthy one, and deserving of support; but as at present worded the clauses upon which we have commented must be energetically opposed. It is remarkable that the Bill should have been drawn in a way so certain to excite —we might say to invite—hostility; but it is still more remarkable that it should have received in its present form the approval of the Royal Colleges of Surgeons.

We do not know, by the way, whether the promoters of the Bill intend that women shall be admissible to the practice of dentistry, but though throughout the Bill the words "a person" or "persons" are carefully used, they are frequently followed by the words "*he*" or "*him*"; thus, Clause 3 provides that no person shall take or use any title, etc., implying that *he* is a person specially qualified to practise dentistry, unless *he* is registered under the Act.

THE MANAGEMENT OF THE BRITISH MEDICAL ASSOCIATION.

We have so often proved our sympathy with, and regard for all those features of the British Medical Association which deserve professional esteem, that we have no hesitation now in calling attention to what appear to be some flagrant defects in its management. One of the official members of the Association, Dr. W. C. Grigg, Honorary Secretary of the Metropolitan Counties Branch, in a vigorous letter, which was published in the Association *Journal* last week, has challenged the opinion of the profession upon this subject, and his remarks deserve instant and serious consideration. Another physician, occupying a high position in the Association—Dr. Hudson, of Dublin,—has spoken seasonably in the same direction. In an able address, delivered a few days ago, in which he summed up the great progress of the Association, Dr. Hudson pointed out—at least, that is the moral of his words —that the Association, as an association, has never been more than a mediocre success. It existed for nearly forty years without being able to enrol more than a tenth part of the profession, and this after annual meetings at London, Edinburgh, Manchester, Oxford, Cambridge, etc., with constant appeals to patriotism, sympathy, and all the cardinal virtues of the medical profession, which were always alleged to be bound up in the constitution of the British Medical Association. Successful journalism, however, as Dr. Hudson pointed out, at last did for the Association what long years of rhetoric and canvassing had failed to accomplish, and the Committee of Council are now in a position to make an annual boast of increasing numbers, amounting to about 6000 new members in the last ten years.

On comparing Dr. Hudson's words of praise with Dr. Grigg's words of censure, it is not difficult to see that both point to a certain hollowness at the core. A small party seem to have ruled the business of the Committee of Council, and controlled the public organisation of the Association. Every year, at the great meetings and feasts of the Association, they have mutually admired each other on the platforms and at the high tables; and they have apparently succeeded in persuading themselves that they are not only in the highest degree useful as well as ornamental, but in a position to act in the most autocratic manner, independently of the wishes and feelings of the members at large.

On the actual mode of proceeding of the Committee of Council Dr. Grigg's letter throws no small light, and there can be no doubt that this letter will attract the serious attention of those to whom it is virtually addressed. Dr. Grigg, who is secretary to one of the largest branches, complains that he finds, to his great astonishment, that the proceedings of a late meeting of the Committee of Council are not published at all for a month; and that, when what purports to be a report is published in the official columns of the *Journal*, it turns out to be a curt and mutilated statement, which really conceals the greater part of the proceedings that it pretends to report. It happens that at the meeting in question important matters affecting the interests of all the members of the Association were transacted. Among other business, a letter was read from Dr. Wilson Fox, asking whether women were in future to be admitted to the meetings of the Association. To this a reply was given which was a model of official dryness and curtness, and upon which we commented at length three weeks ago. It now appears from Dr. Grigg's letter that an amendment of some kind was moved and seconded by members who were desirous of answering Dr. Fox more fully, and possibly more gently. But no minute of this amendment is contained in the report; while the Editor, who professes to have no knowledge of what goes on in the Committee of Council, intimates that he is equally uninformed what were the reasons for doing or omitting whatever was done or omitted. It is absurd that such a matter as the action of the British Medical Association in the women's question—either with respect to the treatment of the females already admitted, or to the admission of future candidates—should be entrusted to a close executive

body, whose proceedings are published in this fashion. We may express a hope, by the way, that the two women referred to will recognise that their election was a mistake, and will resign their membership; but, beyond this, the general question will demand the earnest consideration of the Association at large.

Dr. Grigg's letter, however, discloses other still more extraordinary proceedings. The Committee resolved, he says, at the meeting in question, to lay out no less than £2320 of the moneys of the Association in rent, house repairs, fittings, and type for undertaking a printing business; of which upwards of £1500 are to be sunk in mere repairs and fittings of premises rented for a short term at £320 a year. The only notice on this subject which appears in the "report of the proceedings" is a resolution to lease certain premises, without any mention of the purpose, or of the expenditure of a capital of £2000 in the modifications, repairs, etc. That such a step should be taken without prior consultation of the members of the Association is surprising, but that it should be taken with concealment would be almost incredible but for the very clear evidence which Dr. Grigg supplies. The members have truly a right to complain that so much of their money is to be thrown away in setting-up a shop in the Strand, where, if admitted at all, they will have to pass the counter to a back room on the first floor. This is no fitting habitation for a professional Association, which might for less money secure a convenient and respectable house in a more quiet part of the town—say in the neighbourhood of the other medical societies. The Committee of Council, by concealing their proceedings from the members, as they have done, are not the more likely to carry such a plan as this successfully through.

It is not to be forgotten that this is not the first time that the Committee of Council have brought the British Medical Association into discredit by neglecting precaution and courtesy in conducting its business. By neglect and discourtesy they brought upon the Association a humiliating rebuff, which will long be sorely remembered, when, on the occasion of the proposed meeting at Brighton, they rudely repressed the complaints of the non-admission of local names to posts of honour, and afterwards rejected and suppressed a conciliatory amendment moved by a distinguished metropolitan member. The Committee seem bent on learning nothing by their failures and faults. But we shall be surprised if Dr. Grigg's revelations do not lead to some reform. The members are not likely to tolerate a policy of concealment. They will not choose to have their money wasted nor their affairs conducted by an oligarchy who have secured themselves *en permanence* by one of the most singular systems of election yet devised.

There are other and even more important matters referred to in Dr. Grigg's letter, which most intimately concern the well-being of the Association, but they are only shadowed forth, and meantime are beyond the scope of our criticism.

RHYTHMICAL HYSTERICAL CHOREA.

Of all the pathological conditions which come under the notice of the physician, perhaps the one which gives the greatest trouble, and is the least satisfactory to all concerned, is the condition, or we should rather say the series of morbid states, to which the generic term hysteria has been applied. To the patient and her friends the disease is a very real one, oftentimes giving rise to great suffering, mental or bodily, or both, and too frequently incapacitating its victim from the performance of any of the duties of life. On the other hand, there has been in many instances too great a tendency on the part of medical men to make light of such cases, and, because the symptoms cannot be grouped within the well-marked boundaries of organic disease, to consider them as the result of wilful misrepresentation on the part of the patient, or of mere "fancy," and hence that nothing need be done but to tell the patient there is "nothing the matter."

Of late years, however, there has been a growing tendency among scientific physicians to investigate the phenomena of hysteria in the same way that the more clearly organic diseases are studied, to analyse its various phases, and to attempt to discover their true significance. Foremost amongst those who have attempted to grapple with this most obscure subject has been Professor Charcot, who has lectured from time to time during the last few years on different manifestations of the disease. At one time his attention was turned to the derangements of sensation in the form of hemianæsthesia, general and special, the study of which has now become so closely linked with his name. At another time he dwelt upon the remarkable modifications in the renal functions occasionally seen in hysterical subjects; but more recently he has called attention to the various motor phenomena of hysteria, convulsions, contractions of limbs, or paralyses. In a course of lectures recently delivered at the Salpêtrière, he has carried the study of this division of his subject a step further, by treating of a condition presented by one of his patients to which he has given the name of "rhythmical hysterical chorea." The patient in question was a young woman, nineteen years of age, whose previous history presented a long succession of hysterical phenomena of various kinds. She presented, indeed, all the characters of the condition which Dr. Charcot has termed "ovarian hysteria." From the age of thirteen she had been subject to convulsive attacks of the typical hystero-epileptic order, and these fits could be invariably stopped at once by compression of the right ovarian region. In this region there was at all times a certain amount of pain, which increased when a fit was impending, and was exaggerated by pressure. The warning which preceded the fits started from the painful region, and thence extended to the epigastrium, the neck, the head, etc. The right half of the body was the seat of absolute anæsthesia, both for general sensation and for heat, and the special senses were also affected, though in different degrees. There was loss of smell in the right nostril, absolute loss of taste in the right side of the tongue, dulness of hearing in the right ear, and amblyopia, with partial dyschromatopsy in the right eye—perception for the "central" colours, violet and green, being completely lost, whilst the "peripheral" colours, red, orange, yellow, and blue, could still be clearly distinguished. Corresponding with the hemianæsthesia was a certain amount of muscular weakness on the right side, for whilst the dynamometrical pressure with the left hand was twenty-five kilogrammes, with the right hand it was only fifteen kilogrammes.

The patient had thus long presented many of the more severe symptoms of hysteria, when recently a convulsive attack, which had been of unusually short duration, and of which the symptoms had been much milder than was usually the case, was immediately followed by a ceaseless agitation of the whole of the right side of the body. At first sight the movements appeared to be without perceptible order, but a more attentive examination made it evident that they all presented certain general characters. For instance, the agitation of each part of the body could be decomposed into alternate movements, particularly those of flexion and extension, which were always the same and absolutely uniform. The trunk was at one moment flexed on the pelvis till the forehead nearly touched the knee, and at the next moment it was thrown back, the head falling heavily on the pillow. In the arm a state of complete extension and pronation alternated with strong flexion and supina-

tion; whilst in the leg an extension of the limb, sufficient to press it strongly against the mattress, and which in the foot simulated talipes equinus, was immediately replaced by an equally well-marked flexion of all the joints. The flexion of the trunk corresponded with extension in the limbs, and *vice versâ*. To complete the picture, it is only necessary to add that when the head and trunk were thrown back, the right labial commissure was momentarily drawn outwards, the deviation ceasing when the trunk was flexed forwards, and if the tongue were protruded at the moment of production of the grimace the point was strongly deviated to the right, this deviation being the expression of a rhythmical deviation of the organ which was constantly going on in the patient's mouth, and which greatly interfered with her pronunciation.

The number of oscillations varied from thirty to eighty per minute, and at the time when M. Charcot demonstrated the case to his pupils the movements had been going on for ten days without cessation or respite, except during the few hours that the patient slept. At the moment of waking, a curious phenomenon always occurred: the limbs which were the seat of agitation when she was fully awake became for a few moments quite rigid—the leg more so than the arm; but the rigidity soon gave place to movement. Throughout the attack the limbs of the left side were at rest, and, notwithstanding the great oscillations of the trunk, the patient could, with her left hand, carry a glass of water to her mouth without spilling it, and she could with that hand even write her name legibly.

Taking the term chorea in its widest sense as applying to all continuous excessive involuntary movements persisting as long as the patient is awake, the affection just described may be classed with chorea. It is not to be confounded with the ordinary chorea of Sydenham—the chorea minor, in which the movements are without rhythm and beyond analysis,—but it belongs to the variety described by Professor Sée as *systematic* or *rhythmical chorea*, in which the involuntary movements more or less resemble voluntary, intentional actions; are, so to speak, coördinated, and can thus be clearly distinguished from the incoördinate, utterly purposeless movements of ordinary chorea.

To prove that the attack from which the patient was suffering was no fortuitous complication, no foreign episode superadded to the great neurosis already present, but that it was one which was very closely connected with the hysterical diathesis, Professor Charcot adduced firstly the fact already mentioned—that it set in immediately after a convulsive attack remarkable for its shortness and mildness, and that it is just under such circumstances that other phenomena of a motor order frequently arise, such as paralysis, contraction of members, and the like. Hence the choreiform agitation might be looked upon as a continuation, or prolongation under a new form, of the aborted hysterical attack. But another and still stronger argument, according to Professor Charcot, lies in the fact that compression of the right ovarian region, properly applied, produced complete cessation of the rhythmical movements, as he demonstrated to the class. Notwithstanding, however, that the limbs were in this way relieved from the state of ceaseless agitation in which they had hitherto been, they did not recover their normal functions, for they had become the seat of considerable muscular rigidity, comparable in all points to the contraction which was present each morning when the patient awoke.

The remarkable arrest of choreiform movements under the influence of ovarian compression was, nevertheless, only a temporary suspension. It persisted just so long only as the compression was maintained; as soon as this was removed the contraction disappeared, and the rhythmical movements of the trunk and members recommenced as violently as before.

From all this Professor Charcot has been led to conclude that the rhythmical chorea seen in this patient was dependent upon ovarian susceptibility, in the same way that he considers the ordinary convulsive attacks of hysteria can be traced back to a morbidly excitable condition of the ovary, associated with pain and hyperæsthesia of that organ. Hence he places this form of chorea among the many very various manifestations of hysteria; and because of its replacement by tonic rigidity of the muscles both on first waking in the morning and under the influence of ovarian compression, he looks upon the chorea and the rigidity as equivalent conditions capable of being substituted for one another in the series of hysterical affections.

As regards the treatment of the case, Professor Charcot sought some means by which to cut short the chorea. As we have seen, simple ovarian compression, though it changed the character of the attack for the time, was powerless to arrest it entirely. Arguing from the analogy of allied conditions, Professor Charcot believed that ovarian compression prolonged for several hours, or repeated at short intervals over a considerable period of time, might succeed in breaking the chain of morbid phenomena. This, however, would be a very tedious and laborious process, and Professor Charcot hoped to be able to dispense with it by taking advantage of a fact which he has observed in connexion with hystero-epileptic attacks. He has found that the inhalation of ether or of nitrite of amyl by a patient suffering from ovarian hysteria will in most cases induce a fit having all the characters of the ordinary hystero-epileptic attack. Now, as the attack of rhythmical chorea appeared to take the place of a convulsive attack, he hoped to be able to put an end definitively to the former by inducing the latter. We are not, however, told to what extent he succeeded in the present case.

Professor Charcot ended his lecture by pointing out that the condition to which he has drawn attention is by no means observed now for the first time. In his memoir on Rhythmical Chorea, Professor Sée makes special mention of a variety of the disease connected with hysteria; and Trousseau described a condition, of which three cases had come under his notice, that evidently belonged to the same category. M. Briquet also, in his well-known work on Hysteria, mentions several similar cases; whilst in our own country Dr. Murchison has described a case of unilateral chorea which alternated with attacks in which the side that had been choreic became for a short time rigid throughout. It must not be concluded that all cases of rhythmical chorea are hysterical, nor that all cases of hysterical chorea are rhythmical, for numerous examples exist which prove the contrary; but that certain cases of rhythmical chorea occur which undoubtedly depend upon hysteria must now be considered as proved, and they form an interesting addition to the already multiform manifestations of this disease. That a very similar condition is met with, due to other causes, is also of the highest interest, as it affords an instance the more of the strict analogy existing between the so-called functional symptoms of hysteria and those which have a recognisable organic lesion for their basis—an analogy which, we believe, a more careful observation of the phenomena both of hysteria and of organic disease will make more and more complete.

THE WEEK.

TOPICS OF THE DAY.

THE action of some of the London water companies appears at first sight rather singular, in the face of the present

agitation which is going on, on the subject of the metropolitan water-supply; but admits perhaps of the simple explanation that if the companies' rights are to be bought up, it is desirable in the interests of the shareholders to make the annual income as high as possible. Last week a deputation of gentlemen from the borough of Southwark waited upon the Home Secretary at the House of Commons, in reference to the charges recently made for water by the Southwark and Vauxhall Water Company in the southern districts of London. Mr. Edward Clarke, who introduced the deputation, explained that the Company had raised its demands to a very considerable extent, taking into consideration nothing but the rental of the houses to which the water was supplied. Manufacturers had the right to have water by meterage, but where there was a dwelling attached to the manufactory the Company insisted on their right to charge up to 5 per cent. upon the rental value of the house. This it was contended was unjust. The object of the deputation was to ask the Government that in future persons might only be rated under Bills relating to water-supply according to the accommodation they received. Cases having been quoted where a very large increase had been made in the charges of the companies, Mr. Cross intimated that the justice of the right claimed in the present instance under a private Act would be considered in view of future legislation.

Our contemporary *Nature* says—"The alarming rapidity with which shortsightedness is increasing among German students formed the subject of a recent debate in the Prussian Parliament. From extended observations made in the gymnasia, it appears that the number of the short-sighted increases from 23 per cent. in the first year to 75 per cent. in the ninth or last year. The too frequent custom in Germany, of forcing the lads to study during the evenings with insufficient light in ill-ventilated rooms, is undoubtedly a main cause of this widespread evil."

A petition has been put forward by the local branch of the Anti-Vaccination League to the Brighton Board of Guardians, praying that an inquiry may be instituted into several cases in which it is alleged that the health of children has been very seriously impaired in consequence of their having been vaccinated. The public vaccinators are to be requested to report to the Guardians on the subject, but it would be much more satisfactory, supposing that the allegations made have any real foundation, to have the whole matter investigated by an officer of the Local Government Board.

If the accounts which reach this country from several quarters are to be credited, the sanitary condition of Russia at the present moment is most alarming. The transport of Russian invalids and Turkish prisoners from the different seats of war has been carried on with the most utter disregard of all precautions, and it is now reported that the whole of the interior of European Russia is infected with fever, small-pox, and a deadly species of measles. These diseases steadily follow the track of the railways, developing in strength at each stage of the journey, until, on reaching the central towns, they become epidemic. The most virulent outbreaks have been along the line of railway leading from Tiflis; in one town (Penza) disease has compelled the authorities to close all the public schools and institutes. Neither in their conveyance from the seat of war, nor in their disposition in the various towns to which they have been portioned off, have any attempts been made to isolate the sufferers, or prevent the spread of contagion. A few weeks ago a train is stated to have arrived at Novgorod with Turkish prisoners from Kars, among whom on examination it was found that 80 per cent. were suffering more or less from typhus fever. The disease was prevalent among the men when they left Armenia, but the authorities had made no attempt either to separate the infected from the healthy prisoners, or to guard against the spread of infection during their twenty-one days' journey though the heart of the country. Russia is certainly behindhand in civilisation, but such a wanton neglect of the most ordinary sanitary precautions on the part of her authorities must strike everyone with surprise.

A lecture on the different systems of cremation was recently delivered in the Hall of the Society of Arts by Mr. W. Eassie, C.E. In the course of his address the lecturer informed his audience that during last year sixteen cremations had taken place in the Milan district alone, with the full sanction of the Italian Government, and they were attended by the municipal and sanitary authorities. In France, Holland, Austria, and Russia, and in some parts of Germany, Government sanction had been applied for, and only some formalities were delaying the necessary authority. Switzerland had already legalised it, and, in proof of the antiquity of the custom, Mr. Eassie stated that the rite of cremation was still practised by the aboriginal Indians. More singular still, it appears that about the year 1844 the sanction of the authorities of the City of London was obtained for the cremation, within the City of London gasworks, of the dead of Bridewell Hospital; an arrangement was also concluded with the City authorities for the cremation of bodies of dead prisoners, and of the condemned meat and offal of the markets. The project, however, met with so much opposition from certain churchmen that it fell into abeyance. The different systems of disposing of the bodies were reviewed by the lecturer, and great praise was awarded to the Siemen's pattern of furnace, which has been chosen by the Council of the Cremation Society of England for use in any building erected under their auspices, and which has been examined and approved by Sir Henry Thompson and others interested in the subject of cremation.

The fifty-seventh annual meeting of the *Dreadnought* Seamen's Hospital Society was held on the first Wednesday of the present month at the Cannon-street Hotel, under the presidency of Thomas Brassey, Esq., M.P. It was announced that the amount received from all sources during the past year had reached the sum of £11,653, including subscriptions and donations from her Majesty the Queen and his Royal Highness the Prince of Wales. The average number of beds occupied throughout the year was stated to have been much in excess of any previous one. During the past six months nearly 200 beds have been constantly occupied, whereas the daily average number of beds so engaged during the years 1874, 1875, and 1876 was only 166. The most notable feature in the income of the Hospital is the comparatively large amount (£2928) received from annual subscriptions, which represents a sum of more than double the average receipts from this source during the ten years ending 1874. The Chairman, in an eloquent speech, moved the adoption of the report, and bespoke for this charity a continuance of the support which it so well merits.

That much-debated question, the Thames Valley Drainage Scheme, of which nothing has been heard lately, has again cropped up in the shape of an application which has been put forward to the Local Government Board to include Heston and Isleworth in the special drainage districts, Oatlands, Hersham, and Weybridge, Worcester-park, and part of the parish of Cheam, as well as the southern portion of the parish of Kingston, in the Lower Thames Valley main sewerage district. The Board have come to the conclusion that the best way of dealing with the application will be by altering the provisional order by which the present drainage

district was formed; and with this view they purpose to direct a local inquiry to be held by one of their inspectors.

In his monthly report on the health of the parish of St. Marylebone for the month of January last, Dr. Whitmore, the Medical Officer of Health for the district, says:—"No death from small-pox was registered in the parish during the month, but I regret to have to report that fresh cases are continually brought to my knowledge, and these are not all confined to the poor and destitute classes, many of them occurring in respectable private families. Information has been forwarded to me of seven cases of the disease having been sent during the month by the workhouse authorities to the Asylum Hospital at Hampstead; three of them were adults, three were children above the age of seven years, and one a young infant. The revival of this epidemic of small-pox in many parts of the metropolis during the last two months, so contrary to the course and progress of the epidemic of 1871 and 1872, it is difficult to account for. I believe that in this parish it is in no small degree attributable to the neglect of those precautionary measures which everyone, whilst the epidemic was at its height—some from fear, others from a less selfish motive,—was prompt and zealous to adopt. Two or three cases I ascertained had been imported from the East-end of London, but, as little or nothing had been done to isolate them, they necessarily at once became centres of infection, from which the disease might be conveyed in every direction."

Mr. H. A. Bosanquet, one of the treasurers of Charing-cross Hospital, last week presided at the fifty-seventh annual general court of the governors of this institution. During the past year the Hospital has been enlarged and remodelled, and, it will be remembered, was reopened by the Prince and Princess of Wales. The nursing and domestic arrangements are still entrusted to the Sisterhood of St. John, who act under the direction of the Bishop of London, and the Council speak in high terms of the manner in which these most important duties have been conducted during the past year. The medical school is also stated to have received a large increase of students, which has rendered it absolutely necessary to take steps for providing improved school premises in the immediate neighbourhood. Amongst other improvements it has to be noted that the whole of the roadways adjacent to the Hospital have during the past year been paved with wood, which has proved a great boon to the inmates. The staff has also been strengthened by the election of Sir Joseph Fayrer to the office of Consulting Physician. The institution at present contains 180 beds, but it is proposed by fresh arrangement to make a large addition to this number. The sum of £50,000 is required for contemplated extensions, and this sum it is proposed to raise in five years, at the rate of £10,000 per annum.

In answer to a question from Dr. Ward, on Monday last, the Secretary of State for War said that at the recent examination for admission to the Army Medical Department there were forty vacancies and only nineteen candidates. This, he admitted, was a very unsatisfactory state of things, but he promised to make inquiries into the subject. As Mr. Hardy at last acknowledges that the state of things is very unsatisfactory, some attempt at amendment may be hoped for; though it is also very unsatisfactory to hear that he had not already "made inquiries into the subject."

THYMOL AND ITS PROPERTIES.

A NEW antiseptic is beginning to be talked about—the essential oil of thyme, or thymol ($C_{10}H_{12}OH$),—which occurs in nature also in the volatile oil of the horse-mint, and of the Oswego tea (*Monarda punctata*) from North America. It crystallises in large transparent plates, has a mild odour and a peppery taste, melts at 44° Fahr., and boils at 230° Fahr. According to Bucholtz (*Archiv für Exp. Path.*, Band iv., s. 1), in his researches on the action of antiseptics on bacteria, these organisms are *destroyed* (after cultivation in Pasteur's fluid) by the addition of solutions containing *one* part boracic acid in 133·3, of carbolic acid in 200, of salicylic acid in 666·6, of benzoic acid in 1000, and of thymol in 2000. Similarly, the fertilisation of a fluid by bacterial inoculation was prevented by solutions of the strength of *one* part carbolic acid in 25, of creasote in 100, and of thymol in 200; salicylic acid in this case being more powerful than the three antiseptics just named, and effective at a strength of 1:312·5. From these experiments we may conclude that thymol has considerable antiseptic powers under certain conditions, though they do not justify us as yet in making any large generalisation as to its properties. The effects of the internal administration of thymol have been studied by Bälz (*Arch. der Heilkunde*, 1877), and in the main resemble those of salicylic acid. Doses of one and a half to two grammes are necessary to produce a decided effect, and the drug is best given in wafer paper, on account of its slight solubility in water and its rather unpleasant taste. Thymol reduces the temperature in typhoid fever and acute rheumatism. After doses of two to three grammes the average fall was 2° Cent. (3·6° Fahr.); larger doses had a still greater antifebrile effect, but were followed by dangerous symptoms of collapse. The defervescence lasted a shorter time than after salicylic acid or quinine. In phthisis thymol had but little effect, and the sweats which it often induces would in any case contraindicate it in the advanced forms of that disease. Thymol, like salicylic acid, does not materially influence the pulse or the respiration. Under its use the urine assumes a dark colour, and appears greenish in reflected, and brownish-yellow in transmitted light. Perchloride of iron throws down a greyish-white flocculent precipitate. Patients taking thymol often suffer from ringing in the ears and deafness, and in some rare instances severe delirium has occurred. Thymol has been prescribed by Dr. Neftel, of New York, to arrest fermentation in the stomach in cases of chronic dilatation of that organ, in conjunction with dietetic and electrical treatment; but we are not aware that it has been similarly used in this country. On the whole, it seems more probable that thymol will be of value as an external rather than an internal antiseptic; and we have lately heard it stated by one whose opinion is deserving of considerable weight, that it may possibly eventually take the place of carbolic acid in Lister's dressing.

RECURRENT HERPES.

AT page 667 of the second volume of this journal for 1874 we published details of a curious case described by Professor Kaposi, of Vienna, in which a woman aged forty-two suffered from an eruption of circular groups of vesicles, spreading centrifugally, and crusting at the centre after the manner of a herpes circinatus. This eruption began on the back of the right hand, and spread up the arm to the elbow, and then to the shoulder, scapular region, and chest, of the right side, while a few groups of vesicles also appeared on the *left* shoulder-blade—*i.e.*, beyond the middle line of the body. Now, this eruption, to which Kaposi at first gave the name of cervico-brachial herpes, exhibited the peculiarity of relapsing or recurring after the first eruption had died away, and it has continued almost up to the present time to do the same at the following intervals:—Fifty-six days, five months and a half, four months, four months, three weeks, eleven months, and three months. The importance of the case does not however, wholly depend on the fact of these extraordinary

relapses having occurred, but also on the eruptions having attacked different regions of the body at different times. Thus, in the earlier outbreaks the right arm and shoulder was mainly involved, in the sixth relapse the right lumbar and sacro-crural region was the seat of the eruption, and in the seventh, eighth, and ninth the *left* cervico-brachial region. Professor Kaposi (*Wiener Med. Wochenschrift*, Nos. 25, 26, 1877) regards the neuritis on which the herpes depends as due to a chronic irritative process in the spinal cord, which is gradually spreading, not only longitudinally, but also transversely, so that the two sides of the body have thus become the seat of the eruptions instead of one only, as is the almost invariable rule in herpes zoster of the trunk. Having made a post-mortem of a case of frontal herpes, in which, as in Wyss's often-quoted case, the Gasserian ganglion contained hæmorrhagic effusions, and from the analogy of other similar cases, he inclines to the view that in the case before us the cause of the herpes is hæmorrhages of some size into the lower cervical and upper dorsal region of the spinal cord, dependent either on atheroma of very small bloodvessels, or else on a vascular neoplasm. The future course of the case must decide which alternative is the right one.

COMPULSORY INFORMATION OF INFECTIOUS DISEASES.

In his quarterly report on the sanitary condition of the Whitechapel District for the period ended September 29 last, Mr. John Liddle, the Medical Officer of Health for the District, in once more adverting to the necessity for some rule by which an intimation of the outbreak of all cases of infectious disease to medical officers of health should be made compulsory, furnishes a copy of the provisions in the Bolton Improvement Act of 1877, which deal peremptorily with this subject, and which we last year published in full. They enact that the occupier or person having the management or control of any building is to give immediate notice to the Corporation at the Town Hall of any inmate suffering from small-pox, cholera, or any contagious or infectious fever, or if the sick person be not a member of the occupier's family, then the head of the family to which he belongs, or even the patient himself if well enough to do so, is to forward the notice. Forms are to be supplied gratuitously to all medical men in the borough, and, on attending a patient suffering from the foregoing diseases, one of these documents is to be filled up and sent in to the Corporation; and for each of these certificates a fee of 2s. 6d. is to be paid by the Corporation to medical practitioners forwarding them. The penalty for non-compliance with these provisions is in each case to be a sum not exceeding £10. Mr. Liddle remarks that if this Act is now in force, compelling certain parties to give information of outbreaks of infectious disease to the sanitary authority of a large district in England, it might surely, with modifications if required, be made applicable to all the sanitary authorities in the United Kingdom. An Act containing similar provisions has been obtained by the Huddersfield Sanitary Authority also; and if such powers are found on full trial to work well in those boroughs, steps will, no doubt, be taken to bring the whole country under the like sanitary rule.

PATHOLOGICAL SOCIETY OF DUBLIN.

At a meeting of the above Society, on Saturday, February 16 (Edward Hamilton, M.D., President, in the chair), Dr. T. Evelyn Little, on behalf of Dr. E. C. Thompson, Surgeon, County Tyrone Infirmary, presented a specimen of extensive disease of the upper end of the tibia and neighbouring parts. The patient was a girl, aged three years, whose right knee was "strained" thirteen months ago. The joint swelled, became painful, and matter formed. The limb underwent contraction, the leg being bent at right angles to the thigh. Startings of the limbs occurred, the inguinal glands became enlarged, and an abscess discharged through a sinus below the tuberosity of the tibia. Resection being inadmissible, the limb was amputated by the double flap operation at the lower third of the thigh. As regards the soft parts in the leg, sinuses were found leading to diseased bone and to the knee-joint. The knee-joint itself contained pus; its capsule was thickened; the cartilages were in places ulcerated and absorbed; the floor of the joint was perforated through both articulating facets of the tibia; and vascular synovial fringes lay free in the joint. As regards the bones, the patella and femur were comparatively healthy (as were their cartilages also), but there was extensive disease of the upper cancellated tissue of the tibia, in which, indeed, a small sequestrum lay. Dr. Little considered that the focus of the disease was originally below the joint (*i.e.*, in the tibia), basing this opinion on (1) the site of the abscesses, (2) the relatively intact condition of the femur, and (3) the rapidity of the formation of abscess and sinuses. Dr. E. H. Bennett, recalling the observations of Chassaignac, Cruveilhier, etc., looked upon the affection as primarily an osteo-myelitis in the head of the tibia. Dr. E. H. Bennett showed a very deformed femur, fractures of which had occurred subsequently to disease of the knee-joint. In early life the subject of the injuries suffered from destructive disease of the left knee, which invalided him for many years. Firm osseous anchylosis of the joint resulted, the tibia, patella, and femur being welded together, with subluxation of the tibia backwards, and anchylosis of the patella to the outer femoral condyle. The man was intemperate, and got falls which caused fracture of the shaft of the femur on two occasions. In both fractures there was inversion of the lower fragment. The patient died of malignant disease of the stomach, aged about seventy years.

SUCCESSFUL TREATMENT OF OPIUM-POISONING BY ATROPINE.

The practical application of our acquaintance with physiological antagonisms was well illustrated at the West London Hospital on the 14th inst. A woman living at a public-house not far from the Hospital took from twelve to seventeen grains of opium, as closely as could be ascertained, at eleven o'clock in the forenoon. On the patient being brought to the Hospital at 11.30, an emetic was administered; vomiting followed; and the ordinary peripatetic treatment was then commenced. At 2 p.m. the respiration was failing, and the pulse was weak and small. At this time the case was seen by Dr. Milner Fothergill, who advised the subcutaneous injection of one grain of sulphate of atropia, to arrest the failure of respiration that seemed imminent. This was done at 2.15 p.m. For the next ten minutes the respiration fell till it became imperceptible. The patient was now put into a warm bed, as she was very cold from having been walked about. Ten minutes later the breathing began to return in shallow respirations, about five in the minute, with a long sigh at intervals. Improvement steadily continued till, at 4.30 p.m., the patient was breathing thirteen in the minute, the respirations being deep and long. At this time the temperature was only 97·5°, an indication of how low it had fallen. At 8.30 p.m. the respirations were 24, the temperature 100·4°, and the pulse 128, full, but compressible. The patient passed a slightly restless night; and at 10 a.m. of the 15th the respirations were 18, the pulse 100, and the temperature 99·8°. The pupils were slightly dilated. The patient was thirsty, but did not complain of much dryness of the throat. In the afternoon she was in all respects well and rational. No symptoms of bella louna-poisoning were exhibited, though the amount of atropine injected was large. The history of this case suggests

that in similar but less successful cases the atropine has been given in too small quantities. So far as we know, this is the first time that a fatal dose, or what is commonly believed to be a fatal dose, of one poison has been given at once to check the lethal action of another poison. The result of the case ought to materially influence the future treatment of opium-poisoning.

MEDICAL SOCIETY OF LONDON.

At the meeting of the Medical Society of London, on Monday last, Mr. Adams exhibited some improved instruments for the treatment of broken nose, a subject which he had first brought before the Society in March, 1875. Mr. Adams had divided the cases of broken nose into two classes—first, those in which the cartilaginous septum was depressed, and bent laterally, so as to plug one nostril, obstruct the breathing, alter the voice, and produce ozæna by the decomposition of retained mucous secretion; and secondly, those in which the nasal bones were fractured in addition to the lateral bending and partial displacement of the cartilaginous septum. The operation which Mr. Adams had proposed was to straighten the bent cartilaginous septum by large plate-bladed forceps, and when possible to raise the lower margins of the fractured nasal bones; afterwards retaining the septum in a straight line with the vomer and perpendicular plate of the ethmoid bone by an ivory clamp, and also retaining the nose in an improved position by a nose-truss worn externally. The large flat-bladed forceps originally used by Mr. Adams in 1861, when he first successfully performed this operation, had not been improved upon; but the retentive apparatus for the septum, and the nose-truss applied externally, had been materially modified and improved, and various modifications were exhibited to the Society. The steel screw-compressor and the large ivory plugs were now replaced by the ivory clamp, with rack and pinion movement, first made by Mr. Ernst; and the retentive nose-truss, consisting of a broad metal forehead-band, with two double-action rack and pinion movement levers, with adjusting plates, had been greatly improved by Mr. Hawksley. The necessity of retentive apparatus in cases of broken nose had been questioned by some surgeons, from the absence of the causes of displacement by muscular action met with in the extremities and other parts of the body; but if it could be dispensed with in some cases of recent injury, Mr. Adams considered that it never could be dispensed with in cases where some months, and frequently several years, had elapsed after the injury; and such were the cases which had generally fallen under Mr. Adams' observation. He especially drew attention to three cases now under his care, all occurring in young ladies between thirteen and sixteen years of age, who had met with accidents eight or ten years previously by falling downstairs, or similar injuries. Increasing deformity of the nose was observed at this period of development, and upon examination one nostril was found to be completely plugged by lateral bending of the cartilaginous septum; the breathing and the voice were both interfered with; and ozæna generally existed. In these cases the nose was completely and permanently straightened by the plan of forcibly straightening the septum, and afterwards continuing the use of the retentive apparatus, the ivory clamp being used continuously for three or four days and nights, and afterwards at night only, whilst the nose-truss was worn during the day for several months.

INFECTIOUS HOSPITALS FOR INDIVIDUAL PARISHES.

The Medical Officer of Health for the parish of Lambeth, Mr. Archer Farr, in his annual report on the health of the district for the year ended March 25 last, offers some remarks on the present plan of providing large permanent hospitals for the isolation and treatment of infectious fevers admitted from all parts of the metropolis. The system, he maintains, is wrong in principle, and calls for immediate remedy. Mr. Farr thinks that as it is probable that the Asylums Board will soon be invested with powers to provide hospital accommodation for all classes, it would be well if it would direct its attention to providing a separate hospital for each parish, or so arrange such accommodation as to prevent the necessity for the great risk and danger, not only to the patients themselves, but to the community at large, in drafting infectious cases from one parish to another through the crowded thoroughfares. If a parish were treated separately, as regards hospital accommodation for this class of disease, there would be no difficulty in estimating its requirements, as each epidemic of small-pox under the present administration of the vaccination laws must of necessity become less severe. A hospital of 100 beds, allowing an additional twenty for quarantine and convalescent wards, would, Mr. Farr observes, probably suffice for the future requirements of Lambeth, with its increase of population. Mr. Farr further explains that he is in favour of temporary hospitals, with a combined system of dry earth and strong disinfectants as a means of disposing of the excreta, as opposed to the plan of allowing the drainage of an infectious hospital to be directly connected with the sewerage of a district; for the possibility of the infection of scarlet fever and small-pox being conveyed through our drains and sewers is, he thinks, a matter to which all sanitarians should direct attention. The death-rate for Lambeth parish for the year under notice was 20·56 per 1000, as compared with 23·11 during the previous year.

LECTURES BEFORE THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

The third lecture of this year's annual course of scientific lectures in the King and Queen's College of Physicians was delivered on Monday, February 18, by Dr. John Mallet Purser, King's Professor of the Institutes of Medicine. The subject chosen for this and the succeeding lecture was the anatomy and physiology of the white columns of the spinal cord. It was shown that while anatomical examination of the fully developed cord gave little information as to the course of the fibres, the entire white matter appearing to form one whole, embryological investigation demonstrated that the white matter was highly complex, and consisted of seven distinct tracts which differed widely in the time of their first appearance and subsequent development. Four of these tracts were, for the most part, made up of fibres of the nerve-roots before they finally terminated in the grey matter, and of commissural fibres which connected portions of the grey substance lying at different levels. The tracts of this class varied in size in different regions of the cord according to the amount of grey matter in, and the number of nerve fibres entering (or leaving), each part. The three remaining tracts were developed later, and differed from those of the first class in connecting the spinal cord with the brain; they increased steadily in size from below upwards—1. The continuation of the anterior pyramids in the cord, which, according to the amount of crossing of the fibres which occurs at the decussation, have a somewhat variable arrangement, connect the cerebrum (cortex and basal ganglia) with the grey matter of the spinal cord, the connexion being probably for the most part with the cells of the anterior horn; 2. The direct lateral cerebellar tract, which lies at the periphery of the posterior part of the lateral column, effects a communication between the cells of Clarke's column and the cerebellum; 3. Goll's column, which appears to terminate above in the first pyramidal nucleus, has an uncertain spinal connexion. The facts of

human and experimental pathology were shown to confirm in a striking manner the results of embryological research.

THE PRINCE OF WALES AND THE WATER-SUPPLY OF THE COUNTRY.

At a time when the water-supply of the country generally is forming a subject of discussion amongst all classes, it will not be out of place to notice a suggestion on the subject which has emanated from his Royal Highness the Prince of Wales. As President of the Society of Arts the Prince has addressed the following letter to the Chairman of the Council of that body:—"Clarence House, St. James's, January 30, 1878.—Sir,—The supply of pure water to the population is at the present time exciting deep interest throughout the country. Our great cities and populous towns, such as Manchester, Liverpool, Birmingham, and others, are, each for itself, taking steps to obtain an improved and increased supply; while the metropolis is seeking further powers from the Legislature with the same object in view. The smaller towns and villages are dependent on accidental sources of supply, and in many instances these are wholly inadequate for health and comfort. Whilst the larger populations are striving, each independently and at enormous cost, to secure for themselves this article of prime necessity, the smaller localities must make the best shift they can, and in many instances are all but without supply at all. Under these circumstances I would draw the attention of the Council to the subject, and suggest whether, at the present time, great public good would not arise from an open discussion of the question in the Society's rooms, with a view to the consideration of how far the great natural resources of the kingdom might, by some large and comprehensive scheme of a national character, adapted to the varying specialities and wants of districts, be turned to account, for the benefit not merely of a few large centres of population, but for the advantage of the general body of the nation at large.—I have the honour to be, Sir, yours faithfully, (signed) Albert Edward P." This communication was laid before the Council at their last meeting, and it was resolved that a committee be formed to consider the best means of carrying into effect the proposition of his Royal Highness, and that the Secretary be desired to inform the Prince that the Council would take immediate steps to secure the discussion of the subject as suggested.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

The fifth meeting of the twenty-second session was held at the Royal Kent Dispensary, Greenwich-road, on Friday, February 1; W. Johnson Smith, F.R.C.S., President, in the chair. Thomas Beville Peacock, M.D., F.R.C.P., read a paper "On some Cases of Pleural Effusion." The next meeting is on Friday, March 1, at 8 p.m. Dr. A. L. Galabin, Guy's Hospital, will read a paper "On Operative Measures in Congenital Atresia Vaginæ."

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List of office-bearers for the year 1878:—*President:* Peter Royle, M.D. *Vice-Presidents:* J. Thorburn, M.D.; I. A. Franklin, Esq.; C. H. Braddon, M.D.; D. Noble, M.D. *Treasurer:* J. Stone, M.D. *Honorary Secretaries:* A. Wahltuch, M.D., and J. Broadbent, Esq. *Committee:* W. H. Barlow, M.D.; E. Bishop, Esq.; J. B. Brierley, M.D.; Shelton Daly, Esq.; J. Hardie, M.D.; O. Dean, Esq.; C. J. Rix, Esq.; J. Roberts, M.D.; R. B. Smart, M.D.; W. T. Sinclair, M.D.; J. F. Tatham, M.D.; J. Watson, M.D.

MEDICAL PARLIAMENTARY AFFAIRS.

County Government Bill.—On Thursday, the 14th, Mr. Selater-Booth, in moving the second reading of this Bill, explained more particularly the grounds for the selection of the petty sessional area in preference to any other method of dissecting the counties for local administration. To select the union area as the unit for county division would be extremely difficult. No fewer than 180 unions out of 650 overstepped the county boundaries. It had been suggested that the three Bills which stood in his name on the paper—the County Government Bill, the Highways Bill, and the Valuation of Property Bill—might in some particulars have been amalgamated; but having carefully studied the whole question, he had only included in each measure the principles which belonged exclusively to the particular subjects with which they proposed to deal. Mr. Stansfeld moved, as an amendment, that, "with a view to simplify and strengthen local self-government, it is desirable, with as little delay as possible, to bring each sanitary district and poor-law union within the area of one county, and to give to the ratepayers in and of such districts the power of directly electing members to the county board exceeding in number the representatives of justices." The proposed county board would be entitled to prepare schemes for the approval of the Local Government Board for the rearrangement of areas and boundaries. That was an admission that such reconstruction was needed. He objected to this power being only permissive, and not obligatory. He desired to see the establishment of small administrative units, with very defined powers; the larger areas to be the multiple of those units, and the county board the confederation of the whole. Since the Public Health Act of 1872 was passed the whole country had been divided into sanitary districts, with only one sanitary authority in each; so that his views were endorsed with the authority of the Sanitary Commission. He desired to see an authority which should have vitality, cohesion, adaptability, and strength enough to resist the centralising tendencies of the day. Mr. Rathbone remarked that poor relief, highways, sanitary matters, and education were all subjects which were common to the sanitary district, but none of them were common to the petty sessional division. Therefore the petty sessional division was unfit to be an electoral area. Sir William Barttelot would like to know whether the county boards would have control over matters of drainage and conservancy of rivers. In all our counties where there were tidal and other rivers there were commissions of sewers. Did his right hon. friend mean to sweep away those commissions, and to give to the county board authority in such matters? Those who lived on the spot knew more about these matters than persons who lived at a distance. There was considerable discussion as to the proposed method of electing the county board, and as to the desirability of placing turnpike-roads, pauper asylums, education, and county finance under their control.

Army Surgeons at the Cape.—Mr. Hardy, in reply to Dr. Ward, said that since the breaking out of hostilities at the Cape two medical officers whose term of service in that command had expired were detained there, and six others had been sent from England, some of whom probably had not arrived when the letter referred to by Dr. Ward was written. Twenty-seven non-commissioned officers and men of the Army Hospital Corps have been despatched as an addition to the existing establishment, and a considerable supply of medical and surgical equipment has been forwarded. The military medical officers are sufficient for the number of troops, but private medical practitioners to the number of twelve are employed with the local volunteer force and also at several of the hospitals. The force is divided into so many small detachments that it is impossible to supply military medical officers to all, but the important appointments and the movable field hospitals are in charge of military medical officers. The military authorities were lately questioned whether any increase of medical officers or Army Hospital Corps had been asked for by the general officer commanding at the Cape, but the reply was in the negative.

Manchester Water-Supply.—On Friday, February 15, in the House of Commons, Mr. Selater-Booth moved for an instruction to the Special Committee on the Manchester Corporation Water Bill, that they have power to inquire into the sufficiency of the present water-supply of Manchester and its neighbourhood, and of any other available sources for such supply, to consider whether permission should be given to make use of any of the Westmoreland or Cumberland lakes for the purpose, and if so, under what conditions; to consider the prospective requirements of the populations situated between such supply and the town of Manchester; and to

report upon any provision needful to be made in limitation for the exclusive use of the water of any such lake. This was agreed to.

Army Medical Department.—On Monday, February 18, Mr. Hardy, in reply to Dr. Ward, said that it was to be regretted that only nineteen candidates came forward for about forty vacancies in the Army Medical Department at the recent examinations. He promised to make inquiries as to the reasons for this great dearth of candidates.

Dental Practitioners Bill.—Sir J. Lubbock, in moving the second reading of this Bill, said that the object was to protect the public against quacks. Any person pretending to be a physician or surgeon, unless properly qualified, was liable to legal proceedings. Chemists and druggists, he said, were not allowed to engage in business unless their qualifications had been tested by examination. The system proposed had been largely used in America and Canada with marked beneficial results. Certain vested interests would be protected. Unqualified men would be obliged not to assume a title to which they had no claim under the provisions of the proposed Act. Dr. Cameron moved the adjournment of the debate. The second reading was therefore postponed until March 5.

MANCHESTER MEDICAL SOCIETY.

The February meeting of the Manchester Medical Society was one of considerable interest, the following papers having been read:—Mr. Bradley related the case of a boy aged fifteen who was admitted into the Royal Infirmary, November 2, 1877, on account of an impermeable stricture of the œsophagus, consequent upon the swallowing of a quantity of washing liquid, presumably a solution of caustic soda, four months previously. The strictured portion was five inches below the mouth. Even when the boy was placed under the influence of chloroform the finest bougie could not be made to penetrate it. Emaciation was extreme. On November 17 the operation of gastrotomy was performed. An incision one inch and a half in length was made into the stomach as near as possible to the cardiac end, the edges of the visceral opening being secured to those of the external wound. During the operation the left lobe of the liver and a portion of the transverse colon came into view. The stomach was remarkably small, and some little difficulty was thereby occasioned in recognising and seizing it. For two days the patient was fed by nutrient enemata, and then feeding through the wound was commenced. On account of the small capacity of the stomach and the slowness with which it rid itself of its contents, it was not found practicable to introduce more than three ounces of food at a time, and this not at more frequent intervals than once every eight hours. The organ was allowed thoroughly to empty itself before a fresh supply of food was given. During the intervals a pad of oiled lint placed over the wound and kept in position by plaster was sufficient to prevent any regurgitation. In spite of this regular and persistent feeding, and in spite of the nutrient enemata, which, after a few days' trial of the stomach-feeding alone, were administered in addition, the patient continued to emaciate, and at last, on the twenty-eighth day after the operation, died. For several days before death Dr. Arthur Gamgee had attempted to feed the boy by peptones; but neither stomach nor rectum was able to tolerate them. An elaborate report of the post-mortem appearances, prepared by Dr. James Ross, Pathologist to the Infirmary, was read, and will in all probability be published *in extenso*, not only on account of its interest in this particular case, but as forming an important addition to our knowledge of the conditions found post-mortem in death from starvation. The narration of this very interesting case gave rise to an animated discussion. The great fatality which has hitherto attended the operation of gastrotomy naturally led the speakers to consider the probable causes of failure, and on this point various suggestions were offered. Mr. Whitehead asked if the mucous membrane was noticed to alter in appearance from its periodical exposure to the air, and whether this circumstance would not tend to produce a disturbance of function. Dr. Hardie thought that the movements of the stomach might be injuriously affected by the division of muscular fibres necessarily involved in the operation. Dr. Robert Martin mentioned a case of self-inflicted injury, which occurred at Aberdeen, and was reported upon many years ago in the medical journals by Dr. Murchison, where, after the establishment of a fistulous opening in the stomach by the continued application of a copper coin to the skin, digestion was not interfered with, the opening being plugged without difficulty. He considered that this case proved conclusively that the want of success must be attributed to some other cause than alteration of the mucous membrane, or solution of the continuity of a number of the muscular fibres. Both Mr. Bradley and Dr. Ross were of opinion that in this instance the fatal result was in great measure attributable to the small size of the stomach, and the impossibility of giving a proper quantity of food. Dr. Ross further pointed out that in so small an organ the division of some of its fibres would inflict a proportionately greater injury than if the stomach had been larger.

Mr. Whitehead exhibited, for Mr. Lund, a woman whose tongue had been completely excised by scissors on account of malignant disease. Mr. Whitehead said he had introduced an improvement since describing his operation to the Society (see *Medical Times and Gazette*, December 15, 1877) —namely, the passing of a long piece of stout silver-wire through the glosso-epiglottidean fold immediately in front of the epiglottis. By means of this wire the epiglottis and adjacent parts could be very readily pulled forward in case of troublesome hæmorrhage following the operation.

Dr. Dreschfeld narrated three cases of cerebral tumour, two of which were situated entirely in the anterior lobe, while in the other case both the anterior lobe and the so-called motor sphere were involved. The symptoms observed during life so completely agreed with the results of experiment and pathological investigation, that in all the three cases he was able to localise the lesion correctly. In remarking upon these cases he pointed out that tumours situated in the cortical portion of the ascending parietal and ascending frontal convolutions (the motor sphere) give rise to symptoms corresponding to those produced by lesions of the corpora striata; while tumours in the anterior lobes produce phenomena more strictly psychical. Lesions of the cortex in either of these situations are accompanied with convulsions or epileptiform seizures. Where the motor sphere is affected these attacks are invariably preceded by an aura, whereas no aura occurs in convulsions which are due to lesion of the anterior lobes. In the case of this latter lesion, the convulsions are characterised not only by the absence of an aura, but by the comparatively slight muscular contractions and by the long and persistent unconsciousness. When the disease affects the medullary portion of the anterior lobes, the fibres of which are for the most part unconnected with the central ganglia, there is absence of paralysis both of motion and sensation. Lesions of the anterior lobes involve a disturbance of the higher intellectual functions; there is no delirium or mania, but a condition of apathy or dementia. The patient is lethargic, speaking only when spoken to. Vomiting is not common, owing to the distance of the affected part from the nucleus of the pneumogastric. On the other hand, optic neuritis may or may not be present, and headache is a constant symptom.

Dr. Ross mentioned the case of a boy still under observation, where the symptoms led him to diagnose two tumours, in all probability tubercular—one situated in the left hemisphere, above the lenticular nucleus, in such a position as to interrupt the fibres which connect the third frontal convolution with the lenticular nucleus and internal capsule, and also those fibres of the corpus callosum which connect the third frontal convolutions of the two sides; the other situated in the left lobe of the cerebellum. The chief symptoms were double optic neuritis, right hemiparesis passing on to hemiplegia, slight incipient rigidity, followed by contractions during the waking hours of the muscles of the arm and knee, loss of power of speech, staggering and projection of the limbs as in locomotor ataxy, attacks of pleurosthotonos affecting the sound side only without loss of consciousness, nystagmus, and, as a passing manifestation, conjugate deviation of the eyes to the left.

ARMY, NAVY, AND INDIAN MEDICAL SERVICES.

The following are the questions which were set at the recent examination of candidates for her Majesty's Army, Navy, and Indian Medical Services :—

Anatomy and Physiology.—1. Describe the parts (blood-vessels, nerves, muscles) exposed on removing the glutæus maximus, and give their relative positions, distribution, and attachments. 2. Give the origin, course, relations, and distribution of the glosso-pharyngeal nerve, and describe the dissection required to display it below the base of the skull. 3. Describe the faseiæ of the abdomen, pelvis, and perineum in the male. 4. Mention the various modes in which nerves are described as terminating peripherally, giving instances of each mode. 5. Describe the secretion of the various salivary glands, and state the conditions under which it is increased, diminished, or changed.

Surgery.—1. Describe the commencement and usual course of a carbuncle; the constitutional conditions under which it frequently occurs, or which may influence its progress, and its treatment throughout. 2. Describe the symptoms of acute periostitis; state the period of life at which it most frequently occurs, and which bones are usually affected. What are the common results of this malady, and the treatment in its various stages? 3. A man has been kicked on the side of the body; describe the symptoms which would indicate rupture of the kidney; and what would be the prognosis and treatment in such a case? 4. What would be the symptoms in a patient who has fallen head foremost downstairs, and is supposed to have fractured the fifth and sixth cervical vertebræ, producing complete pressure on the cord? What would be the probable result of such an accident; and the treatment? 5. Describe the most common character of tumour found in the parotid region in early life—*i.e.*, between twenty and forty—and if removed, describe the precautions to be taken in the operation. 6. Describe the treatment to be pursued in a case of cut throat, when the trachea or larynx has been laid open; the complications likely to arise in such an injury; the prognosis; and when fatal, the causes of death.

Medicine.—1. Describe the differences between fatty degeneration and fatty infiltration of an organ, and the effects of each lesion upon the minute elements of its tissue and functions. Describe the condition of a patient in whom you might suspect fatty degeneration of the heart. What are the bearings of such a diagnosis (1) as regards a surgical operation, (2) as regards a medical case of acute disease; and what are the modes in which death may occur in cases of fatty heart? 2. Describe the circumstances under which fibrinous coagula are apt to form in the right side of the heart, or how they may accumulate there, and from what sources. What are the probable results of such lesions? 3. Describe the symptoms produced by the passage of a biliary calculus, and the composition of such calculi. How would you treat a case of this kind? 4. What are the causes of ascites and anasarca; and what would be your treatment of a case of cardiac dropsy, with a weak heart? 5. What are the chief causes of flooding during and after labour. How are such cases to be treated? 6. Describe the action of astringent medicines. Name the chief vegetable astringents used in medicine, and the diseases in which they are found useful.

Natural History and Physics.—Zoology: 1. What are the chief modifications of the structure of the eye in the different parts of the animal kingdom? 2. Enumerate the principal groups of the order primates in the class mammals. Give their essential distinctive characters and their geographical distribution? 3. To what class and order does the genus aphis belong? Give its distinctive characters and habits. What is there remarkable about its reproduction? 4. Enumerate the chief domestic animals of the class mammals. State what you know of their origin and nearest affinities in a wild state, and of their distribution, both wild and in domestication. 5. From what parts of what animals are woollen and silken fabrics obtained? Describe their microscopical structure, and state how they are to be distinguished from the principal vegetable tissues. Botany: 6. Give the essential distinctive characters of the natural order of palms, and describe accurately the flower and fruit of the cocoa-nut. What are the chief economic products yielded by the order? 7. Describe fully the process of nutrition in plants. 8. What are the principal grasses cultivated as cereals and for fodder? Give the area of the distribution of each in cultivation. 9. Describe the structure and function of a leaf. 10. What parts of what plants yield cloves, mace, cinnamon, ginger, pepper, mustard, and saffron? What is the natural order and native country of each? Physics, etc.: 11. What is the present state of our knowledge of the depth of the ocean and the inequalities of its bottom? 12. How are mist, due, and hoar frost produced? 13. What is the position of the coal formation in the geological series; and what is its area of distribution in Great Britain? 14. What is the nature of polarised light? 15. Describe the phenomena of the aurora borealis, and state what is supposed to be its cause.

FROM ABROAD.

Fracture of the Femur in Children.

In a clinical lecture delivered at the Bellevue Hospital (*New York Medical Record*, January 5), Prof. Frank Hamilton observed that the pathology of fracture of the shaft of the femur differs as it occurs in children as compared with adults. In adults the fractures are almost always oblique—very oblique; the line of fracture is relatively smooth, and the fragments overlap very much; while in children the fractures are often nearly transverse, dentieulated, and not unfrequently, especially in very young children, only partially separated, and not at all overlapped—in short, they are apt to partake more or less of the character of the "green stick" fracture. If overlapping occurs, it is usually to a limited extent, because the muscles have so much less power to cause displacement in this direction. The fragments are bent or thrown out of line easily, but there is little or no displacement in the line of the axis of the bone.

Prof. Hamilton believes that these differences have not been sufficiently borne in mind by surgical writers when directing the treatment of these fractures in children. They seem to consider the same procedures applicable to them as to adults, while, in fact, the indications are reversed. Thus, in the adult the first and most difficult indication is to overcome the shortening caused by the obliquity of the fracture and the powerful action of the fully developed muscles, and the second is to keep the limb in line. But in children the first and most difficult indication is to keep the limb in line, and the second is to overcome the action of the muscles, or this second indication may not be present at all. The double inclined plane is totally unsuited for the treatment of these fractures in children. "I have tried these machines often in my earlier experience, and they gave me infinite trouble and disgust. They had to be readjusted daily, and if I got a good result it was a mere matter of accident." The plaster-of-Paris bandage, in which the limb

is placed in a straight position, is a dangerous appliance for children, and that in proportion as the child is younger—the danger of strangulating the tissues and producing gangrene being great. Bandages of any kind, indeed, applied with sufficient tightness to support the bones which lie deep in the soft and yielding tissues, are liable to cut off the venous or arterial circulation. Moreover, they soon get loose and become fouled by the urine and fæces, which also, whatever care or ingenuity be employed, excoriate the delicate skin of these little patients. The straight position—with short side or coaptation splints, and the single long side-splint, with pulleys and weights, which constitute the best apparatus for adults—fails in the case of children, owing to the restlessness of such young subjects constantly disturbing the fragments, and leading to vicious union.

To meet these difficulties, Prof. Hamilton devised an apparatus which he has now employed with most satisfactory results for twenty years. This consists in a double thigh splint, connected below by a cross-bar, and which is figured in the last edition of Erichsen's "System of Surgery." Each splint is about four inches wide and half an inch thick, and extends from within two or three inches of the axillæ to four or five inches beyond the bottom of the feet. These splints are so united by the cross-bar that when they are applied they are separated from each other farther at their lower than at their upper extremities by two or three inches —thus, by keeping the legs a little more asunder, preventing the child in some measure from wetting the dressings. The splints must be well padded to fit all the inequalities of the sides of the body and the limbs. So prepared, the double splint is laid on the bed enclosing the body and legs of the child. The sound limb is first secured to the splint by successive strips of roller from the foot to the groin, and, after extension, the injured limb is treated in a similar manner. The short or coaptation splints (consisting of thin wood, cloth, felt, or binder's board, etc., and lined with some lint or woollen cloth somewhat larger than the splint) are now applied, or may, if there be contusion or swelling, be delayed for a few days. The front or top one must extend from the groin to half an inch from the patella, which it should never touch. The outside splint extends from the top of the trochanter major to the external condyle, or lower if the fracture (usually at the middle) is low down, and the inside one from the groin to the internal condyle. The back splint must be firmer, wider, and longer than the others, and should be made of heavy sole-leather or wood. The limb is to rest on this as a sort of bed, and it ought to extend from just below the tuber ischii to three or four inches below the knee. It should be carefully padded for the inequalities, and covered with cotton-cloth to keep the padding in place, and fasten the circular bands to. Three or four inches or more of the upper end may be covered with oiled silk. The centres of five or six strips of cotton-cloth, each about one inch wide, are to be stitched to the back of this fourth splint, and, the splints all being in their proper places, the strips are to be brought around them, and tied in bows over the front splint. The long splint is not to be included, as there would be danger, when the body sinks upon the bed, that the thigh might bend at the point of fracture. A broad band is now passed around the body near the top of (and including) the long splints, and another broad band under the nates, leaving a hole for defæcation. The upper band keeps the child in the recumbent position, and supports his back when he is taken up; and the lower one supports the nates and thigh when he is taken up, and may be stitched on each side to the long splint. In most cases a soft and flat perineal band may also be applied with advantage; and it is of importance to look at the back splint daily, and maintain it in its place.

In this way the broken limb may be kept straight and quiet, and the patient can be removed at any moment, have his bed changed, or even be carried out of doors. In children of five or six, or older, extension by means of a pulley can be added if required—using about three pounds for a child of four, and one additional pound for each additional year. Fortunately these bones unite quickly (generally in three or four weeks); but it is prudent to keep on the apparatus five or six weeks, and not even then allow the child to walk. "If you follow my directions carefully, and take the proper pains, looking after your patient daily, you will always get straight legs, and in most cases there will be no perceptible shortening, what little that may occur never causing the slightest halt in the gait. This has been my uniform experience since I began to use this dressing, and I have used it now for more than twenty years."

REVIEWS.

The Elements of Therapeutics: A Clinical Guide to the Action of Medicines. By Dr. C. Binz, Professor of Pharmacology in the University of Bonn. Translated from the Fifth German Edition, and edited, with additions, by Edward I. Sparks, M.A., M.B. Oxon., M.R.C.P. London, Officier de Santé (Alpes Maritimes), France, formerly Radcliffe Travelling Fellow. London: J. and A. Churchill, New Burlington-street. 8vo. Pp. 349.

Professor Binz's Clinical Guide to the Action of Medicines is a standard text-book in his own country, as is shown by its having reached a fifth edition; and it is favourably known in England; but the Professor has been very fortunate in his translator, and Sparks' Binz is unquestionably more valuable than Binz proper. Dr. Sparks states, in his preface, that the translation practically represents a new edition, "a considerable amount of new matter, which did not appear in the fifth German edition, having been added by Professor Binz, and a number of errors which occurred in the latter having been corrected"; and nearly the whole of the proof-sheets were read and revised by Professor Binz. And that is not all, for Dr. Sparks has added very considerably to the value of the work for English students, by introducing the preparations of the British and United States' Pharmacopœias, of the drugs which are peculiar to those Pharmacopœias, and are not officinal in Germany.

The remedies are classed generally according to their action, or supposed action; as Chapter I., Nervina Depressoria (nervine medicines whose special purpose is to produce a sedative effect). Chapter II., Nervina Excitantia (nervine medicines whose main action is stimulant). Chapter IV., Emollentia. Chapter VI., Plastica (remedies promoting tissue growth). Chapter VII., Antidyscratica et Antiseptica (diathetic and antiseptic medicines). Chapter VIII., Antiseptica (antiseptics proper). Chapter IX., Antipyretica. And so on—twelve chapters in all; but a distinct chapter is given to the Ætherial Oils; and the Adstringentia, Amara (excluding quinia, strychnia, etc.), and Alkalina are placed together in another chapter. Each chapter has a short introduction, describing the action of the class of remedies included in it; and each remedy is treated of under the headings Action, Use, and Forms of Administration. For his explanations of the "action" of remedies, Professor Binz relies mainly on what we may call laboratory work, on experimental researches into the effects of the remedies on animals and animal tissues; and though he does not entirely ignore clinical experience, it is referred to in a seemingly rather contemptuous way as purely empirical knowledge. This is forcibly and rather amusingly illustrated by the manner in which quinia is treated of: we find it only in the chapter on Antipyretic Medicines; and, after a rather long description—long, that is, by comparison with most other articles in the work—of its effects on certain of the animal tissues, of the energy "with which it paralyses certain kinds of protoplasm," and of its "inhibitory effect over the functional activity of the protoplasmatic cells of the heat-producing organs," the author says, "We are entirely ignorant of any direct relations between quinia and the nervous system which might be utilised for therapeutic purposes, although we cannot deny that such may exist. Any direct 'tonic' influence exerted by quinia upon the nervous system is at present purely hypothetical, and unsupported by a single experiment."

The author appears to refer but very rarely to English authorities, and Dr. Sparks has corrected deficiencies in this respect in many instances, but even he has overlooked some: thus, in the article on Apomorphia, Dr. Gee's name is not even mentioned. The original work contains, however, an unquestionably large amount of valuable information in a small compass, for the style is terse and close, and Professor Binz is an acknowledged authority in therapeutics; but, as indisputably, Dr. Sparks has greatly improved it. His translation-work is admirable, and proves him to be a master of the German language, as well as of a concise and lucid style in English. Besides the special additions already

mentioned he has in innumerable instances interpolated facts worked out by English observers, and notices of drugs or preparations not used in Germany, so that it would hardly be an exaggeration to say that almost every page in the book contains evidence of his watchful care to add useful information. The whole of the article on nitrous oxide is due to him. In an appendix he has also given some valuable practical notes on new remedies—as hydrobromic acid; and on certain disagreeable effects that sometimes attend the employment of old ones, as quinia rash, and the local eczema caused in some patients by belladonna liniment or plaster; and another appendix is added, containing a very useful table for the conversion of doses expressed in metrical weights into the equivalent weights in grains, drachms, etc. The metric system of weights is, however, yet so little familiar to English practitioners that we are not sure that Dr. Sparks has done wisely in retaining it "wherever the original dose could not be converted into English weight without loss of accuracy"; but that is the only fault, if it be one, that we have to find with the book.

Insanity and its Treatment: Lectures on the Treatment, Medical and Legal, of Insane Patients. By G. Fielding Blandford, M.D. Oxon., F.R.C.P. Lond., Lecturer on Psychological Medicine at the School of St. George's Hospital. Second Edition. Edinburgh: Oliver and Boyd, Tweedale-court. London: Simpkin, Marshall, and Co. 1877. Pp. 476.

All students of medicine, whether already in practice or still working towards that desired consummation, will welcome a new edition of Dr. Blandford's well-known work; and seeing how much has to be read and studied in these days, and how terribly apt books are to increase in size in successive editions, they will be glad to find that the present volume exceeds the former one by only some thirty pages. The value of the book as a sound practical work on insanity has been so fully appreciated, that no detailed notice of it is now necessary; but we especially commend to careful study the chapters on the pathology of insanity, and on the morbid appearances, considered in connexion with Dr. Blandford's statement in the preface to the work, that he is "convinced that the only method by which we shall attain an insight into the mysterious phenomena of unsound mind, is to keep ever before us the fact that disorder of the mind means disorder of the brain, and that the latter is an organ liable to disease and disturbance, like other organs of the body, to be investigated by the same methods, and subject to the same laws"; the clear and graphic description of acute primary dementia, the primary dementia of the young as differentiated from the *melancholia cum stupore* of older patients; the remarks on treatment and on the value and power of certain drugs; and the chapters on the law of lunacy, and on the examination of patients. The two latter should be thoroughly studied, be got by heart indeed, by all practitioners of medicine, for any one of us may be called to examine, and if necessary certify, persons supposed to be insane; and the conscientious and scrupulous care and caution insisted on in the advice as to the certifying of patients, might possibly even teach something to those who believe, or affect to believe, that alienist practitioners, if not practitioners generally, are far too ready to think every patient insane. Finally, we may remark that the book is admirably got up in regard of paper, type, and printing, and that the elegant though very simple cloth binding bears on one cover the impress, stamped in gold, of a very artistic medallion of St. George and the Dragon, designed by Tenniel. We hear that all works issued by members of the Staff of St. George's Hospital and School will for the future be bound in the same fashion.

Notes on Asthma: its Nature, Forms, and Treatment. By John C. Thorowgood, M.D. Lond., F.R.C.P. Lond., Physician to the City of London Hospital for Diseases of the Chest, Victoria-park; Physician to the West London Hospital, etc. London: J. and A. Churchill. 1878. Third edition. Pp. 176.

As these "Notes" have reached the third edition, it would seem that they have been appreciated by certain readers. What value they possess would, we think, be greatly enhanced by the condensation and rearrangement of most of the details. The style is very diffuse, and many of the paragraphs might with advantage be entirely omitted. What good is there, for example, in devoting page 8 to a rough description of the ordinary anatomy and physiology of the diaphragm, which every reader of the volume ought to know more precisely than they are here described? The most useful remarks in the volume will be found under the head of Treatment.

FOREIGN AND COLONIAL CORRESPONDENCE.

AMERICA.

Philadelphia, January 20.

The Revision of the United States Pharmacopœia: Question as to the Insertion of Doses in the Text of the Work—The Report of Dr. Vanderpoel, Health Officer, to the Commissioners of Quarantine, New York—The Canada Medical Association—High Personal and Professional Status of the Profession in Canada—Want of Unity in Medical and in Sanitary Legislation in the Dominion—The very High Birth-Rate in Canada—Professor W. Pepper on Medical Education in the United States—The Enormous Over-Production of Medical Men.

The question whether the next revision of the United States Pharmacopœia in 1880 should be placed under the paternal charge of the American Medical Association, having been settled negatively by that body last summer, a great cause of prospective discord has been removed. As will doubtless be remembered, there was a plan on foot, for two or three years previous to that meeting, to take the control of its revision and publication entirely from the convention of organised medical and pharmaceutical colleges and associations, which, decennially chosen to represent existing views, is to meet in Washington in 1880. The arguments in support of this change of base were not considered sufficiently strong. The pharmacists were naturally indignant at the inferior place to be assigned them; the Association feared that this might only be an entering wedge for inharmonious discussion; and many even thought, although doubtless unjustly, that the jealousy of rival cities inspired a merely mercenary, or rather commercial, bias in favour of changing the place of publication. Some were disposed to think that in order to improve the character of the Pharmacopœia as a general work of reference, the whole machinery by which it was to see the light should be changed; but the sober second thought of the profession has settled down to the view that the next revision will be more thorough and complete, in consequence of all the stir which has been made in relation to it, if the same channel of revision be employed, as the gentlemen undertaking it will now realise what is expected of them. Certainly no such amount of activity in preliminary preparations has ever before been visible; and all over the country, it is believed, the same harmonious discussion will soon be made of new and useful features that has already characterised the meetings of physicians and pharmacists in Philadelphia. The County Medical Society, College of Physicians, and College of Pharmacy, have each appointed a committee on the subject, and these frequently meet, alone and in conference, to consider important questions of interest to all; and it is proposed that similar bodies the whole country over shall entertain the same subjects.

The tendency seems to be to make the Pharmacopœia much more expanded in character; but many physicians err, we think, in supposing that it can ever assume the scope or dimensions of a dispensatory. The pharmacists seem desirous of having the doses inserted, but the feeling of our profession is almost unanimously against it, chiefly on the ground that in courts of law, in medico-legal cases, a work published, as the Pharmacopœia is, by representative men of both professions, would be taken as the standard by judge and jury for its doses, although these might be given only as a convenient, not an infallible guide. In this way, a physician who really understands how and when to prescribe might suffer the penalty of the law for ordering a perfectly legitimate dose of a remedy, although it might be larger than that mentioned in the Pharmacopœia. The druggist, by

whom the book is much more extensively used than by the physician, might over his counter furnish a medicine to a patient at the ordinary dose (for there is no law here against prescribing druggists), and not appreciate its therapeutic effects or its adaptability to the case. So when the question was discussed recently in Philadelphia, a sort of compromise was adopted—only, of course, recommendatory to the general Convention of 1880,—that doses be omitted from the text of the Pharmacopœia, but that there shall be placed at the end of the book a posological table of active drugs, with the statement that doses given are not maximum doses, but that in prescribing large amounts the physician should insert some cautionary symbol. It was also recommended that measures of capacity be not employed in the Pharmacopœia, except in the posological table, formulas being given in parts by weight; and that no weights or measures be introduced into the formulas, except when required for convenience of dose (as in pills, etc.), and that then the weights be in grains, with the corresponding metric weights in brackets.

An interesting report has just been presented to the Commissioners of Quarantine at New York by Dr. Vanderpoel, health officer, in regard to the prevalence of contagious diseases during 1877, so far as their admission by way of sea is concerned. Small-pox seems to have been quiescent during that period, only seven cases occurring among the arrivals at the port of New York, and these among the crew or steerage passengers of steamers. The hard times have temporarily checked immigration; but this only partially accounts for the diminution. The arrival of vessels with yellow fever on board seems to be a matter of weekly occurrence, but during the five months of winter the health officer seemed to lay but little stress upon this fact, under the belief that the germs of the disease cannot propagate after the appearance of frost. Vessels engaged in the South American and coffee trade seem to be those which are the most active importers of the fever. The health authorities of New York are greatly embarrassed with the difficulty experienced in obtaining reliable information from our own southern ports during the early periods of a yellow fever epidemic. There is naturally a tendency to conceal the facts of the case until the disease assumes an epidemic character, for fear that the commercial interests of the place may be unfavourably affected. The effect of this concealment was strikingly exemplified last year by the occurrence in New York of two cases of the fever, developing the day after the arrival of a vessel from Fernandina, Florida, the very day that the board of health of that town telegraphed all over the country that the disease prevailing there was not yellow fever. Dr. Vanderpoel seems to have little dread of the sporadic cases which come by rail acting as causes of epidemic extension of the disease, and from his experience considers that it rarely gains a permanent lodgment unless it starts from the water's edge, and has the foulness of bilges or stagnant water of docks as an initial point.

The Canada Medical Association has just published the first volume of its *Transactions*, although the recent meeting in Montreal was the tenth annual gathering of that body. Our neighbours over the border are exhibiting a very praiseworthy activity in the advancement of medical science. During the meetings of the International Medical Congress and of the American Medical Association, at Philadelphia and Chicago, gentlemen from Canada were present in considerable numbers, and created a most favourable impression by their personal and professional status. In all the important discussions, in the Congress more especially, the members of the profession from the Dominion were conspicuous for their earnestness and zeal, and for their advanced views of pathology and therapeutics, in full accord with the very latest steps of progress in these directions. Medical legislation seems to be encumbered and embarrassed in Canada pretty much in the same unfortunate way that characterises it in the United States. The Dominion is, in its political organisation, united; but medical legislation appears, according to the address of the President (Dr. W. H. Hingston), to represent anything but a union. The province of Ontario has a central examining board, but that of Quebec is not so favoured. Each province legislates for its own medical education, and unless a similar act be introduced into each local legislature, it would seem that the lack of uniformity is likely to endure. As matters at present stand, the anomaly exists, that persons having a licence to practise in one part of the Dominion must obtain a separate licence to practise in another part. It would seem to be a very desirable act that holders of Canadian diplomas should be able to practise in every part of the Dominion. Legislation on health matters appears to be no farther advanced than in some of the States of our own country. There is the same difficulty in each region in isolating from politics the purely unselfish regard for the health of the people which should characterise the acts of all such bodies. There are nearly 6000 physicians in Canada, and much impression might be made on the local legislatures for the establishment of sanitary boards if this large force of educated men would, by concert of action, urge upon the Legislature the immediate necessity of systematic sanitary labour. At present the provinces are individually without provincial boards of health, and the Dominion has no State Board. The Canada and the American Medical Associations maintain a very fraternal feeling towards one another, and have been anxious to unite in conference at some central point accessible to both, but the unwieldiness of the latter body, the fact that the French language is so commonly employed over the Canadian border, the difficulty of arranging the expenses of the united gathering, the extreme distances of the places of meeting, etc., were deemed overwhelming arguments against the measure, even though the union would lead to association with a body of physicians all of whom had been educated under English influences, many of them having pursued their studies in England, and received diplomas from the schools of that country, where a high standard of professional qualifications is a matter *de rigueur*. The curious statistical fact was mentioned in the President's address, that the birth-rate for some parts of Canada has never been equalled. In the city of Montreal, for instance, the birth-rate for 1876 was 49 per 1000, the French-Canadian element alone giving 64 per 1000, the largest birth-rate that has ever been reached. This is in singular contrast with the extraordinarily small rate that characterises some of the adjoining States of the American Union. Possibly, the practice of "conjugal onanism," so freely condemned by medical writers as one of the prevalent and fashionable vices of the day, may not be so popular there as in the United States.

Medical education in the United States has become a subject of more decided interest since the adoption of the progressive system at Harvard several years ago. The venerable University of Pennsylvania has followed, with modifications, a similar system, after a century of teaching according to the old method, in which latter all the branches are taught during the same course, and repeated the next year. Almost all the colleges in the country follow the latter system; but it remains to be seen what results experience will bring forth. Professor William Pepper, in an able introductory address recently delivered, discussed the question whether the plan of medical education usually pursued in this country is really the best adapted to its wants, and the best for the interests of the community and of the profession itself. He contends that the defects in the system of American education hitherto have been the absence of a preliminary examination before matriculation; an inadequate period of medical study; the want of personal training in the practical branches; the absence of any grading of the classes; and the examination of the candidates for the degree by those having a direct pecuniary interest in their success. The number of medical schools in this country has increased out of all proportion to the extent of the population. Usually in the statistics of other countries—as France, England, Russia, Brazil, &c.—it has been found that one medical school for every 2,000,000 to 4,000,000 of population was an ample ratio; and it seems a matter of surprise that the United States should afford so notable an exception. Yet facts show that in a total population of 45,000,000 there are at least sixty-five regular schools of medicine, in addition to eleven of the homœopathic faith, four eclectic schools, fourteen colleges of pharmacy, and twelve dental colleges. As the druggists are frequently practitioners of medicine, it is safe to estimate that in this country there is one medical school for, at the most, every 500,000 inhabitants. The result is an enormous over-production of medical men, which has not been diminished, but rather increased, by the depression of industrial interests driving new candidates for future medical honours from commerce to the profession. Probably 3000 new graduates

entered the ranks in 1875 alone. Dr. Pepper estimates that one thoroughly qualified medical man can minister efficiently to, and in turn be fairly supported by, a population of from 1500 to 2500 persons; but he states that the most reliable data show there are not less than 60,000 physicians in the United States, or one medical man to every 750 inhabitants. In some States the proportion rises as high as one to 400, and this too without making any allowance for the almost universal custom in America for druggists to prescribe over the counter, and thus to conduct a medical practice often of very considerable extent.

GENERAL CORRESPONDENCE.

THE TELEPHONE AND AUSCULTATION.

LETTER FROM DR. WILLIAM BIRD.

[To the Editor of the Medical Times and Gazette.]

SIR,—In reply to Dr. Liveing, I wish to say that the ear- and chest-pieces of my stethoscope are continuous, and I have now no doubt that the sounds I heard were transmitted through the wooden portion of the instrument, and were not due to the telephones. Since writing to you I have made many experiments with various telephones, with negative results. I think more success is likely to follow some modification of the toy-telephone, as in some of these sound is increased, especially in those that are connected with fine wires. I am having some made, and if they succeed I shall be glad to communicate with you further on the subject. My principal object in writing now is to reply to Dr. Liveing's inquiry.

I am, &c.,

St. Leonard's-place, York, Feb. 19. WILLIAM BIRD.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, FEBRUARY 6.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

CANCER OF THE UTERUS.

DR. MATTHEWS DUNCAN showed a specimen of general cancerous hypertrophy of the body of the uterus, the cervix remaining apparently unaffected. The patient, an old woman, died of acute suppurative peritonitis, the cause of which was not discovered. Her case was during life supposed to be one of uterine fibroid. She began to suffer only three months before her death, and her complaints were occasional pain in the hypogastrium and occasional loss of blood per vaginam. Three weeks before her death, examination discovered a hard mobile tumour in the brim of the pelvis, about the size of the adult fœtal head. After death, cancerous nodules were found in both lungs and in the liver. The uterus weighed about four pounds and a half, measured eight inches in length, and six inches and a half in breadth; the length of uterine cavity six inches, wall of body hypertrophied, fully an inch thick. Section generally presented the appearance of a section of scirrhous mamma. The lining membrane of uterine body was thick and villous; at some parts destroyed. Cancerous degeneration of ovaries and of parts of vagina. In the cervix uteri the microscope discovered cancerous degeneration. The remarkable point in the case was the diffuse hypertrophy of the uterus with very little change of shape, the whole body being uniformly affected with cancer of a hard scirrhus-like character, while the cervix was on superficial examination unaffected.

DR. ROBERT BARNES also showed a specimen of cancer of the body of the uterus, from a patient who had lately died in St. George's Hospital. She had suffered for a considerable time from continued hæmorrhage, with (during the intervals) a fetid watery discharge. Suddenly perforation occurred, and death from peritonitis. At the post-mortem the parts were found all matted together, the intestines and bladder being adherent to the uterus. This organ was occupied by a mass of broken-down cancerous tissue, probably of the epithelial kind. There were two perforations, one into the rectum, and one into the peritoneum. The cervix was unaffected.

DR. CLEMENT GODSON then showed a specimen of epithelial cancer of the uterus, not affecting the cervical portion, but confined almost entirely to the mucous membrane of the cavity, only slightly invading the deeper structures. The history of the case was remarkable. The patient, aged fifty-two, a well-nourished, healthy-looking woman, of very florid complexion, had come under his care in St. Bartholomew's Hospital in December, 1876. Her chief complaint was of intense pain in the region of the uterus, occurring almost regularly at ten o'clock every morning, and continuing for two, three, or four hours. The severity of the pain caused her to sit up in bed, compressing her abdominal walls while rocking herself to and fro, and frequently her cries were pitiable. Large doses of quinine, chloride of ammonium, and croton chloral failed to give any relief; and the pain was only bearable when the patient was fully under the influence of morphia, which was administered hypodermically. On examination the uterus appeared to be perfectly normal to the touch, and the appearance of the cervix uteri was quite healthy. The sound passed to the extent of two inches and a half into a freely movable uterus, followed by a slight discharge of bright blood. There was occasional inter-menstrual discharge of blood. The patient did not improve. She left the hospital in February, and died at home six months afterwards. The condition had remained much the same, except that during the last fortnight of her life a slight fetid watery discharge had been present. The post-mortem examination disclosed nothing abnormal, except a thickened, shaggy condition of the mucous membrane. The microscope showed this clearly to be a cancerous condition—epithelial. Dr. Godson was of opinion that the woman had died worn out with the constant and irremediable pain.

DR. ROGERS mentioned a case as bearing upon the subject under discussion. He was recently called in consultation to a lady supposed to be suffering from ileus. He found a large irregular uterine tumour pressing on and occluding the bowel. No complaint was made of any discharge from the vagina; the cervix appeared healthy. Colotomy was subsequently performed. The woman did not long survive, and at the autopsy the body of the uterus was found to be cancerous, while the cervix was apparently unaffected.

DR. HEYWOOD SMITH mentioned that one of the specimens he exhibited at the last meeting of the Society was similar to those just shown of cancer of the body only of the uterus. In his case the cervix was not affected, there was not much pain, and there was also perforation at the fundus, and an abscess connected with the bowel.

DR. MURRAY remarked that the point of interest in the first two cases related was the absence of pain. He described a case now under his care where there was pain more or less severe. He advocated the use of the sponge-tent to clear up the difficulty of diagnosis in these cases; and he had used with benefit the perchloride of iron as a local application.

DR. BARNES said that pain was often an early symptom in cancer of the body of the uterus. In cancer of the cervix frequently pain was very late in appearing.

DR. CHAMBERS referred to a case of cancer of the fundus uteri, which he had brought forward at the Birmingham meeting of the British Medical Association in 1873. He had now a patient under his care in all essential points resembling it. He considered the pain, which in this case nothing but the hypodermic injection of morphia would relieve, specially characteristic of this form of disease.

DR. EDIS mentioned a case he had lately seen in consultation similar to that brought forward by Dr. Matthews Duncan. On examination the cervix uteri was found to be normal, the fundus greatly enlarged and fixed in the pelvis. There was no offensive discharge, but there had been profuse hæmorrhage every month. The emaciation, the severe pain, and the sudden setting up of peritonitis, seemed to point to the case being one of cancer, and not of fibroid.

DR. HAYES observed that the greatest caution was necessary in the introduction of sponge-tents with a view to diagnosis. The tissues might be so thinned and softened as to be easily lacerated by dilatation. He remembered one case in which it had been arranged to introduce a tent, but fatal perforation occurred before this was done.

DR. MURRAY said that the tent must be very long to injure the fundus. It ought to be short, and only used to dilate the os and cervix.

DR. ROUTH was of opinion that Dr. Godson's case might

have been benefited, if not cured, by more decided measures. From the post-mortem examination it was evident the disease was limited, and only affected the lining membrane, and he thought if a sea-tangle or sponge-tent covered with cotton and dipped in a strong solution of bromine had been used, the disease might have been destroyed, and a cure possibly effected. This was the plan usually carried out at the Samaritan Hospital. It did not seem to produce any bad symptoms, and was frequently very successful.

The PRESIDENT thought it would be very profitable if some Fellow of the Society would make carcinoma of the body of the uterus his special study in order to provide a better guide towards diagnosis and treatment than was at present possessed. In concluding the discussion on this subject he would add that he could not but regret that so few papers on the diseases of children and of women had been brought forward during the past year, for he was very reluctant to see the Society narrowing its scope, and confining its attention merely to obstetrical subjects.

TUMOUR OF THE UTERUS.

Dr. THOMAS CHAMBERS brought before the Society a large tumour in connexion with the uterus, which he had removed at the Chelsea Hospital for Women that afternoon. The patient was aged thirty-six, and for the last five or six years had been suffering from many of the conditions supposed to be associated with fibroid uterus, especially hæmorrhage. She had been an in-patient in many hospitals, and had been subjected to various forms of treatment, and she ultimately came under his care at the Chelsea Hospital for Women in 1876. She was then, at her monthly periods, losing blood for fourteen or sixteen days; the periods were attended with great pain, and were followed for some days by leucorrhœa. On examination the pelvis was found quite empty, the uterus occupying chiefly the right iliac region. On a sound being introduced, it passed for six inches upwards, and to the right side. She was treated four months with hypodermic injections of ergotine, with the effect of reducing the monthly hæmorrhage from fifteen to six or seven days, and considerably reducing the pain; she was at the same time kept at rest, and fed upon a nutritious diet, and without stimulants. She left the hospital apparently better, but returned again a month ago much increased in size, and suffering very considerably from hæmorrhage. On examination it was found that the tumour on the right side had become associated with a companion on the left side. From the continued discharge, the character of the tumour, and the size of the uterus as ascertained by the sound, it was argued that it was a case of fibroid uterus; but it was difficult to say why it had grown so very rapidly. The patient was examined by many medical men, who held different opinions as to the nature of the tumour, but all of whom thought it justifiable to make an exploratory incision with a view to its removal. This had been done that day, and the result was that the cavity of the uterus was found occupied by a growth of gelatinous consistency, and a huge mass of similar substance was connected with the left ovary and broad ligament. This had probably grown from the lower part of the left side of the uterus, with which it had a distinct fibroid connexion. Though there were no adhesions, he had some difficulty in getting the growth out, and very great difficulty in securing the stump. He first transfixed and tied it with whipcord, both on the right and left side. But though the whipcord was very strong, and had been tied very tightly, after the tumour was cut away the ligatures became perfectly loose. He therefore surrounded the whole stump with a single large ligature, which he tied as tight as possible, bringing out the ends at the bottom of the wound to serve for drainage purposes. He had seen the patient that evening, and she had then recovered from the effects of the chloroform, was free from sickness, and had a pulse of 84. In conclusion, he hoped that the tumour might be referred to a select committee, in order that it might be subjected to a thorough microscopical examination.

Dr. Galabin and Dr. Herman were then appointed to examine the tumour removed by Dr. Chambers.

INVERSION OF INTESTINE THROUGH UMBILICUS.

Dr. ROPER showed a specimen of small intestine taken from an infant. The case occurred in the practice of Mr. Wm. Toulmin, of Upper Clapton. Some days after birth the tissues round the umbilicus became inflamed. The funis did not separate until the fifteenth day, and with it came away a slough of the abdominal integument the size of a shilling, leaving a deep ulcer. This was dressed with carbolic paste, covered by a pad of linen, and secured by a strapping. On the twenty-first day a portion of intestine, two inches and a half long, protruded through the umbilical opening. At the same time fæces passed from an opening in the bowel. The external protrusion was covered with mucous membrane. The case was therefore one where, after an artificial anus had been formed, the intestine became everted to the extent described, and thus protruded through the umbilical opening made by ulceration.

REPORT OF UNIVERSITY LYING-IN HOSPITAL, MONTREAL.

This report, communicated by Dr. MacCullum, gave statistics and other information with regard to the cases of childbirth which had been treated in the University Lying-in Hospital, Montreal, between October 1, 1867, and October 1, 1875. The Hospital consists of two wards, each with four beds; there is also a separate room for private patients. About 120 women were confined there every year. The patients were of much the same class as those received into maternity hospitals in other parts of the world. During the eight years mentioned, 995 women were confined in the Hospital, of whom 987 made good recoveries, and 8 died, 7 of the deaths being due to puerperal fever, which prevailed in epidemic form in February, 1871, and April, 1872. Of the children 948 were born alive—viz., 483 males and 465 females; and 47 were stillborn—viz., 35 males and 12 females. The average length of the male children was twenty inches, of the female nineteen inches and a half; the average weight—males, seven pounds thirteen ounces; females, seven pounds eleven ounces. Instrumental interference was required in twenty of the cases, the forceps being used in nineteen, and the perforator in one. Of the cases in which the forceps were used, thirteen were primiparæ. In the forceps operations all the mothers recovered, and sixteen of the children were saved. In the one case in which the perforator was used it was to diminish the size of a hydrocephalic head. Puerperal convulsions occurred in seven cases; all the mothers recovered, and five of the children were born alive. There was albuminuria in all the cases but one. Venesection was employed with the best results in two cases, and the only reason why it was not employed in other cases was that most of the patients admitted into the Hospital were not in such condition as to bear depletion.

Dr. GODSON called attention to the average weight of the children recorded in the above paper. That of the males was seven pounds thirteen ounces, of the females seven pounds eleven ounces. He had recently weighed a number of children delivered at the City of London Lying-in Hospital, and found the weight of the males averaged six pounds thirteen ounces, and of the females six pounds ten ounces; that was in each case a pound less than the figures given by Dr. McCullum.

Dr. MURRAY said that in the cases which he had noticed, where a small portion of membrane had been retained for some days, and then expelled, he had not seen the hæmorrhage described by the author of the paper. The membranes *not* being attached to the placental site, it was, he thought, difficult to understand how bleeding could result from their retention.

Dr. EDIS wished to call attention to the fact that in the above statistics the still-births amounted to 5 per cent. of the children born—a very considerable proportion. It would be interesting to have some information as to the duration of labour in these cases. He also noted that instrumental assistance was limited to twenty cases, and he could not but think that, bearing in mind the size of the children, the large proportion of still-births might have been lessened had the forceps been more freely employed. He was convinced that the lives of numbers of children were sacrificed through hesitation to use the forceps.

Dr. ROPER said that the statistics of the Royal Maternity Charity did not countenance Dr. Edis's conviction, for out of 2409 confinements last year forceps were applied in only seventeen cases, and the infant mortality was under 3 per cent. from all causes. He would call attention to the large proportion of cases of puerperal eclampsia and puerperal mania in the Canadian statistics. The latter complication occurred three times in less than a thousand cases; but out of 10,000 labours he himself had only seen one case of

puerperal mania. Again, seven cases of eclampsia occurred in Dr. MacCullum's 995 cases, whereas, in the eastern division of the Royal Maternity Charity, out of 2409 women delivered in 1877, this disease only once made its appearance.

Dr. J. Williams thought that sclerotic acid—an active principle recently obtained from ergot—would probably be attended with even greater success than ergotine. He had not as yet made trial of it in post-partum hæmorrhage, but he had used it in a case of large fibroid tumour with the result of arresting the bleeding, which was continuous, and diminishing the size of the growth. He found that it produced less irritation than ergotine. One grain of sclerotic acid would dissolve in six drops of water, and the dose was half a grain.

Mr. Brown, of Ealing, said, in reference to the remarks of Dr. Edis, that he should be ashamed to allow a patient to remain without help for two hours after the os was fully dilated. He thought there could be no doubt as to the correctness of the practice recommended by Dr. Edis.

The meeting then adjourned.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 12.

Charles West, M.D., President, in the Chair.

Analysis of Seventy-five Cases of Writers' Cramp and Impaired Writing Power.

Dr. Poore said that in seventy-four of these cases the condition of the hand completely overshadowed any other disease, whether general or local, from which the patients were at the time suffering. Most of the cases merited the name of "writers' cramp," or had been so-called; but the author had purposely included a few cases which obviously do not merit that name, because the study of them throws some light on the main question. The cases fall naturally into six groups, thus—1. Paralytic (six cases); 2. Spasmodic (five); 3. Degenerative (nine); 4. Neuralgic or neuritic (nineteen); 5. Writers' cramp (thirty-two); 6. Anomalous (four). The cases are arranged in a tabulated form. It is shown that since the ulnar nerve supplied thirteen and a half out of the eighteen intrinsic muscles of the hand, its integrity is very necessary (more necessary than that of any other nerve of the hand) for all delicate manipulation, especially writing. The spasms which affect the hand, and which are particularly prone to follow attacks of hemiplegia, owe sometimes, there is good reason to believe, their character, if not their origin, to a faulty antagonisation (due to a secondary paralysis or paresis) among the muscles of the paralysed limb. Although it is commonly received that such spasms are due to disturbance of the grey cerebral matter, it is well to look also to the peripheral aspects of the question. Provided a nervous impulse issuing from the brain be distributed in a limb to equally irritable muscles which mutually antagonise each other, it is difficult to conceive that spasm of definite form should be produced; but should the equilibrium of antagonisation in the limb be destroyed by a secondary lesion, the production of definite spasm is easily conceivable, especially when voluntary control is lessened by a lesion of the central ganglia. In some cases of localised spasm there is no evidence of central change, and it is theoretically possible that the action of a disordered centre on a healthy periphery and the reaction of a disordered periphery to a healthy centre may be identical in their results. It is shown that loss of writing power is often the first and most prominent symptom of degenerative change occurring in the spinal cord or brain. The neuritic or neuralgic group is characterised by a painful and tender condition of the nerves of the limb, which may be induced solely by overwork, but more frequently by a strain or similar injury, combined with exposure to cold and a depressed state of health. Of the nineteen cases in this group, twelve were females. Any attempt to use the arm either for coarse or fine acts produced fatigue, pain, and neuralgia. It is not always easy to distinguish these cases from true "writers' cramp," and, indeed, there cannot be said to be any hard and fast line between the two groups, but it is characteristic of the neuralgic group that—1. The symptoms involve a wider area; 2. The symptoms are sometimes induced without excessive exercise of any function; 3. Nerve-tenderness or neuralgia is a prominent symptom. In the group of true "writers' cramp" considerable care is necessary to detect peripheral evidence of mischief; but the author states that in every case of impaired writing power which he has seen there has been evidence more or less marked of derangement of one or more of the muscles used for writing. This evidence consisted of—1. Obvious failure to use certain muscles efficiently either for writing or for some other less complicated act; 2. The occurrence of consentaneous movement or tremor when certain muscles were put in action; 3. Depressed or exalted electric irritability; and 4. The occurrence of sensory derangement or nerve-tenderness. The muscles which are most frequently involved are those of pen-prehension rather than those of pen-movement. Reviewing the cases as a whole, attention is directed (1) to the inferences which may be drawn from an inspection of the handwriting; (2) to the fact that joints were found to be implicated no less than twenty-one times, the joint-affection being rheumatic, neuropathic, gouty, or due to strained position; (3) to the fact that a difficulty in writing is not very infrequently hereditary, or developed very early in life; and that (4) any evidence of involvement of the nerve-centres is decidedly rare. "Writers' cramp" has been spoken of as a disease of "faulty co-ordination," and there can be no doubt that such is the case, for it is evident that the muscles used for writing fail to work orderly together. We are not, however, justified in assuming the existence of a special co-ordinating centre for the controlling of the act of writing, and the author has been unable to find evidence that this centre (supposing it to exist) ever gives way, leaving the periphery, except for the special co-ordinated act, in a state of perfect health. The existence of such a centre appears to the author to be improbable for the following reasons:—1. Because he has never seen a case of writers' cramp without peripheral evidence of change, and in the majority of cases there has been no evidence of any change other than peripheral. 2. Because, if there be a co-ordinating centre for writing, it must be created as it were by education. The co-ordination of writing which we are many years in acquiring must be distinguished from those co-ordinated movements (such as the symmetrical movement of the two eyes) which are wholly independent of education. The fact that no two people hold their pens exactly alike, and that it is scarcely more difficult to write with the toes than with the fingers, is much against the probability of the existence of a writing centre. 3. Because writers' cramp is never suddenly established as aphasia sometimes is. 4. Because it is almost certain that a purely peripheral lesion may cause all the symptoms of writers' cramp. 5. The fact that the left hand (if used for writing) sometimes suffers as well as the right is no evidence that the change is central. In previous writings the author has spoken of "writers' cramp" as a "fatigue disease," and he is still inclined to adhere to the word "fatigue" as a convenient expression for an easily recognisable and familiar condition, of the pathology of which we are uncertain. He is inclined to think that occasionally fatigue is the expression of hyperæmia or mild inflammation of a motor nerve, and that the same condition may be produced either by overwork or by accidental causes, such as cold, strain, "rheumatism," or injury. Fatigue more especially attacks those muscles which are subjected to prolonged strain, and it is probable that the relative frequency of "writers' cramp," as compared with other professional ailments, is due to the fact that prolonged strain of certain muscles (those which hold and steady the pen) is inseparable from the act of writing. Finally, as to the position of "writers' cramp" in the catalogue of diseases, the author would feel inclined to class it with "neuralgia," that is, with a disease the phenomena of which are purely local, but which we recognise as being due, not only to conditions which affect the sensory area involved, but also to molecular changes affecting any part of the sensory fibre, whether before or after its junction with the nerve-centre. The author concluded by laying down certain principles of treatment for the various forms of impaired writing-power.

The President suggested that as the portion of the paper relating to treatment had not been read, Dr. Poore should indicate the main points in it.

Dr. Poore said there was no one point, or rather no one treatment. Each group was dealt with by itself. All cases were difficult to treat; none very amenable to treatment.

Dr. Buzzard, whilst passing a high eulogium upon the author, feared that the merit of his paper would be a bar to its adequate discussion, the points of importance raised being in such unusual number. He had long recognised that impairment of writing power was not a disease *sui generis*, but that its cause must be looked for in a variety of directions. To the causes tabulated by Dr. Poore he would add the influence of lead, of which he had seen some examples, one of which he related. In a gentleman who had applied to him on account of "writers' cramp," he found the thumb muscles inexcitable by electricity. The case was not, therefore, one of progressive muscular atrophy, for in this disease the irritability continues for a long time normal. Nor was it likely to be of traumatic origin, since these muscles are supplied by two distinct nerves. It was therefore almost certainly due to lead, and an analysis of the water which the patient drank showed an appreciable quantity of that metal. He had seen also several cases depending upon neuritis in gouty persons, and in these treatment directed to the gouty habit had a marked effect upon the local difficulty. In such cases he had found that the electric irritability of the affected muscles, which was at first augmented, became normal under treatment. As regards the cases more distinctly meriting the title of "writers' cramp," Dr. Buzzard could not feel that the author had made any strong case for considering this affection to be peripheral and due to fatigue. The fact that it occurred not unfrequently in persons who had done no extraordinary amount of writing; that, whilst at first slight, the spasm tended to spread from muscle to muscle, until sometimes those of the upper arm, shoulder, and even of the trunk, were affected; that, in cases where the use of the left hand had been substituted, this member more often than not became similarly involved; that muscles concerned in other acts of co-ordination, such, *e.g.*, as those keeping the body erect, were liable to far greater and more persistent causes of fatigue, and yet never took on a condition analogous to writers' cramp: these circumstances militated strongly against the writer's view. On the other hand, it must be remembered that the symptoms described were all such as we did find at one time or another occurring in some form of central lesion. He believed that writers' cramp was due to a congestion of a centre of co-ordination (or at least of some part where the working of muscles for this object is associated), leading to impaired nutrition of ganglionic nerve-cells, and consequent paresis of muscles thence supplied. Gushes of nervous energy under these circumstances, whilst failing to produce adequate contraction of the impaired muscles, would spread to others and excite them unduly. He believed that education during many generations did gradually build up a centre of co-ordination for writing, but he pointed out that this would necessarily be extremely unstable as compared with some others. The co-ordination of the eyeballs was doubtless coeval with man himself; co-ordination for writing was relatively a thing of yesterday.

Dr. Broadbent regretted that any part of such a valuable paper should be passed over. He thought it showed clearly that writers' cramp was a peripheral disease. These peripheral diseases were, he thought, too much neglected, though Charcot had been in certain cases working in this direction. He hoped that Dr. Poore drew a marked line between certain of his divisions, especially of the central and peripheral kind. He thoroughly rejected the notion of a writing centre; we were all too ready to postulate special centres. Co-ordination was really due to a coaptation and co-ordination of cells and fibres.

Dr. John Harley suggested that it was wrong to take the motor nerve with the muscle. The strain must thus be traced back to the nerve-cells.

Dr. Poore, in reply, said he was afraid that the paper was in some respects too concise. It was strictly limited to facts, and contained little speculation. Every part of it was capable of demonstration. The cases were almost entirely peripheral. He compared the malady to neuralgia, which was mainly a peripheral malady, but might be central. He could not believe in a writing centre. All centres must have a locality: where, then, was that of the centre suggested?

LIVERPOOL MEDICAL INSTITUTION.

Thursday, January 31.

Dr. Waters, President, in the Chair.

Heart with Congenital Band across Origin of Aorta.

Dr. Samuel Archer showed the above specimen. The history of the previous symptoms, if any, was unknown, the peculiarity having come under notice during a post-mortem examination made by order of the coroner. The band, which was of the consistence and appearance of valve-structure, stretched across the vessel, the attachments being at a level with the base of the segments of the aortic valve.

Commencing Sacculation of Bladder.

Dr. Macfie Campbell exhibited this specimen, from the body of a negro sailor, who had suffered for fifteen years from difficulty in urination. He was admitted into hospital for hæmaturia, the result of some injury caused during self-catheterism. The patient died in a few days from cystitis and exhaustion. A post-mortem examination showed great hypertrophy of the vesical walls, the mucous membrane in several places being pouched. One pouch could hold almost a drachm of fluid. The bladder showed signs of recent cystitis. The prostate gland was enlarged and hard, and there was a false passage just anterior to it. Dr. Campbell thought that the specimen illustrated the truth of the theory which explains sacculation of the bladder as being due to the prolapse of mucous membrane between the fasciculi of the muscular coat, the prominence of these fibres being due to a long-continued struggle between the bladder and an enlarged prostate or some other obstruction.

Insular Cerebro-Spinal Sclerosis.

Dr. Pollard brought before the meeting a boy, aged seven years and a half, suffering from insular cerebro-spinal sclerosis. The nervous symptoms had commenced at two years of age, after scarlet fever, and had slowly increased. The rhythmical jerking of head and limbs during voluntary movements was well marked. The muscles of the limbs were hard, apparently from commencing rigidity. The intellect was defective, and the child spoke very little, but the two or three words he occasionally said were spoken in a jerky manner. There was no nystagmus.

Hydatid Mole Pregnancy.

Dr. Armstrong related particulars of a case of hydatid mole pregnancy occurring in the case of a multipara aged thirty-five. The uterus, at the end of the second month, began to enlarge rapidly and irregularly, and at about the tenth week profuse hæmorrhage, with discharge of vesicles, set in. Chloroform was administered, the os uteri easily dilated, and the uterus emptied. The lower cervical zone of the uterus was much distended by the hydatidiform mass. Between this and the fundus uteri was a distinct diaphragm, with a perforation the size of a crown-piece in its centre. Above this opening was a soft fleshy mass, filling the fundus, and closely connected with the uterine wall; this was detached with difficulty. The patient made a good recovery.

Aneurism of Descending Aorta.

Dr. Pollard read notes of a case of aneurism of the descending aorta giving way into the left pleural cavity eleven days before death. The patient, who had not previously suffered from any marked chest-symptoms, was suddenly, while at business, attacked with pain in the left side, vomiting, and faintness. He soon rallied, however, and when seen by Dr. Pollard two or three hours after, presented the symptoms and physical signs of pleuritic effusion. His condition, however, did not appear urgent, and he remained much the same for a few days. On the sixth day after his seizure an aspirator-needle was passed into the left chest, but nothing escaped except a little blood. On the ninth day the aspirator-needle was again introduced in another place, but with the same result. Dyspnœa increased, œdema of the right lung set in, and the patient died on the eleventh day. At the post-mortem examination the left pleural cavity was found full of blood and blood-clots which had escaped from a large aneurism of the descending aorta.

Compound Fracture of Skull.

Mr. Banks read a paper on a case of compound fracture of

the skull in which there were no symptoms of compression, and in which the question of trephining had been very difficult to decide. The case was one of small punctured fracture, with very slight depression. There were no important symptoms until the third day, when severe pain in the forehead set in on the same side as the fracture. On the fifth day the man suddenly became hemiplegic and comatose. The trephine was then used, the depressed bone raised, the dura mater found quite sound; but death occurred a few hours later. A post-mortem examination showed arachnitis, with deposit of purulent lymph extending over the middle and anterior lobes on both sides, more especially the injured side. The dura mater at the site of fracture was quite healthy. It appeared, therefore, that in this instance an earlier operation would have availed nothing; but Mr. Banks introduced generally the subject of surgical interference in such cases.

In the discussion which ensued on the reading of this paper, the feeling of the majority was expressed in favour of more frequent operative treatment.

OBITUARY.

CLAUDE BERNARD.

In the same volume of the *Medical Times and Gazette* (vol. i. for 1860) which had the high honour of exclusively publishing the first course of lectures on Experimental Pathology delivered by Prof. Claude Bernard at the College of France, in the session 1859-60, there is a memoir on his scientific career. In this his position as the leader in physiological investigation and his powers as a teacher are dwelt on with enthusiasm; and if this was so then, seventeen years of subsequent earnest work, followed by most fruitful results, acknowledged on every side, will well explain the universal chorus of regret and admiration which his somewhat unexpected death at the age of sixty-five has elicited. For the twelve years preceding the course of lectures above alluded to he had been lecturing at that institution on experimental physiology, and was enabled to announce discovery after discovery; and this course was the first one which he devoted directly to the subject of experimental medicine. These thirty lectures (followed in 1861 by others on the spinal cord) long continued only accessible in their English form, but were afterwards published in French by their author. They doubtless greatly contributed to increase that reputation which Claude Bernard had acquired in this country by reason of the important practical consequences that were seen to issue from the physiological method when so scientifically pursued. But, in fact, there is no point on which he has insisted more strongly and more repeatedly than that physiology and pathology must be regarded as inseparable. Even in his latest work, "Leçons sur le Diabète," which only dates a year back, he thus reiterates his conviction:—"From the commencement of my teaching at the College of France I have always laboured to place in evidence the indissoluble ties that unite physiology and pathology. I have always sought to show that the various disturbances of the economy can only be properly comprehended on the condition of having acquired precise ideas as to the normal mechanism of the physiological functions which correspond to them. The study of glycogenesis and diabetes, which forms the subject of the present volume, is a new and striking example of the principle which I am now re-stating."

He especially prized the Chair of Medicine which he held in the College of France, in consequence of the unfettered comprehensiveness of interpretation which has always been accorded to its occupants. It was instituted as long ago as 1530, by that enlightened lover of letters and science Francis I., as a kind of protest against what Erasmus termed the "philosophic barbarism" into which the University of Paris had sank; and the Chair of Medicine was afterwards expanded into four chairs, three of which were still later devoted to teaching anatomy, chemistry, and natural history. During these procedures, numerous physicians, surgeons, botanists, and anatomists have held these chairs—the Chair of Medicine, properly so called, having been held of late years by Raulin, Corvisart, Halle, Laennec, Recamier, and Magendie. During all this period the occupants of these chairs have been at full liberty to teach the various branches of medicine as they deemed best, and as most conformable to the epoch at which they lived. In choosing experimental physiology for the subject of his lectures in a chair of medicine, Bernard did so because it is the portion of medical science which at the present time is making the greatest progress, and which, in its onward course, leads with it all the other parts of medicine—it is the scientific movement of the present time. Physiology, as understood by Bernard, is the very basis of entire medicine, comprising alike the phenomena of the economy in its normal state, and those which it presents under various modifying circumstances. This is too wide an expression of its objects as understood in a faculty of medicine; and it is a matter of congratulation that Bernard failed in his attempt to obtain the chair in the Paris Faculty. At a later period, when he had become famous, he declined the invitation to join the Faculty; and we agree with Dr. Brochin (*Gaz. des Hop.*) that, however much this may be regretted as far as the Faculty is concerned, that his aptitudes and genius for teaching were much better suited to the College of France and the Museum than to the chair of a faculty where the professor has to teach science already made. He was destined for science yet to come.

Born in 1813, at St. Julien, near Villefranche (Rhône), after spending some time in a pharmacy, Claude Bernard, like so many other celebrated Frenchmen, came to Paris in 1834, with but scanty provision for his livelihood. Having literary tastes, he brought a play to St. Marc Girardin, to whom he had an introduction. Fortunately for science and mankind, good advice was both given and taken, and he was induced to adopt medicine as his career. He obtained his *internat* in 1839, having meanwhile, in order to gain the means of living, done work for the booksellers—preparing, among other manuals, one in co-operation with Huette on Operative Surgery. Having also presented some memoirs to the Academy of Sciences, he attracted the attention of Rayer, who, possessed of great influence at that time, obtained for him, in 1841, the office of *préparateur* of the lectures of Magendie at the College of France. From this time until his death his career presented few or no vicissitudes, consisting as it did of an even tenor of constant and conscientious investigation, enriching mankind by his repeated discoveries, becoming a guiding genius in tracing the way for others, and imparting to science new directions and procedures. Always benevolent and encouraging to the young and fellow-workers, many of those who were his pupils have now themselves become famous teachers and propagators of his views. Made the *suppléant* or substitute of Magendie in 1847, he in 1855, on the death of his master, became his successor. Describing his success as a teacher, the author of the memoir in our pages to which we have referred observes:—

"It is not the orator they flock to hear, for, as a speaker, we daily hear better. So rapidly do his ideas seem to succeed each other, that he is often at a loss to find words to clothe them. His voice, though not harmonious, is far from being unpleasant. In stature he is above the middle size, well-knit, broad-chested, of a nervo-bilious temperament—the latter element predominating. A highly intellectual expression of countenance, with a large and powerful head, give unmistakable evidence of the energy and indomitable perseverance of the man. Though not a rhetorician in the strict sense of the word, he possesses the rare and happy talent of captivating and enchaining his audiences, and inspiring them with the conviction that he is fully and completely master of the subject which he expounds."

All who are acquainted with his works must be well aware that the charm and lucidity, so characteristic of the best French scientific writing, eminently attach to them. No obscurity of phrase, no doubtfulness of meaning or want of precision can be detected, while the earnestness of purpose, logical sequence, fertility of resource, and completeness of illustration, show that a great intellect has been expending itself in producing so admirable a result. In the power of presenting the highest scientific truths in a popular form no one has more nearly approached Faraday, as will be readily admitted by those who are acquainted with any of the numerous articles which he contributed to the pages of the *Révue des Deux Mondes*. When the character of Bernard's writings is considered, and the amount of investigation they entailed, their number is almost astounding, especially when it is found that out of so much that has been done so

little has had to be cancelled, or even modified; and that while substantive treatises have been issued that might have served to found the reputations of half a dozen *savants*, memoirs and essays almost by the hundred have formed welcome gifts to the academies and learned societies. And during the whole of this period he has worked with appliances which, according to modern ideas, would seem to be ludicrously inadequate to the production of the great results that have been attained.

It is gratifying to have to record that Claude Bernard's merits as an investigator and discoverer have been acknowledged from every part of the civilised world—so that for many years he has been ungrudgingly regarded as the leading physiologist of modern times. In fact, for one who has occupied his conspicuous position for more than thirty years, his controversies have indeed been few, while the acknowledgments of his services have been great. Honours of every description have attended him in his own country, in the shape of membership of all the Academies, awards of their prizes, life-presidency of his favourite Biological Society, a seat in the Senate; and now the importance of his position has been acknowledged by the public at large by the decree of the rare honour of a public funeral, carried by the universal assent of men of all parties. A decision like this is as honourable to the country which thus so spontaneously accords it, as to the memory of him in whose favour it has been arrived at. Foreign countries have never been backward in acknowledging Bernard's great services, and we imagine that there are few scientific societies that have not long since enrolled him among their most honoured members. Amidst this almost universal homage the *savant* pursued his modest way, entirely devoted to science, and deriving but a very moderate emolument from his appointments. Indeed, it has transpired since his death that he was almost a poor man, in consequence of his devoting a portion of his income to defray a family debt which he had not himself incurred.

Although Claude Bernard cannot, any more than Magendie, be regarded (as he has been called) the originator of the experimental method in physiology, seeing that so many investigators from the time of Galen have had recourse to it, yet he has so methodised its employment as to give it a new character and its highest justification. The numerous and important results obtained have shown that an assured pathology must be founded on properly conducted methodical experiments, which, as has been well observed (*Révue Scientifique*, February 15), "has displaced the system of making experiments merely for what may be seen, and executed almost by chance, for methodical experiment conducted under the inspiration of precise intellectual views, and directed by hypotheses scientifically combined."

[In a paragraph in our last week's number, announcing Professor Claude Bernard's death, the *third* ventricle was inadvertently printed for the *fourth*.]

Electricity in Nervous Vomiting.—Prof. Semmola states that since 1858, when he published his first case, he has had numerous opportunities of observing the complete and prompt efficacy of electricity by the continuous current in nervous vomiting. Not only is it a certain and speedy remedy in this form of vomiting, but it is also of great utility in assisting the diagnosis of vomiting from organic causes, for in all cases in which this is not primarily and exclusively nervous, the application of electricity in order to secure the toleration of food is useless."—*Gaz. Med. Lombardia*, February 9.

Ischæmia in Affections of the Breast.—Prof. Bouchut has laid a proposition before the Académie des Sciences with the following object:—"By preventing the arrival of blood in cancer of the breast we may suspend nutrition and prevent its development, so as to produce a cure. This is what is called *ischæmia*, which may be secured by permanent compression effected by means of vulcanised caoutchouc. Permanent ischæmia of the breast induces the gradual atrophy of this gland; and applied for the treatment of cancer or adenoma of the breast it may suspend the capillary circulation of these morbid productions, so as to lead to their atrophy. The best means of producing this ischæmia is the permanent application of a compressing cuirass of vulcanised caoutchouc, lined with several thicknesses of wadding."—*Gaz. Hebd.*, February 15.

MEDICAL NEWS.

Royal Colleges of Physicians and Surgeons, Edinburgh—Double Qualification.—The following gentlemen passed their First Professional Examination during the recent sittings of the examiners:—

Brass, John George, Barnard Castle.
Dalzell, Isaac Wm., Cumberland.
Emson, Alfred, Dorchester.
Fraser, John Joynor, Ross-shire.
Grayling, John F., Sittingbourne.
Harris, James Crofts, Cork.
Knight, Thomas B., Lincolnshire.
Melville, David, Dundee.
O'Connor, George A., Galway.
Paxton, John, Norham.
Roberts, Thomas H., Saddleworth.
Robertson, James Hugh, Alnwick.
Ross, James, Elgin.
Scott, John.
Shannon, R. A., County Kildare.
Turner, J. H., Kingston-on-Thames.
Wallace, Thomas, Limerick.
Williams, Henry Powell, Liverpool.

The following gentlemen passed their Final Examination, and were admitted L.R.C.P. and L.R.C.S. Edin.:—

Butters, Isaiah George, Devonport.
Cæsar, Julius, Cork.
Canning, Philip W. G., Jersey.
Cassidy, T., Cape of Good Hope.
Craig, George B., Northumberland.
Carruthers, H. St. C., Southampton.
Drinkwater, Thomas W., Norwich.
Kennedy, S. A. Stoddart, Ayrshire.
Lewis, W. A. Aylmer, Chester.
Livsey, Edwin, Derbyshire.
Macpherson, J. B., Londonderry.
M'Comb, William Taylor, Dublin.
M'Cormick, Thomas, Castlederg.
M'Lachlan, John C., Yorkshire.
M'Loughlin, T. J., County Meath.
Paterson, W. S., Passage West, Cork.
Pritchard, L. L., Northamptonshire.
Rankine, Walter L., Lanarkshire.
Ray, Henry, Australia.
Smyth, W. A., Trichinopoly, India.
Stenhouse, Daniel, Auchterarder.
Tanner, Lombard J. N., Cork.
Williams, Hugh, Anglesey.
Whiteley, Richard H., Wakefield.

King and Queen's College of Physicians in Ireland.—At the usual monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, February 12, 13, and 14, the following candidates were successful:—

For the licence to practise Medicine:—

Allen, Edmund Henry.
Collins, Patrick John.
Curran, Thomas John.
Emerson, John Joseph.
Flannery, James Gordon.
Hamilton, John Robert.
Hassard, Richard John.
Leary, Edward George.
Mackay, William Brittain.
Wride, Francis George.

For the licence to practise Midwifery:—

Allen, Edmund Henry.
Collins, Patrick John.
Curran, Thomas John.
Emerson, John Joseph.
Hamilton, John Robert.
Leary, Edward George.
Love, Robert Lindsay.
Mackay, William Brittain.
White, Edward William Wood.

Royal College of Surgeons, Edinburgh.—The following gentlemen passed their First Professional Examination during the January examinations:—

Barrett, Lindsey, Donegal.
Bestill, C. A., County Wicklow.
Fenton, Frederick Enos, London.
Jack, R. Nelson, County Tyrone.
Mulligan, James, Dromore.
Watt, William, Kirriemuir.

On the 1st inst. the following gentlemen passed their Final Examination, and were admitted Licentiates of the College:—

Rankine, John, Stirling.
Booth, Thomas, Dublin.
Moore, Edward Head, Devonport.
Caird, John Hay, Fort George.
Evans, Robert Davis, North Wales.
Reddy, Herbert Lionel, Montreal.
Mackintosh, H., Westport, Ireland.

Apothecaries' Hall, London.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 14:—

Evans, Robert Davies, Criccieth, North Wales.
Reddy, Herbert Lionel, Montreal.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Bishop, James Thomas, Guy's Hospital.
Jago, Edwin Osborne, Guy's Hospital.
Morgan, William Pierce, Guy's Hospital.
Nourse, William John C., St. Mary's Hospital.

NAVAL, MILITARY, &c., APPOINTMENTS.

War Office.—Medical Department.—Deputy Surgeon-General Alfred Crocker retires upon half-pay, with the honorary rank of Surgeon-General—Surgeon-Major James Jerome Hanrahan, M.D., and Surgeon-Major Kennedy Macaw, M.D., retire upon temporary half-pay—Surgeon Jarlath Joseph Mullen, M.D., resigns his commission—Surgeon Denis Joseph Canny retires on temporary half-pay—Surgeon Charles Henry Swayne from half-pay to be Surgeon—Honorary Surgeon V. E. R. Ardagh, Hyderabad Contingent, to have the honorary and local rank of Surgeon-Major on retirement—Deputy Surgeon-General George Paul Minchin Woodward, M.D., half-pay Medical Department, is permitted to commute his retired allowance.

India Office.—Bengal Medical Establishment.—To be Surgeons-Major—Surgeons George King, William Conter, Henry Black Purves, George Thomson, Robert Jameson, Robert George Mathew, William Duncan, George Massy, George Cumberland Ross, and Richard Power.

BIRTHS.

ANDERSON.—On February 17, at Newington Cottage, Edinburgh, the wife of Thomas Anderson, M.B., of Shaws, Selkirkshire, of a daughter.

CORBAN.—On February 18, at Sunnyside House, Gibraltar, the wife of Lawrence Corban, M.D., of a son.

DUKES.—On February 18, at Horton-crescent, Rugby, the wife of Clement Dukes, M.D., B.S. Lond., of a daughter.

LACY.—On February 13, at 5, Ovington-square, S.W., the wife of Charles de Lacy Lacy, M.B., of a daughter.

SCOTT.—On February 13, at Aldington, Bournemouth, the wife of T. Bodley Scott, M.R.C.S., of a son.

SMITH.—On February 14, at Christ's Hospital, London, the wife of Alder H. Smith, M.B., of a son.

THOMSON.—On February 6, at Algiers, the wife of W. Thomson, M.D., of a son.

MARRIAGES.

BLAKE—EAGLES.—On February 14, at the parish church, Aston, George Farncombe Blake, eldest son of Valentine Walshman Blake, F.R.C.S. Eng., of Moseley, near Birmingham, to Mary Elizabeth, second daughter of the Rev. James Eagles, M.A., Vicar of St. Bartholomew's, Birmingham.

POWER—JACKSON.—On February 18, at St. Saviour's, Nottingham, G. E. Power, M.R.C.S. Eng., Hucknall Torkard, Notts, to Mary, younger daughter of the late James Jackson, of Ashover, Derbyshire.

SHARPE—CLAPHAM.—On February 16, at Allhallow's, Tottenham, Ernest Rolls, younger son of Richard Sharpe, M.D., of Wormley, to Louisa Marian, widow of Douglas Clapham, of Leabrook, Broxbourne.

THURSFIELD—BROWNE.—On February 14, at St. Nicholas Church, Dundalk, William Thursfield, M.D., of Bridgnorth, Shropshire, to Leila, third daughter of John Browne, M.D., of Dundalk.

WILKINSON—BATTISCOMBE.—On February 14, at St. James's, Kidbrooke, John Cooper Wilkinson, M.R.C.S. Eng., of Ashford, Kent, to Frances Richenda, fourth daughter of the late Rev. Henry Battiscombe, M.A., of Blackheath, Kent.

WILLIAMS—TURNER.—On February 14, at St. James's, Bermondsey, Alfred D. Williams, M.B., of Demerara, to Annette Newman, third daughter of William Hall Turner, M.R.C.S.

DEATHS.

INGHAM, CHARLES THOMAS, M.D., at his residence, Bath, on February 14.

PRICHARD, THOMAS SHUTT, M.D., at Abington Abbey, Northampton, on February 14, in the 59th year of his age.

REYNOLDS, HENRY, M.R.C.S.E., at 87, Denmark-hill, S.E., on February 14, aged 72.

TIBBITS, CHARLOTTE BANKES, wife of Edward T. Tibbits, M.D. Lond., at 11, Eldon-place, Bradford, Yorks, on February 10, in her 39th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BIRMINGHAM (PARISH OF).—Assistant to District Medical Officer as Dispenser. Candidates must be duly registered under the Pharmacy Act, 1868. Applications, stating whether married or single and age, together with not more than three testimonials of recent date, to be sent to Wm. Gordon Coulton, Clerk to the Guardians, on or before February 23.

GENERAL INFIRMARY, NORTHAMPTON.—Resident Medical Officer, as junior to the present House-Surgeon. Candidates must be Members of the Royal College of Surgeons of England, and Licentiates of the Royal College of Physicians or of the Society of Apothecaries of London. Applications, with testimonials and a statement of diplomas, to be sent to the Secretary on or before February 26. The original diplomas must be produced by candidates on the day of election.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, QUEEN-SQUARE, BLOOMSBURY.—Resident Medical Officer and Registrar. Applications, with copies of testimonials, to B. Basford Rawlings, Secretary, on or before February 28, from whom further particulars may be obtained on application by letter only.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Chorlton Union.—Mr. A. Wilson has resigned the Second District; area 183; population 34,658; salary £100 per annum.

Dewsbury Union.—Mr. Walter J. Sykes has resigned the Liversedge District; area 1534; population 8901; salary £18 per annum.

Houghton-le-Spring Union.—Mr. George Tweddell has resigned the Houghton-le-Spring District; area 4570; population 6632; salary £30 per annum. Also the Newbottle District; area 5380; population 6536; salary £30 per annum. Also the Workhouse; salary £20 per annum.

Portsea Island Union.—The Kingston District is vacant; salary £80 per annum.

Teesdale Union.—Mr. J. Makens has resigned the Middleton-in-Teesdale District; area 58,999; population 4455; salary £25 per annum.

Wincanton Union.—Mr. Samuel N. Parsons has resigned the Milborne Port District; area 10,793; population 3624; salary £86 per annum.

Woolwich Union.—Mr. Thos. Baker has resigned the office of Assistant Medical Officer and Dispenser at the Infirmary; salary £75 per annum.

APPOINTMENTS.

Dore Union.—Leslie L. Thain, M.R.C.S., L.S.A., to the Longtown District.

Newtown and Llanidloes Union.—Wm. Donaldson, L.K.&Q.C.P. Ire., L.R.C.S. Ire., to the Llanidloes District.

Tynemouth Union.—Charles S. Kilner, B.M. and M.C. Edin., to the Second and Seventh Districts.

Worksop Union.—John A. Robertson, M.D. and M.C. Glasg. Univ., to the Harthill District. Fredk. J. Elsom, L.R.C.P. Edin., M.R.C.S. Eng., to the Whitwell District

MIDWIVES IN BELGIUM.—The Brussels Academy of Medicine is at present employed in discussing a proposition that midwives may be allowed in future to employ the forceps in simple cases—their future education and examinations being expanded in order to enable them to undertake these new duties. During the progress of the discussion the advocates of the measure observed that as midwives are at the present time allowed to perform version, there surely could be no reason why they should not be trusted with the application of the forceps.—*Presse Méd. Belge*, February 10.

PREVENTION OF PITTING IN SMALL-POX.—M. Bernard, speaking of his experience during a bad epidemic of small-pox in 1870, says that he had frequent occasion to employ a procedure which proved certain in preventing the hideous disfigurement which so frequently results in this disease. Each separate pustule, when it attains a little development, is to be punctured by means of a pin or needle, and then frequently washed with tepid water. This procedure is to be often repeated, so that the little wounds may be prevented closing and impeding the exit of the variolous matter. These punctures require such an amount of patience that relatives alone can be expected to devote the necessary attention, but the most satisfactory results are produced.—*Progrès Méd.*, February 16.

EXCESS OF DOCTORS IN THE UNITED STATES.—In an editorial article of the *Philadelphia Med. Times* (January 5) some statistics recently published by Prof. Pepper are quoted, according to which, while in the United States there is one doctor to every 600 inhabitants, there is in France one to 1814, in Italy one to 3500, in Austria-Hungary one to 2500, in Great Britain one to 1672, and in Canada one to 1193. While in the three principal countries of continental Europe, with a population of 113,000,000, the yearly number of graduates is 1850, in the United States (with less than 45,000,000) the annual medical outpouring reached 3000 last year. The writer observes that this superfluous number of doctors is the real cause of the depressed condition of the profession at the present time; and that thinning out the doctors, instead of thinning out the dispensaries, for which there is a great outcry, is the only remedy that can bring decided relief. Although these dispensaries stand in great need of reform, the impoverishment of physicians by their abuse is ludicrously small when compared with that caused by the overcrowding of the professional ranks.

PROF. GERMAIN SÉE ON BROMIDE OF POTASSIUM IN EPILEPSY.—Up to the present time this must be considered as the best remedy for epilepsy, the daily dose being five grammes (seventy-five grains) for an adult, three grammes between ten and fifteen, and half a gramme for children. First ascertain whether the attack is diurnal or nocturnal. Suppose that it occurs at 11 p.m., the patient should then take one gramme at 11 a.m., two grammes at dinner-time, and two grammes at bed-time, it being indispensable that the last four grammes should be taken within the six hours which precede the expected attack. In younger subjects the dose of three grammes is progressively attained, and, as far as possible, it should be prescribed at mealtimes, in order that it may be more easily tolerated. In general it may be given in a simple aqueous solution, and in certain cases its efficacy may be increased by adding the phosphate of iron and potass, cod-liver oil, glycerine, or valerian, according to the indications. Gaseous or alcoholic drinks (even when weak), coffee, and tea should be interdicted, while everything likely to cause debility should be abstained from, such as hydro-therapy, cold or warm baths, purgatives, bleeding or leeches. Moderate exercise in the open air is an adjuvant; and marriage and pregnancy do not increase the frequency of the attacks. The bromide treatment is invariably useful —(1) if the attacks are separated by long intervals; (2) if they are simple and well marked; (3) in adults and adolescents. It requires to be continued almost for the whole of a life. When a year has passed without an attack, the bromide should still be taken every day without interruption, the daily dose being, however, then reduced to three grammes. In bad cases this dose should be raised to six or seven grammes, but then various toxical accidents may be produced which have been grouped under the name of "bromism," and which oblige us to interrupt the use of the remedy, and diminish its dose.—*Union Méd.*, February 16.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Brighton.—We are sorry not to be able to give the information required. Write to head-quarters.

Ignarus.—We think you had better apply to your medical attendant.

*** We have been favoured with a copy of the following letter :—

Mrs.—— : Madam, in reply to your favour of the 3rd inst., we beg to say that the action of "magnetism" on the body is by induction on the iron in the blood, and magnetism will penetrate through indiarubber and other non-conductors of galvanism just as light penetrates through glass.

We are, &c., DARLOW AND CO., per H. FAIRFAX.

[It is difficult which to admire the more in this production—the sublime audacity which prompts it, or the trustfulness in human ignorance which the unhesitating style of the document betrays.—ED. *Med. Times and Gaz.*]

APPEAL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—I am much obliged by your insertion so promptly of the appeal. Will you kindly announce the receipt of £3 3s. on behalf of Mrs. White and her children, from C. E. A., London? I am, &c.,

37, Shakespeare-street, Manchester, Feb. 14. J. N. DEAN.

Dr. Matthews.—The matter is progressing, and on Monday next there will be another meeting of the Committee of Reference, appointed under the Conjoint Scheme, to further consider the reports to the several medical authorities on the regulations for carrying out the same. The subject of fees to be distributed amongst the examiners has already been discussed. The fees paid to the General Medical Council will be found in the balance-sheet prefixed to the "Medical Register."

Dr. R., and A Member of the R.M.A.—The list of successful candidates at the recent Arts Examination of the Hall duly appeared in *this* journal, where Dr. R. will see the name of his son, who will only have to take up the additional subjects required for the Fellowship of the College of Surgeons, the examination for which will take place on the 21st prox. at Burlington House; but no applications will be received after Friday, March 1.

R. Archer.—One of the busts to which you refer as having been recently placed in the College of Surgeons is that of the late Edmund Belfour, for half a century the Secretary of the College. It is considered an admirable likeness of this well-known official, and as a work of art reflects the greatest credit on the sculptor, Mr. George Adams. The other bust is that of Stromeyer.

Mr. Smith.—The Jacksonian Prize on Erysipelas was awarded to Mr. P. H. Bird, a Fellow of the College, in 1849. The celebrated Akenside's observations on "Putrid Erysipelas" were read before the College of Physicians, and intended for publication in the *Transactions*. The MSS. was sent to him for correction just before his decease, and never returned to the College.

E. T.—The father of the person mentioned was an opulent tallow-chandler, enormously fat. The following lines were inscribed on his tomb:—

"Here lies in earth an honest fellow,
Who died by fat, and lived by tallow."

The father of Guthrie was a maker of bougies, catheters, and the "emplastrum lythargyri." His only son died many years ago.

A Young Poor-Law Guardian.—The foundation of the English Poor-law, when established by the Elizabethan statute, lay in the idea that there is always an indefinite quantity of work for man to do, and it was accordingly enacted that employment for all labourers out of employ should be found by their respective parishes. The new Poor-law is really grounded on the notion that every individual born is entitled, as of natural right, to a bare subsistence from the State.

Sex-Bias.—The American lady's remark was—"Men are very fond of twitting us women with desiring to leave our own 'sphere' in order to lord it over theirs in a high-handed manner. I believe that nothing would induce the majority among us to enter their dusty, noisy, blood-stained precincts; but we should be exceedingly obliged if they would just step out of ours."

A Retired Surgeon-Major.—The military authorities of our Indian Empire still, we believe, serve out a daily ration of rum (four ounces) to the European troops under their control. Reports against the practice have from time to time been made by many members of the Indian medical staff, but apparently without effect.

Economist.—The Registrar-General shows that the resident population of the United Kingdom in England and Wales, in the middle of last year, was estimated at 24,547,309; of Scotland, 3,560,715; and of Ireland, 5,366,395; total, 33,444,419. With regard to emigration, he states that in 1877 our population only supplied 91,060 emigrants—11 per cent. lower than in 1876, which, in its turn, showed a decline of 22 per cent. on the number in 1875. Deducting deaths and emigrants from the births and immigrants (of the latter there is no record), we appear to have increased the population by about 485,600, an increase upon the excess of 1876 by 7903.

A Surgeon and a University Man.—So far is the University from being older than the city, that Oxford had already seen five centuries of borough life before a student appeared within its streets. At the earliest time when its academic history can be said to open, at the arrival of the legist Vacarius, in the reign of Stephen, Oxford stood in the first rank of English towns.

Gilbert H.—Intoxication has never been a Gallic vice; it appeared temporarily in Paris during the siege and the Commune, but since the peace all public symptoms of it have vanished. Sobriety is, no doubt, a real quality with French servants, not only in drinking, but in eating also.

Inquirer.—The trustees of the Peabody Buildings have, up to the present time, provided accommodation for 2341 families, or upwards of 10,000 persons. The average rent of each dwelling is 4s. 2d. per week, which includes the free use of sculleries, laundries, and bath rooms.

Paterfamilias.—According to Major F. McNair's work on "Perak and the Malays," the climate seems almost monotonously beautiful to a European, and is wonderfully tempered by the mountain and sea breezes, considering the close vicinity to the equator. The year is divided between a couple of monsoons, but although heavy rainfalls and thunderstorms only come with the south-west wind, the atmosphere is perpetually freshened by showers. Unfortunately, before rain the air grows oppressive from being overloaded with moisture; and that and the sharp chills during the night are the chief causes of disease among Europeans.

OPHTHALMIA.—BIRKENHEAD SCHOOLS.

Ophthalmia is reported as prevalent in the Birkenhead Schools. It appears the doctor had repeatedly recommended the isolation of the infected children, but notwithstanding this no preventive steps had been taken, although there was abundant room available for the purpose. It was explained in extenuation, at the last meeting of the guardians, that although the spare accommodation was adequate, existing arrangements did not at present permit of isolation being carried out.

AMERICAN AND DUTCH ARTIFICIAL BUTTER.

A New York chemist gave an account, at the Annual Convention of the American Dairymen's Association, held at Cleveland, Ohio, on the 8th ult., of the process of the manufacture by the United States Dairy Company of the so-called "dairy product" oleomargarine, or "salt butter." He described it as a pure and healthful product, manufactured from the fat of animals, to take the place of the miserable rancid butter which now floods the market, and at such a price as to be within reach of the poor as well as the rich. It was stated that the Company had up to last March treated over 8,000,000 lbs. of fat for use in the manufacture of artificial butter, and that very large contracts for it are now offered to them. The exports to the United Kingdom of two Dutch butter-making firms represent a value of £25,000 weekly, natural and artificial butter both included. This artificial butter is made of margarine, new milk, and white American syrup, and other minor ingredients.

DECREASED CONSUMPTION OF BRITISH SPIRITS.

The report of the Commissioners of Inland Revenue for the year ended March 31, 1877, shows for the first time since the year 1808 a decrease in the consumption of British spirits in the United Kingdom of a little more than half a million gallons, or 1·65 per cent. The decrease is confined to England and Ireland, and is almost equally divided between those parts of the United Kingdom as regards quantity, but the percentage of decrease is more than twice as great in Ireland as in England. In 1868, when the last decrease took place, the consumption was 21,019,670 gallons, or 0·697 of a gallon per head of population. In the year ended March 31, 1877, the consumption had reached 29,801,991 gallons, or 0·900 of a gallon per head of the population. There is also a decrease in the quantity of foreign spirits unenumerated, and not sweetened (which come into competition with British spirits), entered for home consumption as compared with the previous year equal to 359,441 gallons, or 19 per cent.; but the increased consumption of this class of spirit in 1876, as compared with 1875, was very large—not less than 72 per cent.

LONGEVITY OF QUAKERS.

According to an official statement, the number of deaths among the Quakers in Great Britain and Ireland during the last year was 308—125 males and 183 females. There are 14,500 Quakers in Great Britain, and 3000 in Ireland. The mortality, consequently, bears a very favourable contrast to that of the population generally. There were only nineteen deaths of children under one year, and but forty-nine under twenty years of age. It may here be remarked that the regulations of the Society respecting the registering of children provide that none shall be considered as "members" unless both parents are in membership at the time of birth. This is frequently not the case, and a large number of children of Quakers are thus not included in the statistical tables. To this fact may partly be attributed the general idea of the small number of births in the community. Many of these children are received into membership as they grow up, but others of course die, and the number of deaths of children thus seems below what it really is. Out of the total 308 deaths the largest number in any one decade of life was in that which included those aged between seventy and eighty, and the next (fifty-five) those who died between eighty and ninety years of age. Eight died aged between ninety and one hundred. The average life of Quakers in the last year was therefore over fifty-eight years.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Chicago Medical Journal and Examiner—New York Medical Journal—Chemist and Druggist—Home Chronicler—Archives of Dermatology—Canada Lancet—Students' Journal and Hospital Gazette—New Preparations—Night and Day—St. Louis Medical and Surgical Journal—Morningside Mirror—Medical Inquirer.

BOOKS AND PAMPHLETS RECEIVED—

Dr. Delefosse, Pratique de la Chirurgie des Voies Urinaires—Fourteenth Annual Report of the Board of State Charities of Massachusetts—Sir J. Fayrer, K.C.S.I., M.D., F.R.S., Destruction of Life by Wild Animals and Venomous Snakes in India—John M. Woodworth, M.D., The Safety of Ships and of those who Travel in them; the General Subject of Quarantine, with particular reference to Cholera and Yellow Fever—Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the United States for the Fiscal Year 1875—Transactions of the Obstetrical Society of London, vol. xix.—List of the Fellows, Members, Extra-Licentiates, and Licentiates of the Royal College of Physicians, London—Charles Meymott Tidy, M.B., M.S., F.C.S., The London Water-Supply: a Report on the Quality and Quantity of the Water supplied to the Metropolis during the past Ten Years.

COMMUNICATIONS have been received from—

Mr. W. E. Poole, London; Mr. John Chatto, London; Mr. B. R. Wheatley, London; Dr. F. Churchill, London; Dr. J. Wickham Legg, London; Dr. John Williams, London; Mr. T. M. Stone, London; Dr. J. Mitchell Bruce, London; Dr. H. G. Sutton, London; Mr. H. C. Burdett, Greenwich; The Honorary Secretary of St. Mary's Hospital Medical Society; The Secretary of the Army Medical School; The Registrar of Apothecaries' Hall, London; Mr. T. N. Dean, Manchester; Mr. Reeves, London; Dr. T. S. Cobbold, London; The Secretary of the Obstetrical Society, London; Mr. W. Bird, York; Mr. Adams, London; The Honorary Secretary of the Manchester Medico-Ethical Association; Mr. W. Hay, Hull; Mr. T. F. Rumbold, America; The Honorary Secretary of the West Kent Medico-Chirurgical Society; Dr. Dowse, London; Dr. Sparks, Mentone; Dr. Haviland, London; Mr. T. Owen, Stourbridge; Dr. Carter, Liverpool; The Secretary of the Royal Institution, London; Dr. O. Sturges, London; Dr. H. J. Hardwicke, Sheffield.

APPOINTMENTS FOR THE WEEK.

February 23. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

Royal Institution, 3 p.m. Mr. R. Bosworth Smith, "Carthage and the Carthaginians."

25. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Dr. J. Milner Fothergill, "On a Case of Opium Poisoning treated by the Hypodermic Injection of Solution of Sulphate of Atropia." Dr. Day (of Stafford), "Observations and Comments on certain Convulsive Disorders."

Royal College of Surgeons of England, 4 p.m. Professor W. K. Parker, "On the Morphology of the Batrachia."

26. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Medical and Chirurgical Society, 8½ p.m. Dr. Broadbent, "On a Case of Amnesia." Mr. Brodhurst, "On a Case of Anchylosis of both Knee-Joints, with Shortening of the Femora." Dr. Dickinson's Microscopic Preparations, illustrating the Pathology of Diabetes, will be arranged for inspection on Friday, March 1, at 8 p.m.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

27. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Professor W. K. Parker, "On the Morphology of the Batrachia."

28. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

March 1. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal College of Surgeons of England, 4 p.m. Professor W. K. Parker, "On the Morphology of the Batrachia."

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Dr. Liebreich, "On the Deterioration of Oil Paintings."

VITAL STATISTICS OF LONDON.

Week ending Saturday, Feb. 16, 1878.

BIRTHS.

Births of Boys, 1253; Girls, 1194; Total, 2447.
Average of 10 corresponding years 1868-77, 2402·9.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	950	947	1927
Average of the ten years 1868-77	815·1	781·2	1596·3
Average corrected to increased population ...	...	...	1708
Deaths of people aged 80 and upwards ...	...	...	73

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	1	3	6	1	20	...	7	...	3
North ...	751729	29	6	16	1	24	...	8	1	2
Central ...	334369	...	4	...	...	5	...	1	1	...
East	639111	8	5	2	...	25	1	6	1	2
South	967692	9	25	8	3	48	1	2	1	7
Total	3254260	47	43	32	5	124	2	24	4	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·8·6 in.
Mean temperature	42·6°
Highest point of thermometer	53·7°
Lowest point of thermometer	32·4°
Mean dew-point temperature	34·9°
General direction of wind	S.W., S.E., & N.E.
Whole amount of rain in the week	0·80 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 16, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Feb. 16.	Deaths Registered during the week ending Feb. 16.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air Cent., Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2447	1927	53·7	32·4	42·6	5·9	0·80	2·03
Brighton	103923	44·1	68	35	49·6	34·7	42·2	5·67	1·09	2·77
Portsmouth ...	129461	28·4	78	40	...	...	...	...	...	...
Norwich	84620	11·3	62	63	51·0	32·0	40·8	4·89	0·53	1·35
Plymouth	73599	52·8	56	58	53·6	37·5	45·9	7·72	0·92	2·34
Bristol	206419	46·4	126	115	52·9	34·5	43·9	6·61	0·64	1·63
Wolverhampton ...	74240	21·4	55	54	48·9	29·6	37·6	3·12	0·60	1·52
Birmingham ...	383117	45·6	303	217	...	...	...	...	...	...
Leicester	121473	38·0	81	47	51·5	32·0	41·1	5·06	0·82	2·08
Nottingham ...	165267	16·6	106	74	51·3	30·6	39·2	4·00	0·66	1·68
Liverpool	532881	102·2	393	327	53·8	33·0	41·4	5·22	0·28	0·71
Manchester ...	360514	84·0	309	270	...	...	...	...	...	...
Salford	170251	32·9	117	108	51·5	28·0	38·8	3·78	0·69	1·75
Oldham	107366	23·0	75	57	...	...	...	...	...	...
Bradford	185088	25·6	111	8	49·7	30·1	37·1	2·84	0·99	2·51
Leeds	304948	14·1	198	121	50·0	29·0	37·7	3·17	0·85	2·16
Sheffield	289537	14·7	220	148	51·0	29·9	37·7	3·17	1·01	2·57
Hull	143139	39·4	104	55	50·0	31·0	38·9	3·83	0·86	2·18
Sunderland ...	112459	34·0	89	63	48·0	34·0	40·5	4·72	0·80	20·3
Newcastle-on-Tyne	144570	26·9	92	59	...	...	...	...	...	...
Edinburgh	222371	53·1	121	112	52·5	30·0	39·5	4·17	0·46	1·17
Glasgow	566940	94·0	294	281	52·2	32·0	40·9	4·94	0·67	1·70
Dublin	314666	31·3	163	215	56·5	33·3	43·6	6·45	0·97	2·46
Total of 23 Towns in United Kingdom	8373953	37·9	5756	4533	56·5	28·0	40·6	4·72	0·76	1·93

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·88 in. The lowest reading was 29·64 in. on Thursday afternoon, and the highest 30·15 in. on Saturday.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

CLINICAL LECTURE ON TWO CASES OF IMPACTED BILIARY CALCULI.

By C. HANDFIELD JONES, M.B. Cantab., F.R.S.,
Physician to St. Mary's Hospital.

GENTLEMEN,—Whatever opinion you may entertain respecting the desirability of an acquaintance with the differential or integral calculus, I am sure you will soon be convinced that some experience (I do not say personal) of biliary calculus is equally important. With this commendation of the subject to your attention, I will proceed to give you the histories of two cases recently under my care.

Case 1.—*Symptoms of Gall-Stones—Probable Escape of one—Recurrence of Symptoms—Relief from Chloroform and Turpentine.*

T. S., aged forty-three, cabdriver, short, broad made, admitted December 22, 1876.

Family history good. Had good health until four years ago, when he had an attack of liver disease. At Christmas, 1874, he fractured his clavicle and some of his right lower ribs. In the summer of 1875 he had pains in the right side and some fainting fits. During last summer he felt some pain, but had no fits. He used to smoke a good deal, but does not at all now. Used to drink hard, but has not lately. Has sharp cutting pain across the right side of back and in the region of the gall-bladder. The liver extends about three fingers' breadth below the ribs, and there is tenderness in this situation on pressure. Tongue pale and pointed. Bowels rather confined. Pulse 88. Simple diet, milk: hot bath; quarter of a grain of morphia subcutaneously. Potass. bicarb. gr. xx., tinct. hyosey. ℥xl., aq. ℥j., 4tis horis.

January 1, 1877.—Urine clear, almost colourless; specific gravity 1022; no albumen; stools very light-coloured. Has broth diet, and sodic carbonate in lieu of potassic.

8th.—Pain severe; prevented sleep last night. Edge of liver felt three fingers' breadth below ribs. The following night he got up, thinking he wanted to go to stool, but was unable to pass anything; on returning to bed he felt sick, and vomited a quantity of blackish fluid, which came up without any retching or straining. After the sickness he felt much better.

10th.—Vomited twice last night, between nine and ten, and between ten and eleven. Amount of vomited matter very large, amounting to two or three pints of black tenacious fluid, which the microscope showed to contain much oil, starch corpuscles, and orange-red pigment.

11th.—Pulse 80; temperature 98·6°. No pain, and very little tenderness over region of liver.

13th.—Had some good sleep from chloral until about 1 a.m., when he was woke up by pain, which passed from just below the lower angle of the scapula forward to right edge of xiphoid. He has had the same pain every night for a week; during the day he has very little of it. Pulse quiet. Rept. chloral o.n., morph. muriat. gr. ⅛ o.n. subcut.

17th.—Doing well; no return of pain.

19th.—Has felt rather sick for a day or two, and last night vomited a large quantity of the same black stuff as he did before; in it were found very numerous and fine sarcinæ. Appetite lost. Liver extends but a little way below ribs. Calomel gr. v. statim. Ice, ammon. muriatis gr. xx., m. camph. ℥j. ter die.

20th.—States to-day that he vomited black stuff a year ago, and passed blood from the bowels; was then in a fainting state. Complains of a rising upwards from epigastrium and eructation. Pain severe at night. Right rectus more tense than left. Tongue coated. Repeat calomel; brandy ℥ij.

22nd.—Black vomit again at 5 a.m., but in less quantity; feels better since; looked distressed and haggard yesterday. Is always better when bowels are open; they are usually costive.

27th.—No sickness, but cannot sleep at night for a burning sensation extending up from stomach to mouth. Has much dysphagia. Suffers more by night than by day.

29th.—More vomiting and restless nights. Pain in right back and loin. No pain on pressing deeply under right ribs. Scarce any yellow tinge of conjunctivæ. Hepatic dulness begins in fifth space, and ceases at the lower margin of thorax. Skin cool; pulse about 105. Total urine of twenty-four hours on 28th, 1100 cubic centimetres; total urea, 514 grains. Cat. lini. to right side of abdomen every night. Glycerole of tannin ℥xx., aq. ℥j., ter die.

February 23.—Great pain since 4 a.m. all over right back and lower sternal region; not in abdomen. Is moaning and looks distressed. No sickness. Pulse 105, of good force; temperature 99°; respirations 27. To remain in bed. Continuous poultice to seat of pain. Warm bath to-night. Ext. belladon. gr. ½ 4tis horis.

5th.—Urine palish, no sediment. Respirations 22; skin feels cool; pulse 93, weak. Found considerable relief from the warm baths. Throat feels dry. Temperature 98·6°. Has pain passing through from lower back to right side of lower sternum.

7th.—Throat he says is sore; he can hardly swallow; on inspection it appears quite natural and moist, but he says it feels dry. Pain in region of liver was sharp last night for three or four hours, but at other times he has had but little. Temperature 98·6°.

8th.—Pulse 96, weak; respirations 27; temperature 98·8°.

9th.—A very bad night; pain set in just after warm bath. Temperature 98·6°.

12th.—Continues to suffer a great deal; right hypochondrium is soft, and very little pain is felt on deep pressure under right ribs. Upper part of right rectus rather more tense than left. Chloral gr. xv., tinct. belladon. ℥xx., aq. ℥j., ter die; if in very severe pain to have also subcutan. morphia.

15th.—Temperature 99°. Suffers much; to be etherised at night.

16th.—Last evening, on going to stool, he passed (as he states) a rough, rather hard substance, about the size of a pigeon's egg, which sank at once to the bottom and was not preserved. The passage of this substance caused great pain, followed by a sense of relief. Feels better to-day, and appetite improving.

19th.—Feels a good deal better.

22nd.—Had severe pain from 2 to 6 a.m.

26th.—Pain recurs occasionally; but there is no return of the sickness, only a good deal of flatulence. Urine very pale.

March 1st.—Altogether is much improved, but has pain for about an hour and a half at night. Pulv. ipecac. gr. v. ter die bis in 7 manâ.

5th.—Acidi nitrici dilute ℥xx., tinct. cascarillæ ℥xx., aq. ℥j., ter die; omitt. pulv. ipecac. He was made out-patient about March 20; was seen on the 29th, when he stated that he had been very well the last two days, but had much pain on the night preceding them. He got worse with increase of pain, and was readmitted April 10. He was ordered chloroform ℥v., ol. terebinth. ℥v., c. mist. mucilag. ℥ss., ter die, and took this during several weeks with very great benefit. The pain ceased almost, if not entirely, and he left the hospital on May 11. Since then he has been seen by the ward sister in fair case. I heard subsequently that he had died suddenly.

Case 2.—*Jaundice—Epileptoid Attacks—Severe Pain in Region of Liver—Epistaxis—Vomiting—Prostration—Death—Rapid Putrescence—Fatty Liver—Calculus Impacted in Ductus Communis Choledochus.*

L. B., aged twenty-six, servant, admitted June 19, 1877. Never very strong, but had no illness till now. Has been out of health some time, but able to go on with her work. On the 18th applied as an out-patient; her tongue was then very coated, and her breath foul. Bowels not open for some time; she had no appetite, and a good many dyspeptic symptoms. Next day was worse and came into hospital; was then quite conscious, and able to speak. Temperature 99·6°; no sickness. Her skin was rather dusky and dry; conjunctivæ not stained; tongue very foul; breath most offensive; bowels confined; heart-sounds normal; complains of pain over liver; hepatic dulness not increased in extent—rather diminished; air enters lungs pretty freely; catamenia present, but flow scanty, always regular. Ordered pulv. jalap co, ℥ ss. statim; pil. hyd. chlorid. co. gr. v. o.n.; mist. pot. citrat. efferves., ℥j. 4tis horis. In afternoon was seized with a severe "fainting fit," in which she was quite unconscious. Her left arm was fully flexed at the elbow, her

hand clenched, her face drawn to the left, her head bowed to the right shoulder; temperature at that time 100·8°.

June 20.—Skin and conjunctivæ yellow; bowels well open; stools pale; urine very deep-coloured from bile, is not albuminous. Fits recurred again in the evening, lasting some time; faradisation of the skin restored her immediately. Soon after this she brought up a little blood (about an ounce), which also relieved her. Bowels open again twice. Taking podophyllin gr. ¼, pil. rhei. co. gr. iv., in pil., 4tis horis; acidi nitrici ℥iij., inf. cascarill. ℥j., ter die.

21st.—Slept fairly well. Jaundice very marked. Tongue moist and white. Temperature 99·2°. Acidi nitromuriat. ℥iv., spt. chlorof. ℥x., aq. ℥j., quater die; podophyllin gr. ¼, ipecac. gr. iij., in pil., 4tis horis. Sinapism to region of duodenum.

22nd.—She seems less jaundiced to-day. Bowels open three times yesterday; the first stool was pale, the second very offensive, the third highly bilious. Had three fits last evening; is quite conscious now.

25th.—Jaundice continues deep. No recurrence of fits. Limits of liver not easily ascertained, but it does not appear to be enlarged. Temperature keeps about 99° in mornings, 100° at night. Ext. taraxaci gr. x., ft. pil. ij. bis die, ad magnes. sulphat. ℥ss., pot. bicarb. ℥ss., aq. camph. ℥j., ter die.

26th.—Temperature last night 101·4°, this morning 98°. Tongue cleaner; looks brighter.

28th.—Right hypochondrium resonant up to edge of ribs, and painless on pressure, not at all prominent, soft. Hepatic dulness begins about fifth rib. A fit occurred on night of 26th. Is now quite rational; tongue getting clean.

30th.—Is suffering great pain in region of liver, over and below the lower ribs; the latter part is quite soft, and not tender. Pulse 105, distinct; temperature a.m. 99°.

July 2.—Subcutan. morphia gr. ¼ relieved the pain, and it did not return till about 2 p.m. yesterday. Pain not severe to-day. Chloral gr. x., pot. bromid. gr. xx., aq. ℥j., ter die. Bowels not open for five days.

4th.—Bowels opened by castor oil given by mouth and enema; stools bilious. No pain now.

5th.—One stool last night, thoroughly bilious. Ammon. benzoatis gr. x., aq. ℥j., ter die.

9th.—Had severe pain on evening of 7th, less on 8th, and a slight fit the same evening. Pulse 108, distinct. Urine deeply jaundiced. Pulv. ipecac. gr. xx., statim.

10th.—The emetic did not distress her. Is much more free from pain to-day. A castor oil enema produced a tolerably well coloured stool.

12th.—Sharp recurrence of pain to-day felt in shoulder and region of liver. Pulse 117. Chlorof. ℥v., ol. terebinth. ℥v., mist. mucilag. ℥ss., ter die.

16th.—Right hypochondrium remains quite soft and painless. Jaundice deep. Stools clay-coloured.

19th.—Much pain in right back, to which empl. belladon. is applied; omitted benzoat. ammon. Sodæ bicarb. gr. xv., tinct. calumb. ℥x., aq. ℥j., ter die.

26th.—Worse last two days. Jaundice much deeper. Has an eruption of abortive vesicles on upper lip, and on lower a much more extensive patch of sanguineous extravasation beneath the epidermis, quite ineffaceable by washing.

About the 28th she was put under the influence of ether, in the hope of relaxing the duct and calming the pain; but the relief only lasted as long as she was narcotised—there was no real amelioration.

30th.—Suffering terribly last four days; gets only temporary relief from chloral gr. xx., tinct. belladon. ℥x., ter vel quater die. On 28th and 29th there were pale stools, with bile separate from the fæcal matter. Vomiting occurs.

August 1.—Keeps nothing down; not even iced champagne. Pulse 66, weaker, but still distinct.

4th.—Copious epistaxis has occurred, requiring plugging of the posterior nares. Has had gr. jss. of morphia subcutaneously in last twenty-four hours. Is fed by rectum. Sickness has subsided.

Died August 5.

The table which was kept of morning and evening temperatures from June 30 to the end shows a normal figure in the morning, and an evening rise of from 1° to 3° Fahr. The highest morning temperature was 100·4° (August 4), the highest evening 103·1° (July 3).

Post-mortem, thirty-eight hours after Death.—Decomposition was far advanced. Veins mapped out by putrescence. No rigor mortis. Hypostasis moderate. The putrescence was extreme—quite out of proportion to the length of time since death. The body was well formed, with good features; hair very thin. Nutrition much impaired. Universal jaundice. Blood was oozing from nose. Right lung weighed fourteen ounces—it appeared normal, but was too putrid for accurate description; left lung weighed eleven ounces, in same condition as right. In the larynx there appeared to be ecchymosis on the left side of upper surface of epiglottis. In the bronchi there was a frothy, bile-stained fluid. Heart normal, weight nine ounces; its muscular tissue good, but thin; a good deal of semi-fibrinous clot. Liver weighed fifty-three ounces, was intensely stained with bile, like all the other organs; extremely putrid and full of gases. It appeared normal to the naked eye. The ducts were much dilated. Gall-bladder a good deal thickened by hypertrophy, contained about an ounce and a half of fluid mucus, slightly tinged with bile. The ducts were dilated, and in the common duct, about a quarter of an inch from its duodenal orifice, where it was actually passing through the wall of the gut, there was lodged a calculus of round shape, rather rough on its surface, about the size of a large pea or a small nut—apparently a solitary stone, which had not undergone attrition. There was no surrounding inflammation or signs of abscess. Spleen weighed seven ounces, was rather large and soft. Urinary organs all normal. Kidneys together weighed twelve ounces, peeled well, but were apparently normal, though highly putrid and bile-stained. All other organs normal. I examined this liver carefully, after portions had been immersed for a few days in dilute chromic acid. A cut surface presented numerous little pits or depressions, apparently lined by a smooth membrane, which, as well as the subjacent tissue, was more bile-stained than the intervening parts. The hepatic cells were generally in an advanced stage of fatty degeneration, filled with larger or smaller oil-drops, their nuclei lost, but their envelopes often preserved. Many cells were broken up and reduced to *débris*. At some spots there were yellow masses made up of biliary matter, either lying free amid granular *débris*, or infiltrating small granular cells. The fattily degenerated cells were, as a rule, exempt from any biliary colouring. It was abundantly clear that the bile-stained parts were distinct from the fatty, but it was difficult to determine whether the biliary deposit had taken place at the periphery or at the central parts of the lobules. I thought the former most evidently affected. Many pellucid vesicles were seen amid the yellow *débris*, of about the size of large fat-cells, containing a clear fluid, not oil; they were quite unlike the fatty cells.

(*To be continued.*)

DEATH OF M. VOILLEMIER.—"The medical body has sustained a loss, as unexpected as regrettable, in the person of M. Voillemier, Commander of the Legion of Honour, Member of the Académie de Médecine, Hospital Surgeon and Agrégé of the Faculté. He died on February 15, in consequence of an attack of apoplexy. Gifted with an acute intellect and great activity, Voillemier occupied himself with a great number of surgical questions. Those to which he principally attached his name relate to dislocation of the wrist, fracture of the lower end of the radius, capillary puncture in abscess, the treatment of urethro-perineal fistulæ, and diseases of the urinary organs. Upon this latter subject he published a first volume in 1860, and had partly completed the second when surprised by death."—*Gaz. Hebd.*, February 22.

DIALYSED IRON.—Prof. Bouchardat, having often had his opinion asked as to the nature and therapeutical value of this, communicates a paper to the *Bulletin de Thérap.* (January 30), in which he furnishes an analysis of the best account that has been published of the preparation of dialysed iron, as given by Prof. Depaire, of the Brussels University, in the *Journal de Méd. de Bruxelles* for 1877. As to its therapeutical value, he agrees with Prof. Depaire that, *à priori*, it is not to be expected to be considerable. He himself firmly believes that the salts of iron at the maximum are of very inferior efficacy to that of porphyrised metallic iron—or, better still, Quevenne's iron (which he employs daily), or the preparation of carbonate of iron combined with an organic acid. *Theoretically*, he must regard the dialysed iron as an inert ferruginous preparation, or as one of the least active, unless clinical observation clearly shows that he is wrong.

ORIGINAL COMMUNICATIONS.

ON THE ACTION OF MALARIA.

By JOHN SULLIVAN, M.D., M.R.C.P. Lond.

Cases of fever and ague are sometimes met with in localities where they might be least expected; but the cause may always be traced to those primary conditions upon which the existence of malaria depends in all localities, however varied they may appear.

Franz mentions that he was astonished to find intermittent fever on Mount St. Gothard. The fact was explained by one of the monks informing him that there existed an unwholesome marsh not many leagues away, situated at the junction of the rivers Po and Ticinum.

Meunier, in his very interesting work, "Mission Médicale de Guadarama," strikingly illustrates the influence of even a rocky soil in some climates on the production of marsh malaria. Between Madrid and the Escorial, a section was being cut through, about fifty kilometres in length. In that part which formed the first half of the section, not a single man employed was taken ill; whereas in the second section, beyond Torredolones, every man was seized with fever; although the conditions had been the same in the two sections—same temperature, same exposure to external influences. But there was one important fact—the constitution of the soil was different in the two sections: the first was sandy and porous, that in the second was based on rock, by which moisture in contact with vegetable *débris* was confined and retained.

These rocks are not all solid and homogeneous; some parts on the surface are soft and argillaceous, alternating with hard nuclei. The broken and uneven surface of these rocks is usually covered with a bed of earth of variable thickness, being in part the product of the more friable parts of the rocks themselves. During the rainy season the water is absorbed into the crevices and sinuosities of these rocks, and so creates an inexhaustible reservoir for the exhalation of malaria during the hot dry season, especially should the earth require to be removed or laid bare for the construction of railways or any works of public utility.

We sometimes meet with marine alluvia and *débris* upon hills or elevated places not far from the sea, which had been deposited by some violent upheaving of nature in remote ages. If there be no rains, as along the coast of Peru, you will probably have heavy dews, or winds charged with moisture from the sea, and thus malaria may be generated in localities the least expected.

Heat and moisture do not generate malaria; they serve only to modify the poison, to facilitate and develope its action, whether by imparting to it greater activity by increasing the dose of the poisonous principle, or by disposing the system to the more easy reception of its influence.

These alone cannot determine fever and ague. The action of a specific albuminoid principle, the product of the fermentation of decayed vegetable matter, appears to be essential towards its production.

Miasmatic exhalations are not so active in temperate as in hot climates, where vegetable matter undergoes more rapid decomposition, by which its action is more energetic and pernicious.

Intermittent fever is the product of infection, not of contagion; although it is capable of being associated with, or modifying, a contagious disease. The emanations from decomposed animal matter, as the refuse of all large cities, do not generate malarial fever. The port of Marseilles, into which all kinds of refuse and impurities of animal origin are emptied, is free from endemics of fever and ague. And again, the Ghetto (one of the most densely populated and filthy localities in the city of Rome) is seldom visited, or not more so than other more cleanly parts of the city, by epidemics of the pseudo-typhoid malarial fever of Rome. And this proves that the so-called dreaded "Roman fever" is not a typhoid. Dense populations influence the atmosphere they breathe, and tend to neutralise, if not to modify, the action of malaria; whereas, the contrary is observed in typhus and typhoid fever, which becomes intensified by a crowded population. Many causes which tend to debilitate the system—as excesses of all kinds, mental emotions, the sudden impression of cold—may dispose the body to fever and ague; but they are incapable of determining the fever, unless the body have been exposed to marsh miasma.

If means be employed for the drainage of these marshes, and cultivation of these malarial soils, fevers will cease, or be greatly modified. Even the Pontine Marshes, which have ever been unhealthy, were far less so in the times of the ancient Romans. We are told by classic authors that many cities formerly existed there, how large quantities of corn had been grown there; how the tribunes, in order to gain the favour of the multitude, demanded that these lands should be divided amongst them—lands which at the present time are the malarial focus of death and disease. Hence it appears that increase of population and of agriculture tends greatly to diminish or to modify the poison of malaria.

If we take a retrospect of some forty or fifty years, and inquire into the opinions and theories of some of the most conspicuous and experienced, especially amongst foreign authors, on the cause and nature of intermittent fever, we shall find much to interest and instruct; and we shall not fail to observe how gradually these varied opinions tend and converge towards the illustration of a truth, which, like the circulation of the blood, once demonstrated—after years of thought and labour,—appears simple and easy of comprehension.

But in all our investigations into the nature and origin of this poison we must be guided by known and undisputed facts, founded upon what we know with certainty of its effects on the human organism; not allowing ourselves to be carried away by theories, however fascinating and plausible they may appear. Broussais believed that the cause of intermittent consisted in a periodic gastro-enteritis, which acted sympathetically on neighbouring organs; but he afterwards retracted these opinions—forced to it by the many objections made to his theory. Boerhaave, in an increased viscidity of the blood and of the nerve-fluid. Willis, in a certain acid or alkaline reaction in the blood, which, no longer receiving its nutritive juice, begins to ferment; Silvio, in an effervescence of the pancreatic juice mixed with bile; Cullen, in a spasm of the muscular fibres; Torti, in the effect of some stagnant humour mixing with the blood, causing it to effervesce, and determining to the stomach, intestines, glands, or lymphatics.

Bally believed that the immunity all animals excepting man enjoy from the effects of malaria depends on their constantly horizontal position, "prona terræ." He considers that the difference in position in man between the night and the day has great influence on the periodicity which is characteristic of intermittent fever. In the morning the circulation is more active, that of the stomach influencing all the other functions. At night, when the position of the body is horizontal, the seat of congestion becomes changed, or ceases altogether. The stimulus emanates from the brain, not from the stomach. Bally regards the paroxysms of fever as the exaggeration of these organic actions. There is one objection, but a fatal one, to this theory: without exposure to marsh miasma the above conditions are incapable of producing intermittent fever.

Roche makes intermittence to depend on the intermittent nature of the causes, such as changes of seasons, alternations of heat and cold, which, coming on frequently and unexpectedly in hot climates, produce in the human system a constant alternation of action and reaction, and thus the body finally contracts the habit of intermittence. Night puts an end to those phenomena, to recommence on the following day. Now, he continues, if, when the body is so impressed or modified, a stimulus should act on any particular organ or system, it will determine an intermittent irritation, especially in those organs the functions of which, as the stomach, are disposed to periodicity. Intermittence in the cause, as well as in the functions of the human organs, together with the habit acquired, form the basis of Roche's theory.

Adouard believes that the poison of marsh malaria alters the character of the blood, and next produces a congestion of the spleen, which, by reason of its relation with the digestive organs, partakes of their intermittent action, and thus becomes established a fever of an intermittent type. Solar influence has an intermittent action, which he calls positive by day, and negative by night; it submits the human economy to a like intermittence. The intermittent function of the spleen seconds the solar action; but he insists that the poisoned condition of the blood is the primary cause of the congestion of the spleen, and that the intermittence of

the fever depends on the intermittent function of the spleen. Adouard cites many authors, ancient as well as modern, who have observed that quotidian fevers are most frequent in summer in hot climates, because the congestion of the spleen is greatest, and marsh miasma most abundant. Tertian fevers are most frequent in autumn, and quartan in winter. Quotidian comes on before noon, tertian in the afternoon, and quartan at night.

Boudin teaches that the different types of intermittent fever depend on an absorption of the same malarial poison, but in various proportions. The smaller quantity of the poison produces simple intermittent, and the larger causes to be developed remittent or continued fevers. He believes that the poison determines a combination of special morbid symptoms not limited to pure intermittence only, but also common to all the other types and forms. Now, this theory has greatly simplified our ideas respecting the nature of marsh fever and its different types. It is the theory adopted by the celebrated Italian writer Torti, and by many pathologists of the present day.

Piorry having observed that intermittence was common to neuralgia as well as fever and ague, also the identity of cause between latent or masked malarial fevers and true intermittent—how the two are cured by quinine, the coincidence that sometimes these neuralgias, as well as simple intermittents, pass into pernicious fevers, and, finally, the intimate relation that exists between the cause of certain neuroses and that of intermittent fever,—induced him to arrive at the conclusion that the origin of all intermittent fevers existed in the nervous system, especially that portion which corresponds to the spleen. It is not easy to understand how the nerves that supply the spleen should be specially affected by malaria, but we can understand how the spleen, from its peculiar elastic, spongy, and erectile tissue, should be better disposed than any other organ to receive the current of blood driven back to internal organs during the cold or congestive stage of fever and ague.

Amongst the many opinions we have selected respecting the effect of marsh miasma on the human organism, that appears to be the most consonant to modern theory which asserts that the poison of malaria produces spasm of the muscular fibres. Now, this spasm can only be produced by irritation of the vaso-motor nerves, followed by paralysis, this nerve-action being consequent upon the contact of malaria through the agency of the blood.

We may, therefore, conclude that a febrile disturbance evolved in paroxysms of an essentially intermittent type, is generated in the human body when exposed to the malaria emanating under certain conditions from marshes—it absorbs the albuminoid element contained in it; or when exposed to the malaria from localities which, although free from marshes, possess the conditions common to them. And this albuminoid element, once absorbed in the human body, profoundly disturbs and paralyses the system of nerves which regulates the circulation of the blood, alters the composition of such blood, produces disorders of calorification and congestion to internal organs, the most constant being that of the spleen.

Let us next consider the influence of malaria on the spleen and its function.

Rome.

ON CHINESE HÆMATOZOA.(a)

By PATRICK MANSON, M.D.,
of Amoy.

(*Continued from page* 590, *Vol. II.* 1877.)

Case 16. *Hæmatozoa and Ulcer of the Leg.*—Ho, male, aged twenty-five, came to hospital on account of ulcers on the leg; lives in Tehoan-tchiu; farmer. When seventeen years of age had a fever for four or five days. With this exception and the ulceration on his leg (which is of five years' standing, and originated in a wound from a thorn) has for many years enjoyed good health. When quite a boy had an attack of dysentery, but has never had hæmaturia, chyluria, nor any signs of elephantoid disease. His glands are quite normal, with the exception of slight induration on the left side, probably the effect of the chronic ulcers in front of the leg. This man's mother has elephantiasis of the leg, and suffers much from monthly attacks of fever; and a friend living in the same house has also elephantiasis of the leg. In six small slides eight hæmatozoa were found.

Case 17. *Hæmatozoa and Lymph-Scrotum.*—Tsoo-ien, male, aged fifty; Tchiu-po; a field labourer. Came to hospital to be treated for discharge of yellow fluid from the scrotum, of twelve or thirteen years' standing. He declares that very small vesicles appeared on his scrotum years before he became subject to fever, and the scrotum would at times become red and swollen, without his general health being affected. For the last five years, however, he has had aguish attacks many times in a year, their frequency appearing to depend on the amount of work he is doing. At slack times he may not have an attack for several months on end. Before the rigors occur the glands swell suddenly to the size of a fowl's egg, and in about fifteen minutes from the time this happens severe rigors set in, and continue to shake him for an hour or two; these are followed by high fever of about equal duration, but there is no sweating stage. The scrotum swells rapidly, and next day a vesicle ruptures; from this a discharge will drain for ten days or longer to the extent of two or three large bowlfuls daily, soiling his clothes and making him very uncomfortable. The discharge at first is straw-coloured and transparent, but after running some time it becomes white and opaque like milk. He has never had chyluria, hæmaturia, or dysentery. The appearance of the scrotum is most characteristic: many vesicles are scattered over its lower and anterior surface, and some of them, expanded into large semi-sessile blebs, project from the skin. Part of the scrotum near the raphe is thickened and elephantiased, and the under part of the prepuce and skin of the penis are much thickened, causing the penis to be bent. The inguinal and femoral glands on both sides are very much enlarged, varicose in some places, and solidified in others. Altogether the appearance of the parts gives the impression that the lymph-scrotum is passing into elephantiasis, and that ere long the tumour, when the lymphous discharges cease, will grow rapidly. Being interrogated on the point, he says he had an abscess in his scrotum some years before it became lymphous. In three examinations filariæ were found twice, but only one each time. Soon after admission, an attack of fever, with inflammation of the scrotum, caused us to delay the operation we contemplated, and he returned home unrelieved.

Case 18. *Hæmatozoa and Rheumatism.*—Thiau, male, aged forty-three; Lak-paug-ichie, Thien-po; farmer. Came to hospital on account of severe rheumatism of seven years' standing. When young he was liable, during a period of ten years, to attacks of quartan ague, but since his rheumatism began these attacks have not recurred. The last occurred about eight years ago, and was immediately succeeded by acute rheumatism, which confined him to bed for about six months. Before this he was a stout, strong man, but since he has gradually wasted, and is now thin and withered-looking. He has had several attacks of acute rheumatism since the first, but until the third month of last year was pretty free from them for a few years. His right foot is œdematous; calf of right leg swollen, apparently from some effusion amongst the muscles. This, he says, followed the kick of a buffalo last year. The right ankle is also swollen, and he walks on his toes on this side, as in talipes equinus. Left knee rheumatic. Notwithstanding his wasted appearance his appetite is voracious. Femoral glands on both sides distinctly enlarged, elevating the skin perceptibly. Has a small hydrocele on the left side; this, he states, has come and gone since childhood. Has never had chyluria or hæmaturia. He comes from a district where elephantiasis is very common. Blood contains hæmatozoa in the proportion of about one in six slides.

Case 19. *Hæmatozoa, Enlarged Glands, and Thickened Scrotum.*—Tso-sim, male, aged thirty-six; Hooikoah; farmer. Came to Amoy seeking employment as a chair coolie. Had ague when thirteen or fourteen years old; never since. Four months ago had an attack of fever; it lasted but one day, and he speedily recovered. The fever was accompanied by swollen and inflamed glands, with stiffness of the legs, interfering with his walking. The swelling of the glands did not subside. On inspection the left inguinal glands are found to be much enlarged, and have the soft, doughy feel characteristic of dilated lymphatics. On the right side the

(a) These cases are in continuation of the fifteen already published in the *Customs Gazette*, and transferred to our columns. The new manuscript has been received from Dr. Cobbold, to whom our acknowledgments are due.

glands are not perceptibly affected. The skin of the scrotum is thick, dense, and corrugated. This condition of glands and scrotum has only come on since the feverish attack four months ago. Never had chyluria or hæmaturia. Four years ago had an abscess in his left arm, previous to which had a wound on his foot. In six slides three filariæ were found.

Case 20. *Hæmatozoa; no Disease.*—Tho, male, aged nineteen; Amoy; a field labourer. Last year had several attacks of tertian ague, and a severe attack of scabies, which appears to have induced an abscess in his thigh. He is now quite well; has no sign of elephantiasis, enlarged glands, chyluria, or hæmaturia. In two slides six filariæ were found.

Case 21. *Hæmatozoa and Stricture of the Œsophagus.*—Nug, male, aged sixty-one; Tang-soa, Thien-po; farmer. A nephew is leprous, and another nephew has a large scrotum. He is a very stupid old man, and his history is in consequence difficult to make out. He had ague once or twice, but does not remember how long ago; there is also a doubtful history of chyluria many years ago. Had an abscess on his thigh, the scar of which is still visible. No elephantiasis or enlargement of the glands. He came to hospital on account of symptoms of obstruction of the œsophagus of six months' standing. He cannot swallow rice, and lives on rice-water and liquid food. Sometimes the stricture appears to relax a little, when he can swallow small quantities of soft boiled rice. Refers the obstruction to the lower part of the sternum. Though very much wasted, no tumour nor any cause for the obstruction can be discovered. Seven slides contained two filariæ.

Case 22. *Hæmatozoa; no Disease.*—Khœ-tsin, male, aged thirty-two; Lamoa, Itsai; farmer. When young he was anæmic, but since has been in good health. Has never had ague or fever of any kind; nor chyluria, hæmaturia, hydrocele, or abscess. Parents and relatives and neighbours free from leprosy and elephantiasis. History is quite negative. Glands and scrotum are normal. In six slides one hæmatozoon was found.

Case 23. *Hæmatozoa, Ague, and Enlarged Spleen.*—Ngai, male, aged thirty-six; Tchang-tchiu, Anpangsia; farmer. No leprosy or elephantiasis amongst relatives or neighbours. At twenty-two he contracted a quartan ague, which stuck to him continuously for four years, and more or less ever since. His spleen has gradually enlarged. Last year the fever was unusually heavy, and was followed by dysentery and dropsy. He once spat blood. Never had chyluria or hæmaturia. No elephantiasis of legs or scrotum; glands of groin quite normal. Spleen but slightly enlarged, hardly extending beyond the ribs. His blood is very defective in corpuscles. In three slides three filariæ were found.

Case 24. *Hæmatozoa, Elephantoid Fever, Enlarged Glands and Scrotum.*—La, male, aged forty-one; Tchang-tchiu, Aupangsia; farm servant; came to hospital for the removal of a bullet lying amongst the muscles of the back. The bullet has been in its present situation since the Taeping rebellion. Until his twenty-eighth year he enjoyed excellent health. During a raid of the Taeping rebels on his village he was shot in the shoulder, and since then has suffered from feverish attacks eight or ten times a year. They occur principally during bad weather, last for one day only, and are accompanied by pain in his old wound. At such times the glands of the groin are apt to enlarge, and once he had swelling of the scrotum and left testicle. Many years ago a swollen gland near the left saphenous opening burst, and discharged a watery bloody fluid—not pus. The attacks of fever are characterised by severe rigors, fever, and profuse sweating, each stage continuing for about two hours. The glands do not always enlarge with the occurrence of fever, but when they are affected their enlargement precedes the fever by a day or two. The scrotum is soft, uneven, and vesicated, and when a prominence is pricked a small quantity of clear lymph exudes; the skin over the lower part is very decidedly thickened. Left inguinal and femoral glands decidedly enlarged; the femoral are hard and firm, the inguinal are softer. Glands on the right side affected, but in a much smaller degree. Never had chyluria or hæmaturia. Last year had dysentery, passing frequent stools of slime and blood for fifteen days. In eight slides seven filariæ were found.

Case 25. *Hæmatozoa, Lymph-Scrotum, and Elephantiasis Scroti.*—Poe, male, aged forty-five; Tchoan-tchiu, Tchinkang; a shopkeeper. No leprosy or elephantiasis in his family, but a neighbour has elephantiasis of one leg. Had tertian ague at seventeen for two months. At forty-two had his first attack of the fever, which for the last three years has never left him for more than a few days at a time. Describes the fever as commencing with a feeling as if produced by retraction of the spermatic cords, and giving rise to so much pain that he has at once to leave off work. This is immediately followed by rigors, fever, and sweating, the whole attack lasting for about six hours. Says that this disease commenced by an attack of chills coming on in the middle of a very long and wet journey; when he got home he had fever, and next day he discovered that his glands were enlarged and his scrotum œdematous. In a month's time vesicles had formed on the surface of the scrotum. With successive attacks of fever the scrotum inflamed, became permanently enlarged, at times discharging a white lymph in great abundance—four or five ounces. His fever never comes on during the night. A mass of elephantiasis, weighing about two pounds and a half, involving both penis and scrotum, was removed, and penis and testes were left bare to cicatrise. This process took about four months to accomplish, and during the whole of this time he never had a recurrence of the fever, which formerly attacked him every few days. The glands in the left groin appear quite healthy; not so those on the right side, where a large tumour is formed by the enlargement of a bunch of them over the saphenous opening, and another cluster above Poupart's ligament; to the touch they are firm and not varicose. This man has never suffered from chyluria, hæmaturia, or dysentery. His blood was examined altogether seven times, and on one occasion only were filariæ found. Three days afterwards they had again disappeared.

Case 26. *Hæmatozoa; Aortic-Valve Disease; Dilatation of Arteria Innominata and Right Carotid.*—Phien, aged seventy, widow, native of Ankhoe; been resident in Amoy for thirty years. She is in very destitute circumstances, being able to earn only about forty cash a day. On this pittance she supports herself and two grandchildren. Her parents lived to be very old. There is no leprosy or elephantiasis in her family. Ten years ago had a tertian ague; altogether about ten paroxysms. Twenty-five years ago had an attack of inflammation about the left knee—not in the joint,—followed by abscess of the groin and fever. Never had dysentery, chyluria, or hæmaturia, and with the two exceptions mentioned had, notwithstanding great privation and misery, enjoyed excellent health all her life. Came to hospital on account of a malignant-looking ulcer on her left heel, which, she says, has been open for three years. There is marked disease of ascending aorta; innominate artery and right carotid much bulging, and strong expansion at right front and root of neck on systole; systolic bruit and very distinct reduplication of second sound. Filariæ abound in this woman's blood.

Case 27. *Hæmatozoa and Lymph-Scrotum.*—Simpoo, male, aged fifty-nine, farmer; Lamtai-boo, Soa-kha. No leprosy in his family. A distant relative has elephantiasis in both legs; and in his neighbourhood are several cases of that disease. Never had ague or other disease till his scrotum began to be diseased seventeen or eighteen years ago. This commenced with pain in his thighs and knees; red streaks appeared on the parts, and he had rigor, fever, and sweating. Similar attacks have since occurred from two to six times in a year, and on some of these occasions the scrotum and groin-glands inflame if the legs are not affected. On the inner surface of the left thigh are the scars of two abscesses which formed at different times after these attacks. Under the skin of the left popliteal space is a bunch of dilated vessels, which look like, and may be, lymphatics. He says there is sometimes elephantoid swelling of his leg. Last attack of fever occurred seven months ago. The scrotum is a well-marked example of lymph-scrotum, and the glands of the groin are very much enlarged, especially on the left side, and equally characteristic. Has never had chyluria, hæmaturia, or dysentery, and but for the attacks of fever and inflammation enjoys good health. In eight small slides of blood eighty-four filariæ were counted.

Case 28. *Hæmatozoa, Chyluria, and Lymph-Scrotum.*—Tho, male, aged forty; Tchiu-po, Phoo-lam-kio; farmer. Relatives and neighbours have no leprosy, no elephantiasis. Till thirty-five or thirty-six years old was a strong, healthy man; had what appears to have been prolapsus ani about that time. When eighteen years of age had an abscess in his scrotum. Elephantoid fever began when he was thirty-five or thirty-six; attacks consisted of rigors, fever, and

sweating, the whole paroxysm lasting about six hours. Glands and scrotum have been affected since this fever began, their swelling and occasional inflammation appearing from his description to be secondary to the fever. Attacks occur very irregularly, from once to several times a month. Last attack occurred four days prior to his admission. He knows of no cause for his complaint. His is a fine specimen of lymph-scrotum; it has never discharged spontaneously, but on pricking one of the many vessels on the surface, two to three ounces of rapidly coagulating straw-coloured lymph exudes. There is no hardening, and but slight enlargement of the scrotum, which is soft, silky, and pendulous. The inguinal and femoral glands of the left side are very much enlarged and varicose; those on the right side are also enlarged to a less extent and are harder to the touch. Three months ago he first noticed blood and clots in his urine; at the time he had a slight attack of the usual fever. Since that time his urine has never been quite free from blood and clots, the proportion of these diminishing or increasing according to the amount of work he does. Since the establishment of the chyluria, fever attacks are more frequent, and he has become very anæmic and debilitated—so much so that he cannot keep on his legs for any length of time, but is compelled to lie or sit down. Never had dysentery or other serious disease. July 11: Came to hospital. 14th: Blood and urine have been frequently examined, but no filariæ have been found in either. Blood is very defective in corpuscles. Prescribed quinine grs. ij. and gallic acid grs. xx. three times a day. 15th: To-day I examined two specimens of urine. One of them, passed last night, had been standing in a conical glass vessel for about twelve hours, and had separated into three well-marked zones: the uppermost and most bulky was of a pale salmon colour, the middle was of a considerably redder tinge than the former and had small red specks in it, and the lowest was of a dark red like blood, and formed a mere sediment at the bottom of the vessel. I examined many slides of this sediment, and after a prolonged search found one dead hæmatozoon in it. The other specimen of urine, passed only two hours before examination, was of a dirty blood-red colour throughout, with several very firm clots floating in it; specific gravity 1012; no filariæ were found in it; blood, lymph, and oil corpuseles abounded in both specimens of urine. 16th: An assistant found two filariæ in blood to-day. 19th: He found one hæmatozoon in blood last night, and this morning I confirmed his observation by finding two more. 22nd: Returned home, having derived no benefit from the very large doses of gallic acid he had been taking.

Case 29. *Hæmatozoa, Enlarged Groin-Glands, and Ulcerated Leg.*—What, male, aged twenty-three; Tchang-tchiu; barber. Came to hospital on account of ulcerated leg. Relatives free from leprosy and elephantiasis. A near neighbour is a leper, and another has elephantiasis. When about ten years of age suffered much from lumbrici. Last year had two attacks of fever within a few days of each other, and this year about three months ago had a single paroxysm. Has had ordinary indolent ulcers on his legs for seven years. Never had chyluria, hæmaturia, or dysentery. The inguinal glands on both sides are indurated and slightly enlarged; the femoral glands more so, distinctly projecting. Perhaps the ulcers may account in part for the state of his glands. Filariæ in considerable numbers in his blood.

Case 30. *Hæmatozoa, Hydrocele, Enlarged Femoral Glands, and Cataract.*—Mgee, male, aged fifty-eight; Go-po, Pho-lam; cotton carder; came to hospital to be operated on for cataract. No leprosy or elephantiasis in his family. Two neighbours are lepers, but there is no case of elephantiasis near his residence. Five or six years ago had quartan ague for a month or two, and now is liable to attacks of headache and pain in the limbs, but no fever. For two or three years has had enlarged groin-glands. At times they increase in size, but the swelling is not accompanied by any distinct febrile movement. The femoral glands are distinctly enlarged and indurated; not varicose. Inguinal glands normal. A small hydrocele in right testicle; skin at the bottom of scrotum is thick, wrinkled, and coarse. Left cataract mature; right forming. The mature cataract was operated on with a good result. Filariæ found in his blood on several occasions.

Case 31. *Hæmatozoa and Incipient Elephantiasis of the Leg.*—Tui, male, aged thirty-two; Tiu-hai; farmer. Parents alive and well; no relatives leprous. His father has elephantiasis of the leg. The man Sim-poo (Case 27) is his cousin, and lives in the same village. Another village, about three "li" from his house, contains many cases of elephantiasis. During ten years has been liable to attacks of elephantoid fever, along with inflammation of the right leg and swollen femoral glands. The attacks recur irregularly twice or thrice a year, the fever lasting four days, and convalescence about ten days more. Says that when about ten years old had a quartan ague, and that many years ago had inflammation of the scrotum. The scrotum and inguinal glands are now quite normal in appearance. Never had abscess, chyluria, hæmaturia, or dysentery. Below the knee the right leg is slightly but distinctly swollen, and larger in circumference than the left leg—about three-quarters of an inch. The skin, however, has not yet taken on the thickening and coarseness characteristic of elephantiasis. Corresponding femoral glands slightly enlarged and indurated. His blood contains hæmatozoa.

Case 32. *Hæmatozoa, Hæmatemesis, and Enlarged Glands.*—Tchian, male, aged forty-nine; Lamoa; tinker. Has been short-winded for seven or eight years; and two years ago, in Annam, where he has resided for five years, vomited and defæcated a large quantity of blood. Since this occurrence his breathing has become very much worse, and two months ago he returned to China. Last year had attacks of fever for about ten consecutive nights; no enlargement of the glands at that time. Heart-sounds very feeble; no bruit or abnormality of præcordial space. Breath-sounds feeble, as in asthma. Left femoral glands project much, and are enlarged; right less so, but still large. The skin of the scrotum is very coarse, not, however, distinctly elephantiased. Patient is thin, feeble, and covered with itch; filariæ found in his blood.

Case 33. *Hæmatozoa, Quartan Ague, Enlarged Spleen, and Abscess.*—Lang, male, aged twenty-six; Loa-sia; farmer. No elephantiasis in his family or neighbourhood. Several cases of leprosy in his village. When young had many attacks of quartan ague, and has now an enlarged spleen extending to the umbilicus. Every year, about the eighth month, has three or four attacks of quartan ague. A good many years ago, during one of these attacks, his scrotum inflamed; inflammation subsided, without the formation of abscess, in ten days. Never had chyluria, hæmaturia, or dysentery. Two years ago, during one of his ague attacks, a large abscess formed in his left groin, and discharged a cupful of pus; the resulting scar is very apparent, but glands and scrotum are healthy. Lens of right eye opaque; globe softened, probably traumatic. Filariæ in considerable numbers.

Case 34. *Hæmatozoa, Lymph-Scrotum, and Chyluria.*—Kaw, male, aged seventy-two; Amoy; pedlar. Parents and five brothers dead; one sister alive and well; no leprosy or elephantiasis in his family. Has twice visited foreign places—once Tien-tsin, and once Formosa—about thirty years ago. With the exception of an aguish attack of very short duration, between thirty and forty, has always enjoyed good health. When over thirty had an abscess in his scrotum, but it was not till a few years ago that he became liable to swollen groin-glands every three or four months. His scrotum has been swollen for two or three years. Occasionally he has a rigor and fever, and then the scrotum itches excessively, inflames, and becomes covered with minute white vesicles; these burst and discharge a large quantity of fluid. When this happens he passes urine white like milk for a few days; when the discharge from the scrotum ceases, the urine resumes its normal appearance. This chyluria has occurred many times during the last two or three years. Is much troubled with rheumatism. Had dysentery between thirty and forty. The scrotum is large, pendulous, and vesiculated, and the glands on both sides are swollen and varicose. Filariæ in abundance in the blood.

Case 35. *Hæmatozoa; Enlarged Glands.*—Pho, male, aged sixty-four; Loa-kor; shopkeeper. He came to hospital to nurse his nephew, who attended for the amputation of a very large elephantiasis scroti; they do not live in the same house, but in places about a "li" apart. Parents dead, both very old people; six brothers and two sisters alive; none of them have elephantiasis. A granduncle had a very large elephantiasis scroti, and a near neighbour has a "big leg." When young had tertian ague for about a month, but since has never had any very serious disease. Has been liable to enlargement of the groin-glands, especially after exercise, three or four times a year for the last thirty years. He has

no pain in them unless they become very large and hot, and he has slight fever. His scrotum swelled once when he was fifty-three years old; he had rigor, fever, and swollen glands at the time, and he feared his scrotum would become like his nephew's, but the swelling subsided, and the scrotum is now quite normal in appearance. Not so the glands, especially those over the left saphenous opening, which are large as hazel-nuts, and grouped together so as to form a prominent swelling two inches by two inches. Has never had chyluria, hæmaturia, or dysentery. Filariæ abundant in the blood.

(*To be continued.*)

A FEW REMARKS UPON THE USE OF

TURPENTINE IN DISEASED STATES OF THE SYSTEM OF AN ACUTE CHARACTER.

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So long ago as 1860 I was led to try turpentine in a case of typhoid, which had run a course of twenty-eight days without very great severity; the diarrhœa was not severe, and was kept in check by acetate of lead. On the twenty-ninth day of her illness—in fact, in the first of her convalescence—symptoms had all abated, and she seemed over her illness. On the thirtieth day, on visiting her I found her in a state of terrible excitement; some cause there was, but not enough to account for her state. Fearing mischief, I at once went for, and brought to see her, a leading physician from Dublin. He advised the use of turpentine, but his advice was based on the view that there was uræmic poisoning, for on his visit she had severe convulsive movements of her face. Urine scanty; it was tested, but did not show any morbid condition. Following the thirty-first day she had a terrible night; violent raving and restlessness; no sleep. Thirty-second day: In a worse state; now almost collapsed. The sphincters failing. The turpentine mixture had been carried on since the consultation, but there was no benefit from it. She died that night. In this case the turpentine was given for the head symptoms.

The next cases in which I used turpentine were various, and at different stages of the disease. In my earlier practice, and in hospital practice in 1873, when I acted as Physician to the Meath Hospital, in the absence of my colleague Dr. Stokes and his colleague in the medical wards, I had at least one great case which showed the value of turpentine in typhoid fever. Here the chest was in the latter stage attacked with severe bronchitis, the bowels being much too free at the same time. Bronchitis was for some years an almost constant attendant on typhoid, and often led to death. My mode of giving the turpentine was as follows:—If bronchitis were present, and even if diarrhœa complicated the case, I gave what was known as my turpentine mixture:—℞. Terebinth. ol. ʒ ij., liq. potassæ ʒ ij., mucil. acaciæ ʒ iv., syr. flor. auran. vel syr. papav. alb. ʒj., aq. camph. ad ʒviij.—m.; ft. mist. ph. agitat t. ʒj. quarta qq. horâ. Since I commenced that treatment, I never lost any case of typhoid from either bronchitis or diarrhœa, or their sequelæ of ulceration or hæmorrhage.

Each epidemic of typhoid (and at present there is a widespread and severe one passing over this country) is marked by its peculiar characters. In the present time, most of the cases of typhoid are characterised by intense pain in the abdomen, with enormous flatulent distension. In most cases constipation exists before the illness is developed, and when removed by purgatives, diarrhœa sets in. I give a short sketch of some cases recently under my care:—

Martin ——, aged seven, at a distance several miles from the city. The child sickened slightly about September 30, but nothing was suspected for some days. On Monday, October 4, I found him very ill. I at once suspected typhoid fever. He had on Sunday some vomiting, and slight diarrhœa, which was now (on the 7th) followed by constipation. I found it necessary to give an enema, and used turpentine in the injection. This brought away a great quantity of scybalæ of a light colour, and gave great relief. The abdomen was at this time tumid, with some pain on pressure. I gave a small dose of castor oil and turpentine on the succeeding day; it gave much relief, with a similar character of discharge. Between the 9th and 10th his bowels became a little too free, but the distension of the abdomen had become so great that it pressed upon the heart and lungs so as to give great distress. I at once ordered about ten minims of turpentine every third or fourth hour in mixture. There was some improvement on the 11th; pain much less. On the 12th he allowed me to press my hand on his abdomen, which hitherto he could not bear, and expressed himself much better.

I need not detail the case. I continued the turpentine for nearly a fortnight, towards the end lessening the dose to twice each day; no diarrhœa returned, but the bowels were slightly free—twice most days. After this, slight pain and diarrhœa came on, and a few doses of the turpentine were given with perfect success. This child is now quite well, running about; he convalesced in the sixth week.

The next case, a more recent one, and one in progress at present—a lady, aged seventy-three,—gives no previous history of illness. On Sunday last (November 18) she vomited, and diarrhœa quickly set in, severe in character, and blood mixed with stools, but in small quantities. When I first saw her next day (Monday) I put her on sulphuric aromatic acid, with small doses of two tablespoonfuls every fourth hour. On Friday morning, she was going on well; diarrhœa had ceased; there had been only two small motions since. The medicine gave much relief for two days, and at my visit on Wednesday all was well; only two slight motions, but no blood. In the afternoon, profuse diarrhœa set in four times before 9 p.m., nine times to 7 a.m. on Thursday, and five times more up to my visit, blood coming in all the later motions. I at once ordered the turpentine mixture. The turpentine was commenced. I saw her at night; she still continued in comfort; no motion since morning. On Monday, November 26, she continued in comfort; no pain: no diarrhœa; only two small motions in the twenty-four hours. This case is not concluded, but all goes on most favourably.

I have several other cases of typhoid on hand at present, but none of them of any peculiar type, except one, who developed jaundice about the twelfth day it quickly yielded, and the child (five years old) progresses well.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

HOSPITAL FOR WOMEN, SOHO-SQUARE.

CASES OF COLOTOMY.

(Under the care of Mr. REEVES.)

[Notes by J. B. HELLIER, M.B. Lond., House-Physician.]

Case 1.—*Scirrhus of Rectum—Colotomy—Convalescence until eighth day—Death from Perforation of Bowel.*

HARRIET H., aged fifty-eight, widow thirty years, a general servant, was admitted on February 3, 1877, under the care of Mr. Reeves. She stated that her family history was good, and that she herself had enjoyed fairly good health until the commencement of her present symptoms, which are of about eighteen months' duration. Commencing without obvious cause, and growing steadily worse, these have been as follows:—She has had hæmorrhage from the rectum (chiefly, but not exclusively, during defæcation), the motions being at first streaked with blood, but lately containing clots; sometimes they have been dirty, watery, and tinged with blood. For some months has passed no solid motion. Desire to defæcate constant; defæcation extremely painful, and accompanied by much straining; burning pain in rectum, over sacrum, and in right side; sleep often prevented by the intensity of the pain. She has lost flesh, and on admission is thin, anæmic, but without marked cachexia; tongue coated; expression rather anxious; pulse fairly strong; temperature normal; heart and lungs healthy; urine not albuminous. On rectal examination there was felt, two inches and a half within the anus, an annular stricture formed by indurated, irregular new growth, infiltrating the walls of the rectum, and narrowing its calibre so that it just admitted the tip of the index-finger. After admission the difficulty of relieving the bowels was very great, and the patient was suffering from the constitutional effects of the continued constipation. Blood in small quantity escaped at intervals from the rectum.

On February 22 Mr. Reeves performed left lumbar colotomy in the usual manner under chloroform. The descending colon was discovered without much difficulty,

and was opened by a small incision. The patient bore the operation well, and for the first eight days appeared to be progressing very satisfactorily. On the second day the early morning temperature was 100°. After this it was never more than one degree above normal, and was 98·6° on the morning of the fourth and following days, with a slight evening rise. There was slight passage of fæces from the wound on the second day; on the fourth day there was a little tenderness in the left groin, and a hard lump was felt there, which was probably a collection of fæces. On the fifth day there was a little redness around the sutures, which were all removed. The wound had united by first intention. She now began to have a daily passage of fæces per rectum, the motions being more solid than before the operation. There was but little passage through the wound. On the seventh day she had griping pain in the abdomen, some relaxed motions were passed per anum with a considerable amount of straining, and some solid fæces passed by the wound. On the morning of the eighth day the temperature was normal, very slight abdominal pain, wound almost completely healed, and apparently all well. At 11.30 a.m. she took two drachms of confection of sulphur. During the afternoon she complained of nausea, and at 7.30 p.m. was seized with violent pain in the left side, and for a short time she seemed to be delirious. A small, simple enema was thrown into the rectum: some action of the bowels followed, and the pain was temporarily relieved; but it soon returned, the pulse failed, respiration became hurried, and the extremities grew cold. Brandy was freely given, hot bottles and opiate fomentation used, and morphia administered; but the collapse increased, and she died at 10.10 p.m.

On post-mortem examination the abdomen was found to be distended with flatus. On opening the peritoneal cavity it was found to be filled with extravasated fæces, and in the lower part were several indurated large fæcal masses. In sigmoid flexure, at its junction with the rectum, was a perforation a little larger than a shilling, through which the fæces escaped freely. The rectum and the lower part of the colon were filled with hard rounded masses of fæces. The artificial anus had been truly made into that part of the descending colon which is not covered by peritoneum. The walls of the rectum were much thickened, and an annular stricture was found two inches and a half within the anus, but the rectum was but little ulcerated.

Case 2.—*Cancer of Rectum—Colotomy—Recovery.*

S. J., aged forty-seven, married twenty-three years, was admitted under Mr. Reeves' care on July 24, 1877.

No family history of cancer. Never very strong, but no serious illness until present symptoms commenced in May, 1876, when she began to have frequent diarrhœa, and for the last twelve months she has had constant tendency to relaxed bowels; the motions have been lately very frequent, sometimes twenty times daily. Defæcation is accompanied by much tenesmus. She can pass solid motions, but these have been diminished in size for last twelve months. Has occasional purulent discharge from rectum. Blood is frequently passed, but she has never had an excessive loss. Has had pain in back and rectum for a year, and is now unable to walk without great increase of pain. Has been losing flesh, strength, and appetite. Has also a little pain and difficulty in micturition. No uterine trouble. Menses ceased fourteen years ago. Is now thin and anæmic, but cachexia is not marked. Lungs and heart healthy. Appearance of anus normal externally. On passing finger an inch within anus a ring of indurated irregular growth is found to constrict the bowel. The finger can, however, pass through it, and the mucous membrane does not appear ulcerated. But beyond this is felt another stricture which will not admit the tip of the finger. Here the new growth is ulcerated on the surface, and gives way under the finger. The rectum walls are extensively infiltrated, and are felt thickened per vaginam. Discharge offensive.

August 29.—Since admission there has been some escape of fæces by vagina, and the patient has got thinner and weaker. The motions consist of small round masses of the size of peas, and are mixed with offensive matter and dark blood.

30th.—Left lumbar colotomy was performed to-day under ether. The operation presented no difficulty. The bowel was reached at once by a small incision, and the opening made into the bowel was also of limited size. Silk was used for the sutures. The temperature remained from 2° to 3° above normal until the fourth day, after which it averaged 99° in the morning and 100° at night for several days. On the fourth day the wound was somewhat inflamed, and a little pus escaped on removing the sutures. Wound poulticed. On the seventh day fæces passed by the wound; the wound was much more healthy, and was uniting by first intention. The pain felt in the rectum before the operation was much relieved. Twelfth day: Has daily motion by wound. Still some fæcal discharge from vagina and from rectum. Vagina well syringed with Condy. Eighteenth day: Got up; much relieved by operation; appetite much improved; a little pain in rectum at intervals. Her temperature is, however, elevated. It averages 99° in the morning, and is 2° or 3° higher each night. Twenty-seventh day: An ischio-rectal abscess has formed on the right side.

September 24 (thirty-first day).—Discharge of pus into rectum and fall of temperature.

October 2.—An abscess has formed over the top of the coccyx. This was incised. This was followed by the formation of another abscess on the left of the anus, which was also opened. And then the continuous discharge of fæces mixed with pus from the anus, sinuses, and vagina became a great distress to the patient, who otherwise was much better than before the operation: was able to walk with less pain; appetite also good. By constantly syringing out rectum, sinuses, and vagina with carbolic lotion the discharge was much lessened.

She was discharged on November 2. There was then no fæcal discharge from the anus or sinuses, and but little purulent discharge. Bowels acted regularly through the artificial anus. There was still a nightly rise of temperature.

Case 3.—*Stricture of Rectum (Syphilitic?)—Colotomy—Recovery.*

N. S., aged thirty-five, married seven years and a half, was admitted on August 27, 1877, under the care of Mr. Reeves. Has always enjoyed good health, but has suffered much from constipation. No definite history of syphilis can be obtained from patient. Her husband is a soldier. She miscarried without obvious cause three months after marriage. She gives no history of sore throat or skin eruption, etc. About a year after marriage she had an abscess on the right of the rectum, and this left a fistula, which has never healed since. Some time after this she noticed that her motions were altered in shape, being "indented on one side" and flattened. Defæcation difficult, but not very painful. This was about four years ago, and she sought advice at one of the larger hospitals, and became an in-patient. A bougie was passed up the rectum, but this was followed by an attack of pelvic inflammation, and she states that she had "pyæmia," but recovered after many weeks. About three years ago had another abscess on the left side of the bowel, which caused her to keep her bed for three weeks. This burst, and left another fistula on that side. Since then she has also had some escape of fæces per vaginam. She comes now complaining of great and increasing difficulty in defæcation, which is also accompanied by pain. There is constantly a fæcal discharge from both sinuses and from the vagina, but there has very seldom been any sanguineous discharge. Also there is pain in rectum, and bearing-down more or less constant, and a little difficulty lately in micturition. Her appearance is healthy, and she is in good condition. Heart and lungs healthy. On each side of the rectum is a fistulous opening, through which a probe passes up into the rectum. The external opening of each fistula is surrounded by prominent condylomatous growth. Two inches within the anus is a constriction just admitting the index-finger, and as far as the finger can reach the bowel is narrowed by indurated cicatricial tissue. There is a small recto-vaginal fistula seen in the posterior vaginal wall.

October 9th.—Since admission the patient has been taking mercury and iodide of potassium, and attempts have been made to dilate the stricture with bougies. Their passage causes great pain, and tends to send up the temperature. Still, by advancing cautiously, a three-quarter inch bougie was passed eleven inches. Some slight relief followed; but all the former difficulty in defæcation returned quickly when the passage of the bougie was suspended for a short time. The patient is therefore very anxious to have colotomy done, rather than submit to prolonged and painful treatment by dilatation.

11th.—Mr. Reeves performed left lumbar colotomy to-day, the patient being under ether. There were one or two points of interest connected with the operation. The bowel lay very deep, the subcutaneous adipose tissue being of great thickness, and the muscles being well-developed and vascular. There was a good deal of hæmorrhage from the incision. Then the kidney was situated so low that it reached below the iliac crest, and it was accidentally wounded in the operation. After some trouble the colon was found, transfixed, brought to the surface, and the operation completed in the usual manner. The patient bore the operation well. On removal to her ward a subcutaneous injection of half a grain of morphia was administered.

The after-history is as follows:—The first night the patient was quiet. At midnight the temperature was 100°; pulse 120. On the second day she had abdominal pain and tenderness, but no vomiting. In the evening the temperature reached 103·4°, and the pulse 130, full, but not incompressible. There was a trace of albumen in the urine, and she required the catheter to relieve her. Complained of a little bronchial irritation. A fluid motion was passed by rectum. The patient was kept pretty fully under opium, and when the temperature went up she was ordered four minims of tincture of veratria every three hours, which was followed by a fall of pulse and temperature. Hot opiate fomentations and turpentine stupes were applied to the abdomen. On the third day the pain and tenderness were less. A hard motion was passed by wound. Morning temperature 100·2°, pulse 106; evening temperature 102°, pulse 108. Urine (drawn with catheter) contained albumen. The stitches were removed on the fourth day. Tissues a little red and swollen around wound, but very little abdominal tenderness, and patient much better. Motions passing daily from wound. On the sixth day the morning temperature was normal, evening 99°. Wound a little inflamed. Albuminuria continues; otherwise no bad symptom. The temperature rose on the eighth day from 99·1° in the morning to 102·4° at night. The urine was smoky in appearance, and contained pus and blood cells, and also albumen in small amount. (The urine was drawn by catheter for examination.) A little seropurulent discharge from suture-holes. A little tendency to prolapse of bowel. On the tenth day the patient was much better. After this time the temperature continued normal, or nearly so. No more pus or blood in urine. There was no albumen on the fifteenth day. On the sixteenth day (October 27) the patient was allowed to get up. The anterior part of the wound healed well. The posterior part did not all unite by first intention; and granulations being now rather redundant, nitrate of silver was applied. November 13: Patient in very good health. No pain in rectum or elsewhere. Says that she is very greatly relieved by the operation. Her depression and irritability of mind are markedly ameliorated. There has been no motion per anum for three weeks. The wound is contracting, but there is considerable tendency to prolapse of the bowel at the artificial anus. The condylomatous growths are less. The rectal stricture will not admit finger. Examination causes very little pain. Bowels act daily by wound. On November 22 the patient was discharged, wearing an indiarubber air-pad secured by a belt, which efficiently closed the artificial anus and prevented prolapse, and which was made for this case by Messrs. Mayer and Meltzer.

CASES OF VESICO-VAGINAL FISTULA.

The two following cases of vesico-vaginal fistula are of interest, as illustrating the ultimate success which may sometimes be obtained in cases which appear at first most unpromising, or where failure has been most frequently repeated:—

(Under the care of Dr. CARTER and Dr. HOLLAND.)

Case 1.—E. F., a healthy young woman, of rather small build, married in 1874, at the age of twenty-seven. At her first confinement, in the following year, she was in labour two days and a half after the rupture of the membranes; and she was ultimately delivered by forceps of a large dead male child (head presentation). From the next day dates the incontinence of urine, which caused her to seek advice at this hospital in August, 1876. In addition to incontinence of urine, she was also suffering from prolapse of the bladder, which became inverted, so that its anterior wall passed through the fistulous opening and presented at the vulva. She was thus incapacitated for walking; unable to work; and, being deserted by her husband, was altogether in a most pitiable condition. The first operation in August, by Dr. Holland, and the second in November, by Dr. Carter, failed, and she was discharged for a time unrelieved; but in April, 1877, she was readmitted for further treatment. The fistula was large, measuring two inches or more across. The upper margin was close to the cervix; the lower invaded the urethra, and the edges were hard and rigid; and on coughing or straining the bladder prolapsed through the opening.

On May 5 the patient was put under ether, and Dr. Holland pared the edges and brought them together with silver wire sutures, passing the two anterior ones from left to right to complete the urethra, and the rest from before backwards. A flexible catheter was left in the bladder. For a week after the operation there was considerable trouble from hæmorrhage from the wound, which recurred at frequent intervals, but usually yielded pretty regularly to iced injections or plugging. There was also a little pyrexia, and the patient was somewhat reduced by the bleeding. On the fifth day the urine escaped per vaginam; and on the eighteenth day, when all the stitches were removed, the edges were found to be ununited for three-quarters of an inch at the left extremity. The rest, however, held well, and the prolapse was cured. The patient went for a time to a convalescent home, wearing a "portable urinal," which is a great comfort to patients of this kind. She returned in September, in very good health. On October 11 the edges of the small remaining aperture, which had contracted since the last operation, were touched with the point of the thermo-cautery; but, this failing, Dr. Holland, on November 1, pared the edges and passed silver sutures as before. On the thirteenth day, when the stitches were removed, a minute pin-hole still remained. Nitrate of silver was applied to this, without effect; and on November 27 the point of the thermo-cautery was again applied. This completed the cure. She was discharged on December 7, entirely free from incontinence, and able to retain six ounces of urine in the bladder.

(Under the care of Dr. HEYWOOD SMITH.)

Case 2.—J. J., a Welshwoman of rather small build, aged thirty-five, a servant, was admitted on November 8, 1877, under the care of Dr. Heywood Smith.

Eleven years ago she was delivered by a midwife of a dead child, after having been several days in labour, and she has suffered ever since from incontinence of urine. The patient, on admission, had already undergone seventeen operations. At Bristol, at St. Bartholomew's, at Guy's, at Westminster, at Bath, and finally at the West London by Mr. Teevan, attempts had been made to close the fistula or (in four instances, according to the patient's statement) to close the vagina. Mr. Teevan had operated five times. After his last operation the portion still remaining ununited was small, but, being at the time prevented from completing the case, he requested Dr. Heywood Smith to take her into his wards.

On admission the patient was found to be in good health. The vagina was irregularly contracted; the finger reached the os uteri on passing two inches and a half; the cervix uteri was somewhat adherent by its anterior labium to the cicatrix; the finger went past the os into a *cul-de-sac* on the left side; a bladder-sound could be passed three inches. The fistula was situated just in front of the os, rather more on the left than the right side, and of small size.

On November 15 anæsthesia was induced, and Dr. Heywood Smith, remarking that the case was now a simple one, its great difficulty having been overcome by previous operation, placed the patient in the semi-prone position, exposed the fistula with a duck-bill speculum, and having pared the edges, succeeded in bringing them into very perfect apposition by four silver wire sutures. The sutures were passed with small curved needles by means of Croft's needle-holder. The stitches were secured by Aveling's coils.

The catheter was passed at frequent intervals for several days. It was feared at first that the operation was unsuccessful, there being still incontinence of urine; but on December 13, on making a careful examination under ether, it was found, on injecting the bladder with milk, that the escape was not from the former aperture, which was completely closed, but from a small fistulous opening which had previously escaped detection, and which was situated on the right, behind a crescentiform band of cicatrix. Nitrate of

silver applied to this failed to cause it to contract, but on December 27 the application of the point of the thermocautery, followed by diligent catherisation for several days, was effectual in finally closing the fistula; and on January 22 she was discharged, being quite free from incontinence by day and night, the bladder holding six ounces of urine.

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Medical Times and Gazette.

SATURDAY, MARCH 2, 1878.

METROPOLITAN WATER-SUPPLY.

As the *Times* says, it is hard to get the public to take a keen and active interest in the question of the London water-supply. It behoves us all the more, therefore, as medical men, whose duty it is to enforce on others the paramount importance of a good water-supply, to persist in what we have tried to enforce already by every mode in our power. This week we have to notice the waiting of the representatives of the water companies on Mr. Sclater-Booth, and the separate publication of what might be called the official scientific defence of the water companies by Dr. Tidy, who, in this matter, may be said to act for these companies.

In addressing the authorities of the Local Government Board, Mr. Samuda insisted, as was to be expected, that the present water arrangements were the best possible, or if they were not the best possible, they were rapidly becoming so; that there was a great deal of money invested in waterworks, and that the Metropolitan Board of Works was not a proper body to have control of such gigantic interests as were these. In the greater part of his remarks Mr. Samuda directed himself against the Waterworks Purchase Bill, speaking entirely from the shareholders' standpoint. We only wish we could agree with him, for we have no intense faith or belief in the Board of Works; but we cannot shut our eyes to facts. The water companies have got a monopoly, and they desire to keep it. They supply certain districts, and in those districts there is no appeal from their behests. They supply in many instances dirty water, and charge what they like for it. Moreover, the supply is often in certain districts inadequate. What we want is this: a plentiful supply of good water at a fair rate—surely not too exorbitant a demand; and if the water companies will not give us that, we must try other means, and the only means we can see is to buy up the companies at a fair rate.

Really, as it seems to us, the Board of Works would go to Parliament with a much better grace if they did not introduce along with their Purchase Bill their Bill for a new supply. The objections to this scheme are so numerous and so strong, that it will, we expect, hardly prove viable. In the first place, the present supply is such that, with due care, it may be made perfectly sound and satisfactory. In the second place, it has not been proved that the proposed supply of water would be forthcoming, certainly not without injuring the water-supply of other districts. And this being so, we can hardly expect that Parliament will look with kindly eyes on what we might term the conjoint water scheme. Nevertheless, the malfeasances of water companies have been so serious and so numerous, that Mr. Samuda was surely laughing in his sleeve when he gravely asked Government to negative by their majority the second reading of the Water Purchase Bill. This would of course be to negative the principle—which we are very far from wishing done. We think the whole thing had better be, as indicated by Mr. Sclater-Booth, well beaten out in committee. Meanwhile, if the companies were wise, they would see to their water being well filtered and duly supplied, and would rather diminish than increase their rates, for assuredly any increase of income thus obtained will not avail them when settling-day comes.

There is a curious little book, entitled "The Praise of Drunkenness," not along ago republished, along with some other admirable works of the same antiquity, by Mr. Pitman, Paternoster-row. The name of this little book suggested to our mind one which would seem well to befit Dr. Tidy's work on the London Water-Supply: it might be called "The Praise of Dirty Water." This contribution on the part of Dr. Tidy to the present discussion consists of the regular analysis of all the water supplied by the London water companies, as conducted and published by Dr. Letheby and himself during a period of ten years, together with certain facts, figures, and comments of his own. There are a good many points in it deserving of notice, but, looking at it in the aspect above indicated, the following is at least interesting:—

"And here, then, I venture to state broadly—and the analyses I now place before you justify me in the assertion—that the water supplied to London, the healthiest city in the world, is as excellent in quality as it is liberal in quantity. The Kent Company's water, although reported to be loaded with previous sewage contamination, is undoubtedly of excellent quality; nevertheless, although I have most diligently considered and compared the death-rates, and also, as far as possible, the causes of death of different parts of the metropolis supplied by the Thames water, the Lea water, and the water from the chalk wells of the Kent Company respectively, I have failed to discover any differences worth noting in the death-rates, or any evidence whatsoever that any special class of disease has been prevalent from drinking the waters of the Thames and Lea, or absent from the use of the chalk water. Indeed, what differences exist are in favour of the Thames and Lea waters, over that of the chalk wells. It has, I know, lately been publicly stated that at Millbank Prison diseases were caused by the prisoners drinking Thames water, which disappeared when water was supplied to the prison from wells. This statement is contrary to fact. The truth is, Millbank is, and has been from 1874, supplied by the Chelsea Water Company, since which time the medical officer has yearly reported on the excellent health of the prisoners. I am,

therefore, fully prepared to endorse the high opinion entertained of the wholesome quality of the water supplied to London, as expressed in the reports of the Scientific Commission of 1850, the Select Committee of the House of Commons of 1867, and the Royal Commission on Water-Supply in 1869—all specially appointed to investigate the quality of the water supplied to the metropolis. Further, there is clear evidence that the quality of the Thames water as supplied by the companies has during the past few years been gradually improving—due probably to increased care in filtration. If, therefore, in 1867 the Select Committee of the House of Commons were, as they reported, 'satisfied that both the quantity and the quality of the water supplied from the Thames is so far satisfactory that there is no ground for disturbing the arrangements made under the Act of 1852, and that any attempt to do so would end in entailing a waste of capital, and an unnecessary charge upon the owners and occupiers of property in the metropolis,' *à fortiori* they would be satisfied now."

We should be the last to undervalue the returns which we have periodically for many years published; and we are not at all inclined to quarrel with the companies save on the grounds indicated. But we think they have had their day; and it would certainly be far better to have the whole management of London water-supply centred in one responsible body, instead of in the hands of many with one common object—making money.

THE NEW ANTISEPTIC.

A RIVAL to carbolic acid has certainly been discovered in thymol, the essential ingredient of oil of thyme, which is prepared either by treating the oil of thyme itself with a strong alkaline solution, skimming off the thymene and cymol, which separate and rise to the surface, and precipitating the thymol which remains in solution with hydrochloric acid; or else (and this appears to be its most common commercial source at present) by distilling the seeds of *Ptychotis ajowan*—an East Indian umbellifer, which contain from 5 to 6 per cent. of their weight of this body. Thymol was discovered, according to Lewin, in 1719, by Caspar Neumann. Its chemical properties were first examined in detail by Leonard Doveri and by Lallemand; and its antiputrescent properties were first distinctly pointed out by Bouillon and Paquet of Lille in 1868, though they only used it to deodorise unhealthy wounds, and did not attribute any antiseptic properties to it in the present surgical sense of the word. These properties were first definitely recognised, in 1875, by Dr. L. Lewin of Berlin (*Centralblatt Med. Wiss.*, No. 21, 1875, and *Virchow's Archiv*, Band lxv., s. 165), and by Husemann and Valverde (*Archiv für Exper. Path.*, Band iv.). Lewin, who worked in Professor Liebreich's laboratory, showed experimentally that solutions containing one part thymol per 1000 absolutely arrested saccharine fermentation; and that they powerfully retarded lactic fermentation, and checked various processes of decomposition, even when used in relatively small quantities. Lewin also first pointed out the comparative harmlessness of thymol internally administered; the absence of digestive disturbance after taking it, and its effect in checking abnormal fermentation in the stomach. He further directed public attention to the probable future of the drug as an antiseptic. Husemann's experiments, which were chiefly made on rabbits and frogs, went to show that thymol is *ten* times less poisonous to the organism than carbolic acid, and that hence in the quantities ordinarily used for antiseptic purposes it may be considered as entirely innocuous. He further showed that thymol is a far more powerful antiseptic than carbolic acid, that its local application to the skin either as such or in saturated solutions had no irritant effect whatever, and that in animals poisoned by excessive doses gastric erosions never occurred as they do in carbolic acid poisoning, but that, on the other hand, nephritis with albuminous urine and extensive fatty degeneration of the liver are nearly constant phenomena in these cases.

At present it is as an external antiseptic that thymol claims the earnest attention of the followers of Lister. The success which has attended its introduction into Professor Volkmann's clinic at Halle, as described by his assistant, Dr. Hans Ranke, in No. 128 of *Volkmann's Sammlung Klinischer Vorträge*,(a) is striking in the extreme, and we propose here to bring before our readers the method employed and the results obtained. In the main the general features of Lister's antiseptic dressing were retained by Ranke, thymol being substituted for carbolic acid with the single exception of the ligatures used for arresting hæmorrhage and for deep sutures, which were always made with carbolised catgut. Since thymol is not entirely soluble in water in the proportion of 1 to 1000, the following formula was, after the first few trials, exclusively used for antiseptic purposes:—Thymol, 1 gramme; alcohol, 10; glycerine, 20; water, 1000 grammes. This "thymol solution," as it may be called for brevity's sake, has no corrosive action on instruments immersed in it, and in this respect is superior to solutions of carbolic, and still more of salicylic acid. It causes, however, when sprayed over the hands of the operator, a lively sensation of burning, accompanied with redness of the skin; but otherwise has no irritant qualities. Anæsthesia of the skin and epidermic desquamation, both of which are liable to occur under the use of carbolic acid, were never once observed in the case of thymol, nor did it exert any irritant action on the respiratory organs. The gauze bandages used for Lister's dressing were composed of the following materials:—1000 parts of bleached gauze, 500 of spermaceti, 50 of resin, and 16 of thymol, spermaceti being substituted for paraffin as a non-irritant, its object, however, being the same—namely, to retard the evaporation of the somewhat volatile thymol. In these proportions the gauze is extremely soft and pliant, it can be accurately adapted to a wound, and "sucks up" (to use Dr. Ranke's own expression) "blood and the secretions of the wound like a sponge." Owing to the impregnation of its fibres with spermaceti and resin, they are unable to absorb the fluid, and as the latter distributes itself only in the meshes of the tissue, the bandage retains its elasticity in a high degree, even when thoroughly soaked. This thymol-gauze was directly applied to the wound, no "protective" being necessary, owing to the non-irritant quality of the thymol. Between the seventh and eighth external layers a piece of guttapercha paper previously washed with thymol solution was inserted in place of the ordinary hat-lining, and the whole was firmly fixed to the body with a gauze roller soaked in thymol solution, and tightly drawn, so as to seal up the parts almost hermetically against the outer air. Under these conditions very little thymol evaporates, and even at the end of eight days a very strong smell of thyme is perceived on removing the bandage. The thymol-gauze should be kept in stock wrapped in parchment paper, which should only be opened at the moment of using. The bandage must be removed and renewed as often as the least trace of secretion reaches its surface; but this necessity arises very much less frequently than in the case of Lister's carbolic dressing. In no instance, however, was the same dressing allowed to remain unchanged more than eight days. On those parts of the body to which it was difficult to adapt the dressing, the edges of the bandage and any other

(a) "Ueber das Thymol und seine Benutzung bei der antiseptischen Behandlung der Wunden."

apparently weak points were strengthened with strips of benzoic wool.

On the whole, from the summer of 1877 up to January 23, excluding a number of slight injuries and trifling operations, thymol had been used in fifty-nine operations in Volkmann's clinic with the most excellent results. In the first forty-one cases the secretion was serous in only eight, and purulent in two. In the remainder there was absolutely no secretion—that is to say, when the bandage was removed, the skin of the protected parts was found completely dry, and not a drop of liquid could be squeezed out of the layers of gauze. This first series of thymol dressings includes cases of amputation of the mamma, of the arm, of the foot by Chopart and Pirogoff's operations, three amputations of the leg, four excisions of the elbow, two radical operations for hernia, and seven radical operations for the cure of hydrocele by excision. The sixteen severe operations treated with thymol during January of the present year include, *inter alia*, a gunshot wound of the knee-joint treated by drainage of the joint, a secondary amputation of the thigh, an excision of the hip, and also one of the knee-joint for scrofulous caries, and an excision of the shoulder in an old case of dislocation of the humerus complicated with fracture, in all of which the results obtained were equal to those of the first series. Lastly, we should mention the successful termination of three ovariotomies performed by Professor Olshausen, and treated throughout on antiseptic principles by means of thymol dressings.

To sum up Dr. Ranke's observations on the use of thymol, we may say that nearly all the major operations of surgery have been treated by him successfully by the thymol modification of Lister's method; and although at present the introduction of thymol offers no hope of any relaxation of the minute attention to details which a successful carrying out of this method invariably necessitates, yet since the secretion from wounds treated by thymol is much less, and their rate of healing much quicker, than when carbolic acid is used, thymol deserves the preference over the latter, the results obtained with it (antiseptically considered) being, to say the least, equally good. An additional advantage of thymol over carbolic acid consists in its innocuous effects on the system at large, and in its non-irritant action on parts to which it is locally applied. Thus, on the one hand, permanent antiseptic irrigations with thymol solution (1 per 1000), which cannot be carried out with carbolic acid for any length of time, have been repeatedly and successfully used in Professor Volkmann's clinic; and, on the other, the redness of the skin, vesication, and eczema produced by carbolic acid dressings have entirely disappeared on the substitution of thymol for it.

At present one kilogramme of thymol costs, in the German market, sixty marks (£3), whereas carbolic acid costs a little more than three shillings per kilogramme, so that, at first sight, the expense of thymol dressing appears to be very great. If, however, as Dr. Ranke clearly shows, we take into account the reduction in the number of bandages rendered possible by the use of thymol, owing to the extremely small amount of secretion induced by the new antiseptic, the difference in price is much more than compensated for. Thus, to give a single example of the superiority of thymol, we may mention the fact that two cases of diffused ganglion of the palm, treated by incision, only required two changes of bandage instead of eight or ten, as they would under the ordinary Lister's treatment.

The internal use of thymol in various diseases has at present scarcely answered to the expectations which were formed of it. Experimented with on a large scale by Coghen of Cracow, it only relieved the symptoms in a case of chronic gastric catarrh accompanied with fermentation; whereas, in a number of cases of acute and chronic gastric and intestinal catarrh, in intermittent fever, chronic cystitis, typhoid fever, pneumonia, pulmonary phthisis, and chronic bronchitis, it completely failed. As an antipyretic, in doses of two to four grammes (Baelz), its action is also far inferior to that of salicylic acid: hence, for the present, at any rate, it is for its valuable antiseptic properties that thymol deserves to be attentively studied; and there can be no doubt that Dr. Ranke's experience offers every encouragement to antiseptic surgeons to introduce it largely into their practice.

THE WEEK.

TOPICS OF THE DAY.

THE abuse that may attend the out-door licensing system has lately attracted, or has been made to attract, general attention; and last week an influential deputation representing the licensing magistrates of Liverpool, Manchester, Salford, Sheffield, West Bromwich, Bradford, Bristol, Dudley, and the Manchester division of the county of Lancashire, waited on the Home Secretary to present memorials from the different localities, praying the Government to take into consideration the necessity for amending the Licensing Act of 1874 with reference to outdoor licences. The deputation was introduced by Mr. Chamberlain, M.P., who was accompanied by Sir Thomas Bazley, Serjeant Simon, and other members of the House of Commons. The former gentleman explained that the licensing justices desired to have the same discretion with regard to outdoor licences which they possessed with reference to the publicans' indoor licences. Under the present system it appears that, in accordance with the 31st clause of the Act of 1874, the possession of a strong-beer dealers' wholesale licence confers the right to demand of the magistrates an out-door licence, which practically they have not the option of refusing; and it is a fact that during the last four years numbers of these licences have been granted to grocers, artisans, small shopkeepers, and even pawnbrokers. As many as 200 of such licences were granted last year in Birmingham alone, and the magistrates are of opinion that the evils arising from this system should be remedied by a suspensory Bill to prevent further granting of them, until the matter, which is now before the House of Lords' Committee, has been reported on. Mr. Cross promised that the subject should receive the attention of the Government; there had been an inquiry into this special point in Scotland, and the results were expected to be made public shortly, meanwhile he would bring the whole matter to the notice of his colleagues. Almost at the same time that this deputation waited on the Home Secretary, the Committee of the House of Lords, appointed to inquire into the cause of the increase of drunkenness, held a meeting, and Dr. Richardson was examined, chiefly as to the effect of alcoholic drinks on the human body, and their results on the brain of those who indulged in them too freely.

The danger of the indiscriminate use of chloral was painfully illustrated at an inquiry held before Dr. Hardwicke last week as to the death of Mrs. Tyler, of Argyll-square. The deceased had suffered for many years from spinal disease and paralysis, and took chloral night and day. Her husband administered it, and there were always two bottles by the bedside, one containing syrup of chloral, and the other a solution of one part of the syrup and five parts of water. Both bottles were identical in size and shape, and neither had a label. Mr. Tyler gave his wife a dose of the solution, and at midnight she awoke in pain and asked for a strong dose. This he gave her, but the lamp being out, he believed that he administered a dose from the wrong bottle. In the morning he found that his wife was dead.

Dr. Dingley said that the cause of death was syncope caused by an overdose of chloral; the deceased had probably taken about eighty grains. A verdict of "Death from misadventure" was returned, but Mr. Tyler was censured for administering chloral year after year without medical sanction, for having two bottles alike in size and without labels, and for carelessness in giving the dose.

A very important addition has been made to the hospital accommodation of the metropolis by the opening of a new workhouse infirmary for the St. George's Union, situated in the Fulham-road, West Brompton. Last week, Mr. Sclater-Booth, M.P., and a number of noblemen and gentlemen, attended to formally open the buildings, and the President of the Local Government Board congratulated the authorities of St. George's on the way in which they had employed the powers conferred on them by recent legislation, at the same time expressing a hope that other unions would follow such an excellent example. The total cost of the buildings, including the price paid for the site, has been £105,000. The infirmary will afford accommodation for 830 inmates, and is the largest establishment of the kind in London; it contains seven pavilions, each of which has four wards, and each ward about twenty-eight beds. The building was generally admitted to be admirably adapted for the purpose for which it was designed.

The second annual meeting of the Metropolitan and National Nursing Association, which owes so much to the patronage and exertions of the Duke of Westminster, was recently held at Grosvenor House, the Duke himself presiding. The report stated that the year's receipts amounted to £6051, the expenditure having been £3624. During the last eighteen months 1573 cases have been nursed by the Association; of these 852 have recovered, 178 have been transferred to different hospitals, convalescent homes, and infirmaries, 233 have died, and the remainder were, on January 1, either being nursed, or had been removed from the books as unfit cases for further nursing. It will be remembered that the object of the Association is to supply the want of trained nurses able and willing to visit the homes of the poor both in the metropolis and in the country, and generally to bring the art of nursing more prominently under public notice. The Association possesses a central home in Bloomsbury-square, and branch homes at Holloway and Paddington. During the year 200 ladies have applied for admission to the central home, and, in addition to the thoroughly qualified nurses employed by the Association, three ladies are now undergoing a course of training in the school attached to St. Thomas's Hospital. Lord Shaftesbury, after commenting on the excellent work done by the Association, moved the adoption of the report, and the Bishop of Peterborough, who also warmly approved the objects of the charity, seconded it.

A Board of Trade inquiry has been opened at Falmouth by Dr. A. B. Harris, Medical Inspector of Seamen, to examine into the cause of scurvy, and to report on the state of the provisions on board the ship *Warrior*, of Swansea, from Pabellon de Pica, which arrived at Falmouth on the 17th ult. The investigation has been ordered in consequence of complaints made to the Board of Trade by some of the crew. Dr. Harris has given a certificate to one of the seamen that he is incapacitated by scurvy from doing further duty in the vessel. From what has already been gathered, it appears that the water obtained at Pabellon became contaminated by the cargo, which consisted of guano, and the crew had to depend upon the rain-water they could collect for drinking purposes. Dr. Harris has concluded his inquiries, and will furnish his report to the Board of Trade. The vessel has been ordered to proceed to Glasgow.

Every real check which can be placed on the growing habits of intemperance amongst the lower classes must be welcomed as a step in the right direction; and it is satisfactory to be able to record that at the present time there are twenty-nine cocoa-rooms established at Liverpool. At a recent meeting of the Company which works these establishments, a dividend at the rate of 10 per cent. per annum was declared, which may, we hope, be considered a most telling proof of the success of the undertaking. It was further determined to open other places of a similar kind, and to increase the capital of the Company to £40,000. A wish was expressed at the meeting that the houses should be opened on Sundays, but the directors refused to yield this point, as they rather sought to close public-houses of every description on Sundays. It was mentioned that, notwithstanding the depression of trade, the takings this year, up to the present time, were at the rate of £47,000 per annum.

A correspondent writing to our contemporary the *Standard* asks if nothing can be done to clear away the orange-peel from our pavements. Last week he saved a child from being crushed to death by a coal-waggon; a day or two afterwards he noticed a lady with a child in her arms narrowly escape serious injury—both cases arising from orange-peel thrown on the pavement. When resident some years ago in one of our largest commercial cities, he had an accident through the same cause; in this case he applied to the magistrates, and demanded to know whether the Local Act would not provide against "throwing refuse on the pavement." The subject was taken up, and the next day the whole city was placarded with bills notifying a penalty of ten shillings, or seven days' imprisonment, for the offence. On the following day not a sign of orange-peel was to be seen. Something of this kind might surely be tried to mitigate the nuisance in the metropolis.

Some extraordinary facts were elicited at an inquest held last week at Lincoln, on the body of a chambermaid employed at the Spread Eagle Hotel there, who died of small-pox under peculiar circumstances. She had entered the situation three weeks before, and a fortnight afterwards became ill and kept her bed. The landlady and her children were suffering from what a neighbouring chemist, who attended them, pronounced to be chicken-pox, and he saw the deceased and said her complaint was of the same nature. Eventually, on the Monday evening, Mr. Joseph Goodall, surgeon, was summoned; he at once saw that deceased was suffering from malignant small-pox, and that she was not in a fit state for removal. This gentleman deposed in his evidence that the want of proper attention and food, and the exposure to cold by rolling out of bed on to a plaster floor (the deceased having been found cold and dead, lying on the floor), would accelerate death, but that when called in he considered the case to be hopeless. Deceased might, perhaps, have got better had she been kept warm. He told the people of the hotel to send to his surgery for medicine, but no one came. Deceased made no complaint, but she could scarcely speak, and the gravity of the case was not appreciated at first by the landlady. Mr. Brook, surgeon, also gave evidence. It was shown that deceased was found dead on the floor on Tuesday morning. The jury returned a verdict of "Death from small-pox, accelerated by the want of proper nursing, and by accidental exposure to cold, but that no wilful neglect was attributable to those who had charge of the deceased." On the following Thursday morning, on searching the box of the deceased, a two months' fœtus was found, wrapped in a sheet, and it is presumed that she must have had a miscarriage, and that, on endeavouring to return to her bed, she fell from weakness, and there lay till she died. There

appears to be little doubt that small-pox was brought from London in the first instance by the son of the landlady, who had just returned from a visit to the metropolis; but neither coroner nor jury appear to have thought that there was anything censurable in the "medical" attendance of the "chemist and druggist." The case may be commended to the notice of both the Medical Defence Association and the Council of the Pharmaceutical Society.

The Faversham Town Council has at last decided, by seven votes against three, to rescind the resolution previously arrived at, to make no appointment of a public analyst. The Local Government Board had previously addressed a third letter to the Council on the subject, and, as the most sensible of its members saw no reason why the benefits of the Act should not be extended to Faversham, the decision now arrived at is the result of their representation.

The Hospital Sunday and Saturday collections at Manchester, which have just taken place, do not, unfortunately, compare favourably with previous years. The accounts have not yet been fully made up, but it is feared that the former will show a deficiency of at least £1000, and the latter of £500. There is, perhaps, nothing surprising or unexpected in this result: the present depression of trade, and the great amount of distress which exists in the manufacturing districts, are sufficient to account for any diminution in the fund which may have to be announced; but we trust that these untoward circumstances are only to be looked upon as temporary, and that another year may witness a return to the handsome sums which the people of Manchester have been in the habit of subscribing towards the support of their hospitals.

If any of our readers will take the trouble to look at page 240 of our first volume for 1877, they will find that the list, there published, of the gentlemen who succeeded in obtaining appointments in her Majesty's *British* Medical Service, at the examination held in February of that year, was headed by Mr. J. J. Mullen. At page 157 of our second volume for the same year they will find the list of candidates who were successful at both the London and Netley examinations, having passed through a course of instruction at the Army Medical School, Netley, and this list also is headed by Mr. J. J. Mullen, who further gained the distinction of the Herbert Prize; and in the list we to-day publish of the successful candidates for appointments in the *Indian* Medical Service, at the examination held on February 11, the same gentleman again occupies the first place, for we learn on inquiry that the Mr. Mullen who now has entered the Indian Medical Service *is* the Herbert Prizeman and late Surgeon in the Army Medical Department. He did duty for a few months at Aldershot, we believe, and then resigned his commission, and presented himself as a candidate for the Indian Medical Service. Now, as the Secretary of State for War has awoke to the knowledge of the fact that the state of the Army Medical Department, *quâ* the paucity of candidates for vacancies in it, is "very unsatisfactory," we would submit this little history for his consideration, as an additional and very telling proof of the unpopularity of the British Medical Service. Mr. Mullen is bent on a military-medical career. He enters the British Army Medical Service under the best possible auspices; he is the best man the Department have caught for a long time—the only Herbert Prizeman they have had, it is said. He may feel sure of consideration and such success as is possible. Yet no sooner is he actually on duty than he resigns, though only to enter another Army Service. We have no wish to make more of this than it deserves. Mr. Mullen may be a glutton at examinations, and only change for the sake of passing one or two more; or it may be that he chose to enter her Majesty's British Medical Service simply *pour passer le temps*, till he was old enough to compete for entrance into the Indian Branch; or there may be other reasons; but the fact remains, that the Army Medical Department could not retain him. We would further, without suggesting any reflection on Mr. Mullen, venture to ask—Is it quite fair that candidates at the first examination for the Indian should have to compete with a man who has already passed through the course of instruction at Netley?

PATHOLOGICAL SOCIETY OF DUBLIN.

At a meeting of the above Society, on Saturday, February 23 (Edward Hamilton, M.D., President, in the chair), Dr. W. J. Smyly showed a large ovarian tumour, removed by Dr. Atthill, Master of the Rotunda Lying-in Hospital, on the previous day, from a patient aged forty-nine, married thirty years, but childless. There was an abdominal swelling since Christmas, 1876, but during the past few months the tumour grew apace, so that the girth three inches below the umbilicus increased from thirty-three inches, last autumn, to thirty-eight inches. The tumour was extremely adherent, and contained scarcely any fluid contents. The patient sank in a few hours after the operation. The specimen was referred to a committee to report as to its nature. Dr. T. E. Little presented three specimens illustrative of the modes of union in intra-capsular fracture of the femur. Case 1, a woman, aged seventy. The accident happened long ago. The bone was light and atrophic; the cervix femoris was absorbed; so were the cartilages; and the true joint was obliterated. Slight osteophytic deposits had occurred. A new joint had formed. In Case 2, that of a man aged fifty-four, who had met with the accident at least six years before, strong fibrous union existed. A large gap anteriorly in the bone was filled with dense fibrous material. There were osteophytic growths also. Case 3 was especially interesting, for in it firm bony union had occurred. The fracture and the union were of great antiquity, the subject of the injury being a woman of advanced age. The bone was light, but cancellated tissue was thrown across the line of fracture. There were certain peculiarities in the case. Thus, the line of fracture was oblique, running down nearly to the trochanteric line; the lower fragment was laterally displaced backwards, and an osseous outgrowth passed up towards the head of the femur. There were traces of a fracture through the femoral condyles, to which second injury the above-mentioned peculiarities may have been due. The President suggested that the obliquity of the cervical fracture may have aided the occurrence of bony union. Professor Bennett attributed bony union to the impaction of the lower into the upper fragment. Dr. J. W. Moore showed a specimen of cancer of the liver from the body of a woman, aged from forty-five to fifty years, a cook by occupation. She enjoyed good health until November 4, 1877, when a shivering fit ushered in a protracted intermittent or pseudo-intermittent fever. In it the temperature at first ranged from 105° to 97° in the course of a few hours. The patient had never been out of Ireland. There was no hepatic enlargement, nor was the spleen considerably or permanently enlarged. After an unsatisfactory convalescence, she noticed a fulness in the right hypochondrium, and physical examination revealed the presence of a large hepatic tumour, which was decided to be of a cancerous nature. There was never any jaundice, but towards the close of her life an extensive ascites formed. The right pleura also became so distended with fluid as to cause almost complete collapse of the right lung. This was the immediate cause of death. The liver was enormously enlarged, and studded with masses of encepha-

loid carcinoma. The peritoneum was chiefly healthy, so were the stomach, intestines, uterus, and ovaries. The mesentery and mesocolon abounded with infected glands, and the pancreas formed with the retro-peritoneal glands a vast mass of disease, which pushed the liver and stomach forward. The kidneys were healthy, though congested. The spleen was slightly enlarged. The gall-bladder was involved in a mass of new growth. The Rev. Professor Haughton then showed the lungs of an African lioness, which died after two months' illness in the Zoological Gardens, Phœnix-park, of what was apparently pulmonary tuberculosis. Dr. Haughton said that the animals usually died of a peculiar and limited lobular pneumonía, either primary or symptomatic of *Milzbrand*, and accompanied by an extensive suppurative nephritis.

ROYAL COLLEGE OF SURGEONS.

Professor Parker, F.R.S., will bring his course of lectures on the Morphology of the Batrachia to a close this day (Friday), and will be succeeded on Monday, March 4, by Professor Flower, F.R.S., who will deliver nine lectures on the Comparative Anatomy of Man, in continuation of his course of last year. The present course will be devoted to the consideration of the physical, and especially the osteological, characteristics of the more marked types of mankind, illustrated by specimens from the Museum (of which the distinguished Professor is the able conservator), and treated in the order following, the account of the anatomical characters of each race being preceded by a short description of its history and social condition:—In the first two lectures a recapitulation of some of the principal methods of investigation in craniology (treated of in detail in the last course) will be given, illustrated by a series of fifty Australian and an equal number of European skulls:—1. The Australians; 2. The Tasmanians; 3. The natives of the Melanesian Islands; 4. The Papuans; 5. The Negritos of Southern Asia, especially the Andamanese; 6. The Polynesians; 7. The Malays; 8. The people of Eastern and Northern Asia, Burmese, Chinese, Japanese, Mongols, Ainos; 9. The natives of the American continent. The races of Africa, Western Asia, and Europe will form the subject of a future course. The course will be concluded on Friday, March 22; and Professor Spencer Wells will, some time in June (immediately after the examinations) commence his course.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

At the ordinary meeting of the Association, held on February 20, S. J. A. Salter, F.R.S., President, in the chair, Mr. Maunder showed a benign tumour of the lower jaw, the size of an orange, involving rather more than one-half of this bone. The operation was performed within the mouth—a method introduced and practised by Mr. Maunder on several occasions, so as to avoid section of important vessels and nerves. In this way no external scar results—a great desideratum in the female. Mr. Isidor Lyons read a paper "On the Treatment of Compound Fractures of the Lower Jaw." After remarking that the principle objects to study in the treatment of fractures in general were—(*a*) that union should take place between the fragments; (*b*) that the fragments should be placed in apposition to each other; (*c*) the avoidance of deformity, by which is meant that such a displacement of the fragments of a bone has taken place that it does not present the same appearance as it did previously to the fracture. Mr. Lyons stated that, with the advance of art and science, dental surgery had made rapid strides during the last few years, and especially with regard to the formation of inter-dental splints, which should be simple in construction and easy of adaptation. There were only two splints he would allude to—that of Mr. Hammond, consisting of a single iron wire so formed as to fit round all the teeth, and a thin one passed through, entwining both teeth and outer wire, a pair of ordinary pliers being the principal tool required in its manufacture. Its adaptation is easy, and very effective in cases of single fracture. The other apparatus was Mr. Gunning's splint, which is also very ingenious, although much more elaborate, and specially adapted for those cases where there are double and triple compound fractures with great displacement. An account of it is given in Mr. Christopher Heath's work on the Jaw. The author then proceeded to relate eight cases of fracture of the lower jaw, four of which he had treated with Hammond's splints, which had these advantages over all others at present in use: it gives complete immovability to the fragments; it is small in bulk; the mouth can be opened, permitting of cleanliness (which is extremely important) and also the mastication of soft food; bandages can be dispensed with; and an in-patient is converted into an out-patient, and may attend to his work if necessary. In conclusion, he remarked, in the impressive words of Mr. Coleman, that "to apply a guttapercha splint and four-tailed bandage is to perpetuate a deformity"; and that in most cases it was an advantage to allow a short period of rest to a patient before adopting active measures to reduce a fracture. A discussion ensued, in which the President, Mr. Maunder, Mr. Bryant, Mr. Coleman, Mr. Napier, Mr. Moon, and Mr. Ranger took part. Mr. Lyons briefly replied.

LECTURES BEFORE THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

The fourth lecture of this year's course of scientific lectures was delivered in the New Hall of the College on Monday, February 25, by Dr. John Mallet Purser, King's Professor of the Institutes of Medicine. The principal facts which are known as to the functions of the different tracts of white fibres in the spinal cord were stated. The difficulties and uncertainties which beset experimental investigation were pointed out. The results of the more important researches were detailed—particular notice being given to those recently carried on at Leipzig, as being better conceived and more perfectly executed than the experiments of earlier physiologists. The hyperæsthesia which follows certain limited lesions of the spinal cord was stated to be probably due to destruction of inhibitory fibres. The knowledge to be derived from the facts of human pathology was then considered. It was shown that as yet even the best-defined diseases, such as posterior or lateral fasciculated sclerosis, were able to throw very little light on the functions of the different parts of the medullary cortex. In conclusion, an attempt was made, from a consideration of all circumstances, to trace the course of sensitive and motor impressions through the cord. It was shown that, while we possessed a fair amount of knowledge as to the paths of motor impulses, many facts existed which made sensitive conduction still quite inexplicable. The next two lectures, concluding this year's series, will be on "The Present State of our Knowledge of the Intimate Pathology of Contagion and its Relation to the Prevention and Treatment of Zymotic Diseases." They will be delivered, on March 4 and 11, by Dr. Thomas Wrigley Grimshaw, Fellow and Censor of the College, Diplomate in State Medicine of Dublin University, Physician to Steevens's and Cork-street (Fever) Hospitals.

THE LIVERPOOL SEAMEN'S DISPENSARY.

The medical officers of the Liverpool Seamen's Dispensary—Messrs. F. W. Lowndes, M.R.C.S., and Armand Bernard, M.B.—have published a supplementary report of the results of the first year's working of the Dispensary, which is eminently satisfactory. The practice of the Dispensary is

limited to seamen suffering from venereal diseases, and it was instituted with a view of rescuing the men from the ignorance and extortion of a large class of advertising quacks, and low chemists and druggists, who preyed upon this particular class of society. The Dispensary is open from 3 to 5 p.m. each day except Sunday—the hours most convenient for the attendance for seamen. During the year 847 patients have received advice and medicine, and it is confidently asserted that when the institution becomes more widely known the applicants will be much more numerous. The medical officers point out that this, and any kindred institutions which may hereafter be opened, should be warmly patronised by owners of merchant vessels, as venereal diseases are a prominent cause of invaliding in the merchant service, and men continually proceed to sea suffering from them to such an extent that they have to be discharged at the first port; their work, meanwhile, falling upon that portion of the crew not similarly incapacitated. A medical examination of seamen previous to a vessel's departure is suggested; and though great difficulties must attend any compulsory regulation on this subject, much might be done by voluntary action on the part of the leading shipowners. It is satisfactory to be able to record that one of the objects of the Dispensary has already, to a very considerable extent, been realised; and the number of the patients treated represents a very large proportion saved from the clutches of the self-styled doctors located within a short distance of the Sailors' Home. Dispensaries of this nature would be well worth the countenance and support of the local authorities of all large seaport towns.

METEOROLOGICAL SOCIETY.

The usual monthly meeting of this Society was held on Wednesday, the 20th inst., at the Institution of Civil Engineers (Mr. C. Greaves, F.G.S., President, in the chair), when Dr. Tripe read a paper on "The Winter Climate of some English Seaside Health-Resorts." The places selected were Scilly, Torquay, Penzance, Guernsey, Barnstaple, Ventnor, Llandudno, Ramsgate, and Hastings, and the climatic features of each were compared with those of London. The results of this discussion may be briefly summed up as follows, viz.:—The mean daily winter temperature of these seaside places, and especially of those situated on the coast of Devon and Scilly, is higher than at London; the mean daily maxima and minima are also higher, and especially the latter, so that the daily and monthly ranges of temperature are smaller; the mean humidity is less; the general direction of the wind is about the same; but the number of rainy days and the rainfall are greater at the seaside. As regards the wind, therefore, the chief point to be especially noticed is the amount of shelter afforded by high land, as at Ventnor, and especially of protection against the stormy and cold winds which ordinarily prevail at the end of February and in March. The soil also should be considered, as heavy rains at gravelly and chalky places are not so objectionable as on clayey ground. The discussion on this paper was adjourned until the next meeting, which will be held on March 20. The following were elected Fellows of the Society:—W. C. Baker, W. Berridge, W. M. Burke, Rev. I. A. L. Camphell, Prof. J. Eliot, Lieut. C. S. F. Fagan, C. H. Holden, Prof. H. J. S. Smith, Capt. W. Watson, C. Woollett, and Miss E. A. Ormerod.

CLINICAL SOCIETY.

There was an unusually large attendance of members at the last meeting, held on Friday, 22nd inst., attracted, no doubt, by the excellent papers that were down for discussion. Dr. B. Yeo's and Mr. Lister's paper, which was at the bottom of the list, was, nevertheless, called on first; and, as might have been expected, it proved to be an exceedingly interesting one, and took up almost the whole evening. The case was one of large multiple papillomatous growth in the larynx; Mr. Lister removed it by the trachea—doing, in fact, laryngo-tracheotomy. Owing to the extent of surface implicated, it was necessary to entirely remove the vocal cords, together with the diseased mucous lining of the larynx. The man completely recovered as regards this operation; but he is also the subject of intra-thoracic aneurism. In spite of the operation, and the absence of the organs which we have hitherto been accustomed to regard as essential to vocalisation, the man can talk quite distinctly. The *timbre* of his voice is necessarily much altered, but there is not the slightest difficulty in hearing and understanding what he says. Indeed, he talks as though he were suffering from catarrhal laryngitis. Not the least interesting part of Mr. Lister's paper was the physiological explanation of this power of speaking after removal of the vocal cords. He related an experiment undertaken some years ago, with a view of explaining the stertor during chloroform narcosis. He found that it was due to the vibration of the aryteno-epiglottic folds. On examining this patient's larynx, too, during phonation, it is found that the voice is produced by this means. The President remarked on the interest of this discovery, and compared it with the satisfaction—not unmingled with astonishment—which surgeons all felt on finding that patients whose tongues had been removed were nevertheless able to speak almost as well as ever. It is of further interest also: for if, by such an operation as this, cancerous growths can be effectually removed from the larynx, there will be less need of the severer proceeding, extirpation of the larynx, which is now beginning to be practised.

APPOINTMENTS AT ST. GEORGE'S HOSPITAL.

Mr. Henry Lee, who was for fifteen years one of the Surgeons to St. George's Hospital, lately resigned that office, and at a special court of the governors has been elected one of the Consulting Surgeons. At the same meeting Mr. Thomas Pickering Pick, F.R.C.S., the Senior Assistant-Surgeon, was elected full Surgeon, and Mr. E. C. Stirling, F.R.C.S., was elected to the vacancy thus created among the Assistant-Surgeons. This is the first time that any election on the staff of this Hospital has been made under the new law, by which the members of the professional staff are elected by a special mixed committee of the staff and of governors, annually appointed for the purpose, instead of by the governors at large. The profession, the governors of the Hospital, and the public, are to be congratulated on this change in the mode of electing the members of the professional staff. The candidates for the appointments escape all the expense—sometimes grievously great—and the undignified labour and annoyance of having to canvass the whole body of governors; the governors are relieved from the worry of having to select from among candidates as to whose relative merits they are wholly incompetent to decide, and from the importunities of their respective friends and supporters; and the public have the satisfaction of knowing that the claims of candidates will be carefully and quietly considered by really competent judges. It is to be hoped that the other public hospitals will shortly see their way to following the excellent example set by St. George's.

THE REPORTED OUTBREAK OF TYPHOID FEVER AT EDMONTON.

Some statements have recently appeared in the daily papers announcing a severe outbreak of typhoid fever at Edmonton, and the attention of the Local Government Board has been called to the subject. The Medical Officer of Health for the

district has, however, written to qualify the reports which have been circulated. He says that, however much the parish of Edmonton in one particular locality has been epidemically attacked, he must emphatically deny the statement that he is attending twenty-five cases of fever in various localities. There have not occurred, even during the past twelve months, thirty cases of pure typhoid fever in that locality; and as the inhabitants of the houses in Angel-terrace are nearly all attended by himself, he is competent to deny the assertion. The statements that all this has occurred "within ten days," and that several cases had proved fatal, he declares to be an entire fabrication, and asserts that only four fatal cases occurred in the whole of Edmonton, and these not within the ten days, and only two of them in Angel-terrace. The only zymotic disease now prevalent in the parish is measles. The local Surveyor and Inspector of Nuisances also reports that most of the cases of fever have occurred in a row of buildings called Cuba-cottages, and that, although complained of, the water from the well supplying these cottages has been found to stand the test of purity beyond many, and equal to any, in the parish. The only well in the immediate neighbourhood which can be polluted by sewage is one supplying three cottages; but this well is known to be unfit for domestic use, and was accordingly condemned some years since. To put all doubt aside, the Local Board have now ordered this well to be filled up. It is situate, however, on private property, and the Board have experienced some legal difficulty in dealing with it; but a peremptory order has been issued, and the work will be immediately executed.

THE SERVICES.

The following are lists of candidates who were successful for appointments as surgeons in her Majesty's British and Indian Medical Services respectively, at the examinations held in London on February 11. For the latter thirty candidates competed for twenty-six appointments; all were reported qualified:—

British Medical Department.

	Marks.		Marks.
1. J. Stevenson	1970	10. M. D. O'Connell	1385
2. A. J. Landon	1939	11. P. J. Dempsey	1372
3. J. W. H. Flanagan	1690	12. A. Harding	1355
4. W. L. Lane	1605	13. J. F. Dowman	1335
5. W. P. Feltham	1578	14. H. R. Cross	1305
6. K. S. Wallis	1535	15. A. S. W. Young	1305
7. W. Leah	1520	16. H. J. Noad	1245
8. J. L. Ritchie	1505	17. J. G. MacNeece	1225
9. C. Seymour	1390	18. J. J. Falvey	1205

Indian Medical Department.

	Marks.		Marks.
1. J. J. Mullen	2716	14. S. F. Bigger	1800
2. E. Cretin	2383	15. G. M. Nixon	1783
3. A. Duncan	2123	16. T. E. Worgan	1775
4. A. Hemsted	2011	17. J. J. Moran	1727
5. J. S. Bialc	2008	18. D. P. Warlikar	1726
6. G. A. Cones	2005	19. F. C. Smith	1695
7. G. F. Nicholson	1990	20. J. H. Earle	1615
8. T. H. Pope	1981	21. P. J. Damania	1610
9. R. Pemberton	1955	22. G. H. Bull	1580
10. G. S. Robertson	1900	23. W. A. Quayle	1580
11. D. A. Gomes	1869	24. C. U. Carruthers	1565
12. C. Monk	1848	25. H. Armstrong	1540
13. J. E. Walsh	1833	26. F. F. MacCartie	1525

THE ACTION OF DIURETICS.

According to Grützner (*Pflüger's Archiv*, xi., 370) there are two distinct modes by which the secretion of the kidney can be increased medicinally—(1) by raising the pressure in the arterial system generally, *e.g.*, by digitalis or strychnia; and (2) by directly influencing the secreting tissues of the organ, *e.g.*, by urea or nitrate of soda. If the blood-pressure in the arteries be lowered in rabbits or dogs by dividing the cervical portion of the spinal cord, and so destroying the controlling effect of the vaso-motor centre in the medulla oblongata, the urinary secretion almost completely ceases. If, however, urea or nitrate of soda be injected into the veins, there is a slight rise in the blood-pressure, and the kidneys recommence secreting under a pressure far below that at which they ordinarily secrete. The above drugs have the same effect if the blood-pressure is lowered by large doses of chloral hydrate or curare. This action of urea and nitrate of soda on the renal secretion appears to be of a "specific" character, and to be in some way connected with the function of the Malpighian tufts. It can be prevented by stimulating the medulla oblongata by electricity or by carbonic acid poisoning, and so raising the blood-pressure throughout the body; for this induces vaso-motor nerve spasm, contraction of the renal arterioles, lowered blood-pressure in the glomeruli, and arrest of the renal secretion, in spite of the presence of these diuretics in the blood—the proof that the glomeruli are involved being this, that previous section of the vaso-motor nerves of one kidney is followed by abundant secretion of urine when the blood-pressure is raised, while the other kidney scarcely secretes at all. It further appears from Grützner's experiments that digitalis and strychnia exert a peculiar influence on the renal arterioles, leading to vascular spasm and arrest of the urinary secretion, which does not depend on the vaso-motor action of the medulla oblongata, since it occurs indifferently whether the vaso-motor nerves of the kidney are divided or intact. That the effect is due to intra-renal vascular spasm is shown by the abundant diuresis which occurs at a later stage when the spasm has ceased, but the general arterial pressure continues high.

THE INNERVATION OF THE SWEAT-GLANDS.

According to several recent observers, especially Luchsinger of Zürich, and Naurocki of Warsaw (*Centralblatt Med. Wiss.*, Nos. 1-3, 1878), the nerves which supply the sweat-glands of the fore and hind feet of young cats (these animals being chosen because the hairless parts of their paws are best adapted for observing the secretion of sweat) take their origin from a common "perspiratory centre" in the medulla oblongata, but do not leave the spinal cord in company with the motor and sensory nerves of the limbs. They follow the course of the vaso-motor nerves, as described by Cyon and Schiff, through the spinal cord into the sympathetic nerve—those for the fore feet emerging from the cord at the fourth dorsal vertebra, and passing through the stellate ganglion into the brachial plexus; while those for the hind feet leave the cord at the junction of its dorsal and lumbar portions, and pass through the abdominal sympathetic into the sciatic nerve. The nerves of the sweat-glands of the fore feet reach the paw either entirely through the median nerve, or *more often* chiefly through it and to a small extent through the ulnar nerve. If the sympathetic trunk be divided below the sternal ganglion, neither local warmth nor irritation of the "perspiratory centre" by carbonic acid poisoning (artificial dyspnœa) had the least effect in producing sweating, whereas electrisation of the centrifugal fibres had. In the same way, electrisation of the sciatic nerve, or of the abdominal sympathetic, induces sweating of the hinder feet, even (according to Ostroumow) if the aorta be previously ligatured so as to cut off the blood-supply of the limbs. This latter fact seems to indicate that the secretion of the sweat-glands depends on something more than a mere increase of their vascularity. Still, the question whether the nerves supplying the vessels of the sweat-glands (for no nerves have as yet been traced to the secreting cells) are different from those which supply the vessels of other parts of the skin is by no means definitely answered.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

On Tuesday evening Dr. Dickinson exhibited under the microscope a number of specimens illustrative of his views as to the nervous origin of diabetes. These were exceedingly instructive, but will be best dealt with in a review of the whole subject.

MEDICAL PARLIAMENTARY AFFAIRS.

Factories and Workshops.—In Committee on the Factories and Workshops Bill, on Thursday, the 21st, Dr. Kenealy, objecting to Clause 3, said that it did not provide sufficiently for the ventilation of factories and workshops, and alluded to the mortality among the operative potters of Hanley owing to this defect. In France many lives had been saved and diseases averted by efficient ventilation. Mr. Cross explained that under the provisions of the last Factory Act the powers of the inspectors had been much enlarged, by which considerable improvement had been effected with beneficial effect in the prolongation of life. He would, however, consider the suggestion as to the desirability of giving further powers to the inspectors. Mr. Campbell regretted that the means for ventilation provided for the workpeople were not made use of as they ought to be. Several other clauses regulating the employment of women and children in factories were agreed to. On Monday, the 25th, further progress was made with this Bill. On Clause 27 some opposition was raised to the proposal that children on obtaining employment in another factory shall be freshly certified by the factory surgeon. Dr. Lush said that instead of diminishing the powers of the certifying surgeons he should like to see them increased very much. The clause was ultimately agreed to. On Clause 38, which relates to the prohibition of children and young persons being employed in trades of a noxious character, Mr. Tennant desired to see other trades included in the schedule of the Bill, on the score of being injurious to health. Mr. Cross replied that it would not do to hamper trade too much. The clause was therefore agreed to.

FROM ABROAD.

THE FUNERAL OF CLAUDE BERNARD.

THE funeral of Claude Bernard was conducted with all the pomp and splendour such a ceremony is capable of. The procession left his house about ten in the morning, and the last address was delivered at the border of the grave in Père-Lachaise at about four o'clock. It is said that fully 3000 persons took part in the procession, which passed through the streets kept by infantry of the line. On the funereal car was exposed, according to custom, the palm-green costume of a member of the Institute, almost hidden by the abundance of crowns of flowers, one of the most splendid of which came, appropriately enough, from the hothouses of the Muséum d'Histoire Naturelle. An officer of the Institute carried, on a cushion of black velvet, the decorations which Claude Bernard had received from every country of the world. Ministers of State, members of the Institute, professors of the Collége de France, of the Muséum of the Faculté des Sciences and Faculté de Médecine, deputations from the Faculties of Montpellier, Lyons, and Nancy, a large number of senators and deputies, and municipal councillors, all in their varied and, in some instances, striking costumes, formed a most splendid *cortége*, while medical students in large numbers brought up the rear. It was to have been expected that a *savant* who had traversed life with such noble simplicity as that exhibited by Claude Bernard would have followed the example set by many distinguished Frenchmen in recent times, of prohibiting orations being delivered at their graves. This, however, was not so, and the consequence was that a perhaps unprecedented number of these addresses were recited. They were nine in number, delivered by Prof. Dumas, Secretary of the Académie des Sciences; M. Mézières, Chancellor of the Académie Française; Prof. Bouillaud, of the Institut: Prof. Vulpian, Dean of the Faculté de Médecine; Senator Laboulaye, President of the Collége de France; Prof. Paul Bert, of the Faculté des Sciences; Prof. Gervais, of the Muséum d'Histoire Naturelle; M. Moreau, of the Académie de Médecine; and M. Dumontpallier, Secretary of the Société de Biologie. Now, if each of these orators had been content to utter a few words of appreciation and adieu, the whole matter could only have been regarded as an example of a curious disposition to speechify on all occasions, appropriate or not; but some of these addresses, especially that of Prof. Vulpian, were most elaborate productions, going into biographical particulars, with the history of the discoveries of the late *savant*, and appreciations of their scientific value, which, when the place and time of their delivery is considered, seem to the uninitiated most injudicious. The nine discourses occupy no less than twenty closely printed quarto columns of the *Révue Scientifique* (February 23), and on the most moderate computation must have taken two hours in their delivery. Certainly, judged by these occasions, as well as by their academical discussions, Frenchmen possess the most remarkable, if unenviable, faculty for delivering prolonged addresses, and an almost incredible amount of patience in listening to them.

IRRIGATION OF THE LARGE INTESTINE IN CHILDREN.

In the *Philadelphia Medical Times* (December 22) Dr. Dulles relates a case illustrative of the utility of this practice in the treatment of inflammatory conditions of this part of the bowel in children, which he had witnessed in the wards of Dr. Alois Monti, of the Vienna General Hospital, and described in a previous number (August 24) of the same journal. Some of the cases referred to in this latter paper were examples of catarrh of the large intestine, which in rickety children (of whom there are an enormous number in Vienna) is not infrequently attended with prolapsus of the rectum, in varying degrees from a mere procidentia of the mucous membrane to the passing out of the whole of the rectum up to the sigmoid flexure. The catarrh of the intestine may be the cause of this prolapse; the frequent stools and tenesmus it gives rise to coinciding with a wasting of the muscular coat. The prolapsus may disappear for a time, to return on any exacerbation of the catarrh. Dr. Monti's treatment consists in counteracting the intestinal catarrh by irrigation of the canal with water, beginning with a temperature of 24° to 22° C. (75° to 71° F.), and descending to that of fresh spring water. In his hands it proves a valuable therapeutical measure. To an apparatus like that used in Thudichum's douche, securing available and easily controlled hydrostatic pressure, he attaches an elastic catheter, which (the child having been laid on its back with raised hips) he insinuates into the rectum. The water is now allowed to flow, and as the rectum becomes distended he pushes the catheter gently along until it is well *past the sigmoid flexure*. Still flowing in, the water then fills the whole of the large intestine all the way to the ileo-cæcal valve. This procedure Dr. Dulles has seen employed by Monti in a variety of disorders of the large intestine, as well as for the expulsion of worms or flatus, and always with good results. In inflammatory conditions of the colon in children he has also used solutions of nitrate of silver, such as have been recommended in the dysentery of adults by Prof. Wood, but he decidedly prefers less powerful astringents, when (which is very rarely) any are required. In such a case he uses a one or two per cent. solution of alum, sometimes adding a few drops of laudanum. In general, however, he confines himself to the use of simple water, beginning with a temperature barely cool, and descending with successive irrigations till it is about that of spring water. He never uses a determined quantity, but allows enough to flow in to fill the whole colon to the valve. In children not yet weaned he finds that more than two pints may be used; and in older children twice that quantity. For effecting irrigation Dr. Monti opposes the use of a syringe of any kind, the intermittent and uncertain action of this provoking resistance on the part of the intestine. The securing of an even and easily regulated hydrostatic pressure is indeed the essential feature of this method. Still more essential is the distension of the rectum with the water *before* attempting to pass the tube through the sigmoid flexure. This precaution secures the smoothing out of the folds of the mucous membrane, and straightens the curves of the flexure, thus rendering the passage of the tube perfectly safe and easy. Whatever variety of opinion there may be in regard to the possibility of sending an *injection* beyond the sigmoid flexure, there can be none in regard to

the feasibility of "irrigation" by any who have tried it or seen it tried. No special position of the child is necessary, though it is quite as well to have the pelvis a little elevated.

The case which gave rise to this communication was one of severe vomiting and purging in a child six months old, reduced almost to death's door, and upon which none of the numerous remedies tried had exerted any effect. Cool water was allowed to flow from a height of two feet into the rectum until good distension was secured, when, with scarcely any pressure, the end of the catheter passed beyond the sigmoid flexure, well into the descending colon. The water was allowed to flow steadily on, until about a pint and a half had entered, and inspection and percussion showed a large portion of the colon to have been filled. The method "worked like a charm," and next day the irrigation was repeated, using not quite so much water. Convalescence was so rapid that the child was well in six days.

Aspiration in Effusion into the Knee-Joint.

Dr. Dieulafoy, fortified by the success that has followed its employment in additional cases since his work was published, communicates an article to the *Gazette Hebdomadaire* (February 22), in which he insists in the strongest terms on the complete innocuity and great utility of aspiration as applied to affections of the knee. As regards the innocence of the operation, this he thinks may be fairly inferred from the fact that among 150 aspiratory punctures of the knee performed for effusions of various kinds, whether serous, hæmatic, or purulent, and whether of rheumatic, traumatic, or blenorrhagic origin, one only was followed by accidents, and this case was complicated with fracture. It has often happened that the punctures have been repeated from three to six times in the same place in the very painful and often obstinate hydrarthrosis of acute rheumatism.

But, to obtain this innocuity, the operation must be methodically performed, and the needle No. 2 only employed. The limb is placed in extension, the joint being surrounded by a caoutchouc or linen bandage, leaving the point exposed towards which the liquid has been pressed, and where the needle is to be passed in. This place of election is the external *cul-de-sac* of the synovial membrane, opposite the upper end of the patella, and at about two centimetres exterior to this bone. The No. 2 needle, which is to be *exclusively* employed, only measures a millimetre in diameter, and when passed into the joint is to remain in a fixed position while the fluid is aspired. All manipulation of the joint is to be avoided as causing unnecessary irritation. When the liquid has been removed, the needle is withdrawn and compression employed. The knee is surrounded by a layer of wadding, pretty firm compression being maintained by means of a flannel or linen bandage. A roller is also to be applied to the foot and leg in order to prevent the production of œdema. Twenty-four hours afterwards the joint is examined, and if there is no or only very slight reproduction of the liquid, compression is again had recourse to; but if the effusion has been reproduced in a notable quantity, aspiration should again be performed before reapplying the compression.

With respect to the efficacy of aspiration, it is most marked and most rapid in cases of *effusion of blood* into the joints from injury; for while a simple hydrarthrosis may require its four or five aspirations, an effusion from external cause, as a rule, yields to one or two. Here, in fact, the cause is purely local, and is not attended with a pathological condition of the serous membrane. The exudation, if left to itself, might become slowly absorbed, or it might act in some cases as a foreign body in the joint. But when removed, the serous membrane is placed in the most favourable condition; and purulent transformation has never been met with after the operation. In *sero-fibrinous effusions* we meet with two categories of cases—first, those (which are by no means rare) wherein the effusion disappears after two or three aspirations, *i.e.*, after treatment lasting from three to eight days; and secondly, the chronic hydrarthroses, for which from four to six operations are required, lasting over from twelve to eighteen days. Effusions dependent upon *gonorrhœa* are peculiar and more obstinate; and although puncture of the knee gives relief, the liquid soon forms again. As compared with other means of treatment, aspiration possesses a valuable superiority in the rapidity with which it relieves the pain, sometimes extremely violent, attendant upon acute rheumatism and traumatic effusion.

Influence of Pregnancy on Suckling.

In reference to a case recently at the Hopital des Cliniques, Prof. Depaul took the opportunity (*Rev. Méd.*, February 18) of strongly impressing upon his class that the continuance of suckling after pregnancy had manifested itself, whatever its effect might be on the mother, acted most injuriously upon her infant. First, the quantity of milk diminishes, and the child, though suckling for a long time, no longer obtains the quantity of nutriment which it requires. Its stomach not feeling satisfied with what it has received, in place of going to sleep after a copious repast, as usual, the child cries and becomes restless. If, in spite of these signs, the mother continues to suckle, more alarming symptoms are produced. Digestion is disturbed, and, after each suckling, in place of some pure milk flowing out of the mouth after the breast is taken away, as may be observed in infants who are quite well, actual vomiting takes place, and a large mass of not yet coagulated milk which the stomach cannot tolerate is rejected. The stools, too, exhibit characteristic modifications, and in place of passing two or three of these in the twenty-four hours, the child now passes several, so as to amount to diarrhœa. In some cases there may be, however, constipation. The discharges are themselves abnormal in their appearance. In place of appearing somewhat thickened, and resembling in colour and consistency a boiled egg, they may be quite fluid, of an appearance just like spinach-water; at other times they are less fluid and brownish; and in other instances, again, both in colour and consistence they exactly resemble glaziers' putty. They are accompanied by a more or less considerable quantity of mucus, according to the amount of intestinal irritation, and there may be present streaks or even true drops of blood. Sometimes the amount of milk does not seem to have materially diminished, for it is not uncommon to find it issuing abundantly on pressure being made. This may give rise to error, as it only proves that the gland performs its function actively; but weighing the infant will show that it derives from this milk an utterly insufficient amount of nutrition. Chemical analysis fails to show us what is the modification which the milk undergoes through pregnancy, rendering it unfit, even when in sufficient quantity, for the nutrition of the child; but that such a modification does take place is beyond all doubt, and is indeed sufficiently shown to exist by the marked repugnance which the infant may exhibit to the breast. Prof. Depaul has met with three or four remarkable examples of this. In one of these he was sent for by a young woman, whose infant, which was quite well and had up to then been well nourished, had for some time past absolutely refused to take the breast. Tried in his presence, after having abstained from food for some time, it would not suckle; but no sooner had a nurse who had been sent for made her appearance, than it seized her breast with avidity. On interrogating and examining the mother he became convinced that she had become pregnant. "The conclusion to be drawn from these facts is, that whenever a woman asks you whether, having become pregnant, she ought to continue to suckle her infant, you should reply in the negative and advise her to procure a nurse. For you may be certain that the disturbances of which I have just given you but a very faint sketch, if they have not as yet been produced, will manifest themselves before long, to the great detriment of the child's health."

Continuous Baths at the Vienna General Hospital.—We recently (December 8, page 629) published a paper of Dr. Hans Hebra, describing the utility of these when continued for weeks or months, and in the *Wiener Medicinische Wochenschrift* it is stated that there have now been seven of these water-beds, admitting of continued immersion of parts of the body, fitted up at the General Hospital. Not only are they of utility in certain diseases of the skin, but especially so in some of the worst kinds of surgical cases, as in gangrenous destruction of parts, deep penetrating ulcers, etc. The patients feel while in these baths very comfortable, and almost without any pain. The baths are suitably constructed to admit of sleeping at night, and in nowise interfere with the free movements of the patient. Indeed, it is only by such contrivances that patients can be kept for months in water, and their cure rendered possible.

GENERAL CORRESPONDENCE.

THE CASE OF MR. DURRANT.

Letter from Mr. Brudenell Carter.

[To the Editor of the Medical Times and Gazette.]

Sir,—The case of Mr. Durrant, whose action against the Midland Railway Company to recover damages for injuries said to have been sustained in a collision near Leeds was tried in the Court of Common Pleas last November, has led to some discussion among medical men, and has been made a subject of comment by some of your contemporaries. As one of the witnesses for the plaintiff, I shall be glad, with your permission, to place my view of the case before your readers. I should have done so at an earlier period, but it is only very recently that the Company has decided to accept the verdict without appeal. As long as there was any prospect of my being again required as a witness, I was advised that I was not at liberty to speak freely.

Permit me to begin by a brief outline of the undisputed facts. Mr. Durrant was injured, I think, nearly two years ago. His action was ready for trial last June, but was postponed on account of the block in the law courts. It was at last tried in November. He claimed damages for serious injuries; and the defence of the Company was, in effect, that he was an impostor, who had little or nothing the matter with him. The reply of a special jury to this defence was a verdict for £2300; and the full court refused to allow a new trial. The defendants intimated their intention to appeal, but this intention they have now abandoned.

I first saw Mr. Durrant on June 18, 1877, in anticipation of the trial which was then supposed to be impending. He was about forty-four years of age, of large and originally very robust frame; but he dragged one foot, and had a tremulous and highly nervous manner. My business was only with his sight, which was said to be impaired. Testing it in the usual way, by types at a distance, I found 8-20ths of normal vision for the right eye, and 8-25ths for the left. No lenses improved distant vision. In the hand, with a convex lens of two dioptrics, the right eye read No. 1 of Jaeger's types at seven inches; and without a lens it read No. 2 of Jaeger slowly and with difficulty. The left eye read No. 5 of Jaeger unaided; and, with a convex lens of two dioptrics, it read No. 4, or, with a little encouragement to try, No. 3. From these results, I concluded that there was no hypermetropia; and that the patient, who admitted reading No. 1 of Jaeger, was doing his best, and had no desire to deceive.

On testing the field of vision roughly, with the fingers, I found it contracted in both eyes. I applied atropia, but it acted so slowly that I was obliged to leave home before the pupils were well dilated. I saw, however, that both the optic discs, especially the left, were much congested, and in what seemed to me an entirely morbid condition.

Upon this I wrote to the plaintiff's solicitor, and said that I thought the case a serious one; and that, as the state of the optic discs was important, I should like it to be placed on permanent record by an impartial observer who had no opinion to give or to support. For this purpose I suggested that Mr. Burgess should be employed to make an accurate picture of the left fundus oculi. Accordingly, on June 25, Mr. Durrant came to me once more, this time with his pupils well dilated. I tested his vision again, with like results to those previously obtained, and I took both the visual fields with the perimeter. The results were as follows:—Right eye: upwards, 27°; downwards, 15°; inwards, 35°; outwards, 20°. Left eye: upwards, 30°; downwards, 10°; inwards, 30°; outwards, 20°.

A careful ophthalmoscopic examination showed that in the left eye the optic disc was of an uniform redness, scarcely to be distinguished from the surrounding fundus, except as the meeting-place of the retinal vessels, and that the centre of the disc, the so-called *porus opticus*, was as red as the rest. The transparency of the retina was impaired, so that the vessels were slightly obscured as far as they could be followed. Mr. Burgess was in attendance to make the picture. To his practised eye, as to mine, the abnormal aspects of the disc and retina were perfectly apparent, and he made a coloured drawing which faithfully represented them.

The opinion which I sent to the plaintiff's solicitor was to the effect that the congestion of the optic discs (the condition of the right was like that of the left, but in a less pronounced degree) was presumably due to some chronic congestive or inflammatory condition in the nervous centres, and probably in the cervical region of the spinal cord. It was not impossible that recovery might occur; but, looking at the general state of the patient, who had on several occasions since the accident had saccharine urine, and more than once albuminuria, I thought it more likely that the case would go on to atrophy and loss of sight.

On November 19, two or three days before the trial, I saw Mr. Durrant again. The distant vision of his right eye had declined from 8-20ths to 8-30ths; that of the left from 8-25ths to 8-40ths. The right eye, which in June read No. 2 of Jaeger without assistance, could only spell out letters of No. 3; and the left, which in June read No. 3 of Jaeger with a lens of two dioptrics, could only read No. 6 with the same lens. In both eyes the contraction of the fields of vision had increased, and the perimeter charts were as follows:—Right eye: upwards, 15°; downwards, 8°; inwards, 25°; outwards, 20°. Left eye: upwards, 10°; downwards, 10°; inwards, 30°; outwards, 5°.

Ophthalmoscopic examination of the right eye exhibited appearances like those which the left had presented in June; while in the left eye the vessels had become clearly defined over the fundus, and the disc was more pale, and marked here and there by white striæ, which appeared to me to be bands of contracting exudation. Some similar bands beset two or three of the retinal vessels at a short distance from the disc. I gave an opinion to the effect that the atrophic process had commenced, and advised that Mr. Burgess should make a second drawing of the left fundus, to show the changes which had occurred since the former one was taken.

Mr. Bowater Vernon, who saw the case for the first time while the trial was in progress, and who had both the drawings before him, was not only satisfied of the fidelity of the second one, but he volunteered the remark that the first drawing—that which showed the state of the left eye in June—almost precisely represented the state of the right eye in November.

In giving evidence, I tried to explain to the court and jury how far letter and perimeter tests are trustworthy, and how far they may be vitiated by the desire of the patient to deceive; and I claimed for them, when properly and carefully conducted, a high degree of accuracy. I said that the defect of vision corresponded with the internal appearances; that these internal appearances indicated, in my judgment, the actual commencement of atrophy in the left optic disc, and a state likely to lead to it in the right; and that the probable issue, having regard to the general state of the patient, would be complete atrophy, which would mean blindness. I put in the perimeter charts, and Mr. Burgess's drawings; and Mr. Burgess himself was called to speak to the correctness of his drawings. He said, in reply to cross-examination, that they were not merely generally correct, but minutely correct in every detail. Mr. Bowater Vernon confirmed my evidence, and added a statement of his own with regard to impairment of colour-vision.

For the defence, Mr. Haynes Walton said that he had examined the eyes with the ophthalmoscope with the greatest care and minuteness, under the most favourable conditions of illumination, with the best form of instrument, and with the highest magnifying powers, "with an enlargement," he said, "like that of a powerful microscope, so that he saw the fibres of the optic nerve" (I do not know how this can be done, but I repeat Mr. Walton's words); and that the optic nerves, and the eyes generally, were "perfectly healthy! —perfectly!!—perfectly!!!—perfectly!!!!" In cross-examination, Mr. Walton was asked, among a variety of other questions, whether, in a case of doubtful nerve-atrophy, the presence of contraction of the field of vision would not be a most important symptom, leading to the belief that atrophy was really imminent. He repudiated this doctrine very forcibly; and the learned counsel for the plaintiff, Mr. Waddy, Q.C., then read to him a passage from his own book, affirming in so many words the proposition which he had just denied. To this Mr. Walton answered that the statement in his book was wrong, and that he was going to alter it in the next edition. There were some minor points also in which Mr. Walton's evidence was at variance with his published opinions, but with these I need not trouble you.

The other medical witnesses for the defence were not specialists, and were called primarily with regard to general medical or surgical questions. They all said (and some of them were extremely well entitled to be heard upon the subject) that they saw nothing amiss with the eyes; but Dr. Clifford Allbutt, on being shown the drawings, and asked whether, supposing them to be correct, they indicated a healthy state, said at once that they did not. One of these witnesses (whose name I do not mention because I have not asked his permission) wrote to me immediately after the trial—"The drawings may, or may not, be correct; but when we saw Durrant, at the time they were taken, he professed to be wholly unable to bear the examination, and wriggled and squinted so that we could but get the most flying shots at the eye." This description refers to the very examination at which Mr. Haynes Walton used his microscopically magnifying ophthalmoscope!

I think I have now made clear the nature of the difference of opinion which was expressed with regard to the ocular element in the case. It was proved that the plaintiff had had saccharine urine, with a specific gravity of 1047; and also that his urine had at times been albuminous. On the general medical evidence, however, on either side, I do not mean to dwell, partly because I heard only a little of it, and partly because it is beyond my province. On the whole case, notwithstanding, I formed a strong opinion. I think the nervous system of the plaintiff was greatly shattered; that he entertained an unfounded or exaggerated suspicion and dislike of all who came to him from the Company; and that, with the irritability of illness and weakness, he threw every possible difficulty in the way of their examinations. They could not fail to see this, and I think they misinterpreted his conduct to the extent of allowing a not unreasonable suspicion to obscure the signs of severe and probably lasting injury. To his own witnesses Mr. Durrant gave all necessary facilities.

This letter is too long already, but I should like to add that the judge's summing-up, as reported in the *Times* (for I did not hear it), gave an erroneous view of the bearing of my evidence. In the first place, the judge did not appear to recognise that my knowledge of the case only went back to the previous June, and that the causes of failing sight were, in my opinion, themselves the late effects of the original injury. He spoke as if the failure of sight had been progressive from the time of the accident, and as if it had not made much progress after all; whereas, as far as my knowledge extended, it had only been progressive for five months, and in that time its progress had been very marked. I need hardly write that a railway shock may be productive of immediate impairment of sight from diminished accommodation or in other ways, and yet that these may have no relation whatever to atrophic changes which may occur at a subsequent period. Next, the judge was reported to have said that, in my opinion, the plaintiff "would inevitably become totally blind." My words were that the case would "probably go on to atrophy and complete blindness." I was not asked about the chances of a more favourable issue, or I should, of course, have endeavoured to define them. It is well known that the physical changes which I saw and described may sometimes be arrested, and that they are not incompatible with the preservation of a fair amount of sight. Still, in the plaintiff's general state, I think that an unfavourable, rather than a favourable, issue is to be expected. As soon as the *Times*' report appeared, I wrote a letter to correct the inaccuracies which I have mentioned, and that letter was published in due course.

With my best thanks to you for allowing me to submit the foregoing to the judgment of the profession,

I am, &c., R. Brudenell Carter.

Wimpole-street, February 25.

The vacancies in the honorary surgical staff of the Royal Southern Hospital, Liverpool, were filled on Monday, February 25, by the election of Dr. William Little, who some years ago was a house-surgeon of the institution, and Mr. T. D. Ransford, F.R.C.S.E.

Treatment of Congenital Hernia by Hypodermic Injections.—In the *Bulletin de Thérap.* for December 30, Dr. Luton, of Rheims, relates some cases of congenital inguinal and umbilical hernia which he has radically cured by the hypodermic injection of ten drops of a filtered saturated solution of common salt.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, February 19.

Charles Murchison, M.D., LL.D., F.R.S., President, in the Chair.

Tumours from Both Ovaries.

Mr. Knowsley Thornton exhibited for Mr. Taylor, of Guildford, specimens of solid tumour of the left ovary, with slightly enlarged right ovary, removed from the body of a woman aged sixty, whom Mr. Taylor had seen in consultation. The tumour had caused fatal intestinal obstruction by pressing a coil of small intestine, which was adherent to it, against the sacrum; and it had also obstructed the rectum by pressure at the pelvic brim. It was a spindle-cell sarcoma, with admixture of pure fibrous and myxomatous tissue. The right ovary was also composed of spindle-cell tissue, very rich in nuclei, and it showed remarkably well a peculiar form of degeneration, which was evidently in this specimen a colloid or myxomatous degeneration of the walls of the bloodvessels in the ovarian stroma. Mr. Thornton was familiar with this condition in ovaries after the menopause, and also in diseased ovaries, and in the stroma of ovarian cysts, but had never been able before to refer its origin so distinctly to the bloodvessels. Rindfleisch had described and figured it as occurring in the stroma of ovarian cysts, and considered it the starting-point of one form of these cysts, calling it a "circumscribed colloid softening of the stromal connective tissue." Mr. Thornton considered it a physiological process, and raised the question as to whether it was a similar material which, by swelling, aided in the rupture of the Graafian follicles. Remarking on the rarity of solid ovarian tumours, he said he had only seen two in about 500 ovariotomies at which he had been present, both having occurred in the practice of Mr. Wells, and both being examples of sarcoma. Atlee had lately referred to the rarity of these tumours, and had only seen four specimens in 1300 cases of pelvic tumour.

Mr. Alban Doran said that the opinion had been expressed that some spindle-celled tumours were not really composed of an early type of connective tissue, but of organic muscular fibres. Such a tumour might grow from the broad ligament.

Cysts from the Peritoneum.

Mr. Thornton also exhibited specimens of peritoneal cysts with blood-cyst of the ovary. They had been diagnosed as ovarian, and it was only during the progress of the operation that their true nature became apparent. One, the largest, occupied the pelvis, and contained clear watery fluid, like that common in extra-ovarian or broad-ligament cysts; the other was in the sub-endothelial cellular tissue of the parietal peritoneum on the left side of the abdomen; it contained dark yellow serum. Neither was connected with the left ovary, which was pressed down to the bottom of the pouch of Douglas and firmly adherent; it was converted into a blood-cyst of the size of a hen's egg. The walls of the cysts were composed of loose connective tissue, and they were lined with a single layer of epithelium. The only peritoneal cysts of which Mr. Thornton could find any record were of inflammatory origin, and differed evidently from those he showed. Both were removed by simple enucleation, and severe venous oozing occurred into the spaces left after their extraction, the patient's life being in danger for some hours after the operation. She rallied, however, and the incision healed in a week, but there remained a large hæmatocele. The operation had been performed antiseptically, and it was hoped the blood would be absorbed, but, oozing still going on, the sacs became distended, and as a result there was considerable fever, as is often seen in ordinary pelvic hæmatocele. On the fifteenth day after the operation an incision was made under the carbolised spray, and nearly a quart of perfectly sweet liquid venous blood was removed, which coagulated in the basin into which it was received. At the time the incision was made the temperature was 103·6°, pulse 120, with high tension; in seven hours the temperature and pulse were both normal. Mr. Thornton thought the fever must be regarded as entirely due to nerve-tension from the gradual distension of the sacs

into which the blood oozed. Convalescence had been retarded by putrefaction taking place when the second incision had nearly healed, necessitating the re-introduction of a long drainage-tube. Since this unfortunate accident the fever had again been high, with profuse discharge of blood-clot and putrid pus, but, with careful drainage, the dangers of this condition had been escaped, and the patient was nearly well. Mr. Thornton thought the condition of the blood, when evacuated after its long residence in close proximity to the intestines, bladder, uterus, etc., was of great importance, as bearing on the pathology of putrefaction; and the question of the cause of the fever, with its rapid disappearance, was also well worthy the attention of the Society.

The President asked the members whether they had ever observed cysts from the peritoneum similar to those just described by Mr. Thornton.

Dr. Wiltshire inquired whether a search had been made for hooklets.

Mr. Thornton replied that the fluid from the cyst and the cyst-walls had been carefully examined, but no trace of hydatids had been found.

Cystic Disease of the Thyroid Gland.

Mr. John Wood showed a specimen of cystic disease of the thyroid gland, which he had removed by operation from a woman of twenty-three, in King's College Hospital. The tumour had been growing for fourteen years, but had lately increased rapidly in size. It was very large, extending from the upper border of the thyroid cartilage to the middle of the sternum, and overlapping the sterno-mastoid on either side. It was manifestly adherent to the thyroid structures; could be lifted up from the other parts that it covered; and several arteries could be felt entering it. To the hand it was semi-elastic and tense; but on either side it felt more solid. There was neither exophthalmos nor cardiac disturbance; and the general health was good. The growth was variously treated. Iron, cinchona, and ergot were given internally; the cystic portions were tapped several times; galvano-puncture was also employed; and iodine was injected. At last the tumour, considerably reduced in size, was removed *en masse* by Mr. Wood, under the antiseptic spray. The operation exposed the trachea, the carotid sheath, and the sterno-mastoid muscles. The wound was dressed antiseptically. Recovery was delayed by painful swelling of both legs. On examination of the tumour it was found to possess three capsules—first, the capsule of the gland proper, on which the smaller arterial branches were distributed, and from which the interlobular septa dipped down; secondly, a looser capsule external to the first; and thirdly, a thick covering externally, on which the large branches of the arteries ran: it was on the third capsule that the vessels were ligatured. The interior of the cyst presented curious projections, some of which were probably remains of septa. Fibrin was deposited in places on the serous internal lining. The microscopical structure of the growth was still undetermined.

Mr. Lennox Browne said that one method of treating such cases was by changing the colloid character of the contents of the cysts.

Mr. Spencer Watson referred to a similar case which he had shown several years ago.

Malformation of the Heart: Defective Septum.

Dr. Peacock showed a specimen of malformed heart in which there was a large aperture in the septum of the auricles. It was removed from the body of a girl of ten, who had been admitted into St. Thomas's Hospital on November 28, 1876. She had always been a puny, delicate child, and was slightly cyanotic, the lips being purple, and the face flushed; but the hands and feet were not livid. She suffered from dyspnœa, and had some œdema of the lower extremities. The temperature was generally below the normal standard; a loud systolic murmur was heard more particularly at the upper part of the sternum; and a decided purring tremor was felt over a large space around the left nipple. The patient died on February 24, 1877. Post-mortem the heart proved to be of large size, but the enlargement was rather due to dilatation than to hypertrophy. The pulmonary artery was very large; the aorta, on the contrary, throughout its thoracic portion was unusually small. In the septum of the auricles there was an opening sufficiently large to have allowed the passage of a florin. The foramen ovale was entirely closed; and the ductus arteriosus was also impervious. There was no material valvular disease. The lungs were very dark, firm, and fleshy. The case, Dr. Peacock said, was interesting, first, as an example of a very considerable congenital defect in the septum of the auricles, with, however, complete closure of the foramen ovale. A case very similar was recorded by Rokitansky in his recent work. Secondly, the specimen was interesting from the very slight degree of cyanosis that had existed during life, notwithstanding the very free communication between the cavities of the auricles; the slightness of the cyanosis being doubtless due to the absence of any valvular disease causing obstruction to the flow of blood from the right ventricle.

Defective Development of the Septum Ventriculorum.

Dr. Pearson Irvine showed this specimen, which was removed from the body of a man fifty years of age, who died of phthisis in Charing-cross Hospital, in January, 1878. There was a history of syphilis, but none of rheumatism, and the patient, a free liver, had had one attack of gout. During life he had, in addition to the ordinary evidences of phthisis, a systolic murmur heard over the left side of the heart, and not conducted into the axilla. There was no other evidence of cardiac mischief. Post-mortem, both lungs were found more or less diseased; the heart weighed ten and a half ounces, but was otherwise normal, except that the septum ventriculorum had not acquired complete muscular development towards the base, over a triangular area more than an inch deep. The septum over this space was membranous simply, and immediately below the left segment of the aortic valve it had so given way that an aneurismal pouch, admitting the end of the middle finger, projected into the right ventricle. The margins of this pouch were smooth and uniform, and attached to them were the left aortic flap and the aortic segment of the mitral. The pouch occupied partly the "undefended spot," and on its right aspect one of the cusps of the tricuspid was attached, in the normal position. Dr. Irvine thought this aneurism of the septum a result of congenital conditions; that it had arisen during post-uterine life as a consequence of the incomplete development of the muscle of the septum. Not only would the septum at its membranous part yield towards the right side, because of the greater pressure within the left ventricle; but, in addition, probably the segment of the tricuspid attached to this part must have drawn upon it with every action of the heart, and thus have favoured the occurrence of aneurism. It was interesting to note, also, that the aneurism, in the progress of its formation, must have drawn on the left aortic valve, which had become displaced downwards in consequence, so that its opposite coronary artery was unprotected. The orifice of this artery was found distorted and enlarged, while the right artery was unchanged.

Dr. Douglas Powell asked whether it was not possible that the adhesion of the aneurism to the tricuspid was secondary to the projection of the septum towards the right side?

Dr. Irvine replied that there was no actual fresh adhesion of the aneurism to the valve, which was simply involved in the wall of the sac.

Dr. Frederick Taylor said that he should be inclined to accept Dr. Powell's explanation. He had seen a similar adhesion in the projection of an aneurism of the pulmonary artery into the aorta. The "undefended space" of the septum corresponded on the right side to the auriculo-ventricular valve.

Dr. Greenfield had seen the "undefended space" very large in some hearts, and the present specimen appeared to be an aneurism of that space becoming adherent at the spot of its projection.

Dr. Peacock agreed with the explanation that referred the aneurism to the "undefended space." An aneurism of this part might project either into the auricle or against the tricuspid valve. In the present instance the aneurism had found its way underneath the valve, which had then expanded it.

Thrombosis of the Vena Cava and Portal Vein.

Dr. Samuel West described a case in which thrombosis of the portal vein appeared to have followed thrombosis of the inferior vena cava. The subject, a girl, had enjoyed good health till the age of fourteen, when she had to work hard. The catamenia had always been irregular. At seven-

teen, three weeks before her admission, both legs began to swell from the abdomen downwards. Fourteen days later the abdomen also began to swell. There was great pain in the right leg, which continued to increase in size. There was, meanwhile, neither sickness nor hæmorrhage by the bowel. There was no history of chill; there were no sores on the feet or legs, and no hæmorrhoids. Suppression of urine and dyspnœa then supervened, and the diagnosis made was "thrombosis of the inferior portion of the inferior vena cava, nephritis, and ascites." The patient improved at first; but the ascites then increased, and the superficial abdominal veins became enlarged. On the twelfth day after admission the patient was worse, with increased pain in the leg. Paracentesis abdominis gave her great relief; but death followed. Post-mortem the abdomen contained much clear serous fluid; all the abdominal veins were dilated, and the parietal and internal vessels presented anastomoses posteriorly, while a vessel as large as a goose-quill passed to the umbilicus. The portal vein and its branches were thrombosed, and this condition passed up into the liver; in some places the clot was softened into a creamy consistence. The liver was small, the spleen was large, and behind the kidneys a large abscess was found. The common iliac veins contained a large thrombus, and from this one thrombosed branch was traced down into a pouch, near which was a cheesy spot in the peritoneum. The other organs were fairly normal. The case, Dr. West said, was a difficult one. The portal thrombosis was probably secondary; and the thrombosis of the inferior cava followed the same condition of the common iliacs. But what was the cause of the last lesion? There were, besides, nephritis and abscess in the neighbourhood, but the relation of these to the case was also obscure. He was inclined to think that they were secondary to the thrombosis. The cirrhosis of the liver was, he believed, secondary to the portal obstruction, for there had been no symptoms of hepatic disease or of portal obstruction before; and it was known, both from the effects of local portal obstruction in man and from experiments, that cirrhosis followed this vascular change. There were only six cases on record of the kind; in one of these the liver was described as atrophic, in another as cirrhotic, in two as granular, and in one as atrophied.

The PRESIDENT considered the case as one of great interest. He asked whether there was urgent diarrhœa. Some years ago he saw a boy with somewhat similar symptoms, including rapidly increasing ascites, with urgent diarrhœa and discharge of mucus and blood per anum. The diagnosis made was portal obstruction. Free application of leeches to the anus was attended with relief and ultimate recovery.

Mr. WOOD, who had also seen the case, said that the boy was still alive and well.

Dr. WEST replied that there had been diarrhœa towards the last, with some blood. Vomiting was constant at last, and a little blood was rejected. The ascites was rapid at first, then slow, and ultimately again rapid.

Sir JOSEPH FAYRER said that some years ago he had described somewhat similar cases in India, among patients suffering from malarial cachexia. In such persons fibrinous coagula frequently formed, and these not only in the portal system, but also in the pulmonary artery and in the heart itself.

Aneurism of the Right Auricle.

Dr. WICKHAM LEGG showed this specimen. In opening the body of an old woman who died of emphysema, dilated heart, and dropsy, there was found in the right auricle, at the back of the heart, just above the tricuspid orifice, a hemispherical projection above the size of half a marble. This projection of the wall was lined with layers of clot, and had a distinct opening between the musculi pectinati. The greater number of the heart-fibres showed distinct striation, taken from the right auricle and right and left ventricles. Dr. Legg said that there might be two opinions held as to the source of this local dilatation. It might be looked upon as congenital; or as a consequence of the pressure, upon a spot of the auricular wall, of the blood following the tricuspid regurgitation. It was to the latter opinion that Dr. Legg inclined. He had been able to find no other specimen of distinct aneurism of the right auricle on record. A case had been recorded in the *Lancet* for 1846, in which the pericardium was found full of pus (about a pint.) An abscess was discovered in the right auricle, with a small ragged opening into the cavity of the right auricle; but there was no communication with the sac of the pericardium.

Melanosis.

Dr. LEGG also showed a specimen of melanosis of the liver. A woman, aged thirty-eight, was admitted, in July, 1876, into St. Bartholomew's Hospital, under the care of Mr. Vernon, for troubles in vision. The right eye was cut out, and on examination it was at first doubtful if the disease were a blood-clot or a new growth; but, after hardening in chromic acid, and microscopical examination, it proved to be a melanotic sarcoma. In the middle of January last she applied at St. Bartholomew's, and was admitted into one of Dr. Church's wards, in a dying state. It was found that her liver was enormously enlarged, and that there were numerous small tumours of the breast and skin. On examination after death there was found to be no return of the disease in the right orbit, and no disease in the left eye. The brain was natural, but the breasts were both full of small tumours, none bigger than walnuts, some pigmented, some white. Similar pigmented and colourless tumours were found studding the pleuræ, pericardium, endocardium, and peritoneum, especially the attachment of the small intestine to the mesentery; and the omentum was studded with numberless small tumours the size of split peas. The lungs, heart, kidneys, uterus, and ovaries also contained pigmented and colourless tumours. All these tumours had the same structure—the pigmented tumours were spindle-celled sarcoma; the colourless were round-celled sarcoma. The liver weighed twenty-two pounds and a half, and the under surface of the right lobe alone showed any approach to healthy liver structure; this was a layer along the lower surface of the right lobe, looking to the naked eye like fatty liver. The cells were here still arranged in rays, but were filled with granules, sometimes in quantity sufficient to obscure the nucleus, and more rounded than polygonal. Sparsely interspersed here were pigmented cells. The pigmented part of the liver—that is, the greater part of the right and left lobes—contained here and there small colourless tumours, and the same characters prevailed here as in the rest of the body: the pigmented parts were spindle-celled sarcoma, the white round-celled sarcoma, and there was no transition between the two, the pigmented spindle cells being sharply marked off by a line, across which the colourless round cells began.

Mr. SPENCER WATSON asked whether the eye had been affected with melanosis outside or inside the sclerotic.

Dr. LEGG replied that the disease was probably inside the sclerotic, and there the original melanosis had begun.

Large Gall-Stone, with Ulcerative Escape.

Mr. BARKER showed a very large gall-stone, from a lady of fifty, who had been a patient of Dr. Quain's and Mr. Erichsen's. In October last the patient had suffered from malaise and night-sweats, with some tenderness in the right hypochondrium. She continued to complain somewhat up to Christmas, passing several stools daily of a fatty appearance. At Christmas she went out freely. On February 4 last, pain commenced in the right iliac region, followed by vomiting. Four stools were passed at this time; but no more up to her death. The vomiting afterwards became stercoraceous. On February 10 no hernia could be discovered, and in a few days she died, the vomiting persisting till the last. Post-mortem, no acute peritonitis was found. In the upper part of the ileum a large solid body could be felt, lying in the right iliac region; and this proved to be a biliary calculus, four inches and a half in circumference. It consisted of layers of cholesterine and biliary colouring matter. There were thin fæces above and below the calculus in the gut. The anterior margin of the right lobe of the liver was adherent to the colon; and a ragged cavity occupied the region of the gall-bladder. The ductus communis choledochus was not obstructed, but dilated. Fourteen or fifteen large calculi were found in the cavity. The absence of general peritonitis was remarkable. Undoubtedly the symptoms of last autumn were referable to ulceration and suppuration about the gall-bladder. These had culminated in ulceration and escape of the calculus. In February it had probably been arrested in its passage at the ileo-cæcal valve, though it was not found there.

Cancer of the Tongue.

Mr. LENNOX BROWNE related the sequel of the case of a patient who had been exhibited at the last meeting of the Society, suffering from cancer of the tongue invading the

tonsil (see *Medical Times and Gazette*, February 16, page 181). Three days afterwards the patient was attacked with another violent hæmorrhage, which was somewhat arrested, though slight sanguineous oozing continued to occur, for some days, whenever food was taken. The patient became very weak, and the sloughing considerably extended. Early on the morning of the present meeting he died after a very short attack of suffocation which awoke him from sleep. Most unfortunately an autopsy had not been permitted, but a portion of the tonsil and the tongue were brought fresh to the Society. The specimen was referred to the Morbid Growths Committee.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 22.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

APPARATUS FOR THE TREATMENT OF TRANSVERSE FRACTURE OF THE PATELLA.

THE PRESIDENT brought before the Society a patient fitted with this apparatus, which he had employed for some time past at St. Bartholomew's Hospital. It consisted essentially of a sheet of plaster fitting to the thigh and extending to the upper margin of the patella, with loops on either side of that bone, and of a canvas slipper, between which, acting from the sole of the foot, and the loops in the plaster, such extension was made by means of pulleys as sufficed to draw the upper fragment down to the lower portion of the broken bone. It was easy to regulate the tension; and, when it was thought well for the patient to get up, the apparatus was left on, as it acted just as well when the man was walking about as it did whilst he was recumbent in bed. Practically, the appliance had been found to insure very good results.

LARYNGO-TRACHEOTOMY FOR LARGE MULTIPLE PAPILLOMATOUS GROWTH IN THE LARYNX—REMOVAL OF THE VOCAL CORDS—PRESERVATION OF VOICE—CO-EXISTENCE OF THORACIC ANEURISM.

DR. BURNEY YEO introdnced the subject of this communication, who was a labouring man aged forty-nine, and who first came under his observation as an out-patient at the Brompton Hospital on October 13 last, complaining of severe and almost constant pain at the upper part of the left side of his chest. He was very hoarse, and had been so for eight or nine years. He suffered much from dyspnœa, and could not lie down in bed. Examination of the chest discovered a distinct pulsation at the sternal end of the second left intercostal space, with a corresponding area of dulness and strongly accentuated second cardiac sound. There was also a prolonged, noisy, harsh, and sometimes whistling inspiration heard all over the chest, without any moist râles. Laryngoscopic examination disclosed the existence in the larynx of a large vascular warty growth, apparently pedunculated, and attached to the anterior commissure above the vocal cords. It almost completely filled the upper part of the laryngeal cavity, concealing the glottis and the vocal cords entirely, except during breathing, when a triangular interval could be seen between the growth and the left vocal cord, through which air passed into the air-passages. On the 16th he was admitted into King's College Hospital, when, amongst other points in his history, he mentioned that, in June last, while helping to pick up an iron rail, he heard something crack, and was suddenly seized with severe pain in the superior cardiac region, from which he had ever since suffered. He was kept at rest in bed for a month, without any amelioration in his condition; indeed, the pain in the chest and the difficulty of breathing were so distressing that the patient begged for some operative interference. After consultation with Mr. Lister, the operation which he immediately described to the members was performed on November 23.

MR. LISTER then described the operation which he had performed. Cricotomy having shown that both vocal cords were implicated in the disease, he at once divided the thyroid cartilage, after introducing into the trachea one end of a bent leaden tube packed with thin sheet indiarubber, so as to plug the canal completely and prevent danger from blood entering the air-passages, chloroform being given at the other end of the tube. Both vocal cords were removed entire, together with neighbouring portions of mucous membrane, including the false vocal cords. The sides of the thyroid cartilage were drilled and tied together with silver wire, and the edges of the skin over the thyroid cartilage were kept in a state of relaxation by means of the button-stitch. The great peculiarity of the case consisted in the fact that the patient retained the power not only of coughing, but of speech of considerable power. In order to explain this, Mr. Lister referred to observations upon the movements of the larynx, which he had made in 1861, and published shortly in the article "Anæsthetics" in "Holmes's Surgery." He had then ascertained by laryngoscopic examination in his own person, after an experiment on one of the lower animals, that the pulpy folds of mucous membrane which surmount the summits of arytenoid cartilages can be carried forward to the base of the epiglottis by an antero-posterior movement of the cartilages not generally known to occur, so as to act as a secure valve to the opening of the respiratory passage. It is the vibrations of these posterior parts of the aryteno-epiglottidean folds which constitute the mechanism of laryngeal stertor; and it is by their means that the exit of air is prevented during the accumulating pressure in an expiratory act which ends in coughing. Mr. Lister believed that it was still not generally known that the strain of the act of coughing is not borne by the delicate apparatus of the rima glottidis, but by these folds of mucous membrane which cannot suffer from such treatment. Knowing this fact, he had anticipated that the patient would be able to cough like other people; but he had not expected him to retain the power of speaking above a whisper. Yet he might have been prepared for the possibility of such an occurrence, seeing that laryngeal stertor can be produced at will, and by a mechanism which is independent of the vocal cords, and was left intact by the operation. Mr. Lister then himself uttered a sentence in a voice produced by the vibrations of the aryteno-epiglottidean folds; and he stated that, since his attention had been directed to the subject, he had noticed that this kind of voice is occasionally resorted to in ordinary parlance under the influence of mental emotion.

When the patient was introduced, the linear cicatrix over the box of the larynx having been exhibited, he showed that he could cough naturally, and also spoke some sentences in a deep, gruff monotone, plainly audible to all present.

The patient was then introduced; and DR. BURNEY YEO added, in completion of the history of the case, that inspection with the laryngoscope now showed an entire absence of the normal inter-laryngeal structures. In attempts at speech, the aryteno-epiglottic folds were drawn towards the median line, and served as vibrating media. He had been readmitted into the hospital a few weeks ago on account of the same neuralgic pains caused by his aortic aneurism, the physical signs of which had become more evident. He had been treated by rest in bed, hypodermic injections of morphia to procure rest at night, and iodide of potassium in doses of thirty grains three times a day. He had much improved under this treatment; he was now able to lie down comfortably in bed on either side. He had no dyspnœa and no cough. The expansile impulse and the area of dulness were less. Dr. Yeo thought the case of great interest, not only on account of the curious physiological fact it had revealed with respect to the production of voice, but also from the remarkable coincidence of the existence of these large inter-laryngeal growths together with thoracic aneurism. In pre-laryngoscopic times it would have been difficult to have avoided the error of regarding the hoarseness and the obstruction to respiration observed in this case as consequences of aneurismal pressure. It was another instance, and a very remarkable one, of the clinical value of the laryngoscope.

THE PRESIDENT considered the case now brought under the notice of the Society one inviting consideration and discussion, not merely from its clinical interest, but also from the physiological question which it raised. It seemed to offer another factor in that series of observations which, beginning with the facts noticed after the removal of the tongue, had drawn attention to the manner in which the power of speech was preserved after great interference with the organs usually regarded as being concerned in its production. It had been taught that removal of the entire tongue rendered a man mute, but we now know that the organ might be taken away and the power of speech retained; and now Dr. Foulis's case and the one at present before the Society pointed to further interference with the

organ producing the voice allowing of the retention of modified speech, or of the production of speech by artificial aids. The question of the compensatory action of the arytenoepiglottidean folds after the removal of the vocal cords was one which would, no doubt, attract further observation, for it was a point of practical importance.

Mr. MAUNDER said the case under consideration was of interest from physiological, clinical, and operative points of view. Doubtless it was shown thus early after operation lest the man should die of his aneurism, but he trusted Dr. Yeo would cure this, and would give the Society an opportunity of knowing whether or not the growths recurred. This was important in connexion with a case shown elsewhere, by Dr. Foulis, where the papillomata had returned twice, and then excision of the larynx was resorted to. It is very desirable to have decided data in order to settle the question of choice of operation.

Mr. HOLMES said that the case would have been more complete had any anatomical proof been given of the entire removal of the vocal cords, especially as in the ordinary operation of thyrotomy, for the removal of warty tumours from the larynx, no necessity was generally found for doing more than removing at most their surfaces. He also said that, in reference to the supposed power of the arytenoepiglottidean folds to produce vocal sounds by their vibration, it would be interesting to know whether any laryngoscopist had ever observed such vibrations during the production of the hoarse voice which Mr. Lister imitated, or during any other kind of phonation. Mr. Lister's own experiments, of course, referred to a peculiar and forced position of the tongue, and to the production of a mere inarticulate sound.

Mr. LENNOX BROWNE said, that having had an opportunity of examining the patient, he could bear testimony to the fact that every portion of the vocal cords, true and false, had been removed. It appeared to him that in the act of phonation in this case there was general lateral compression of the larynx; there was certainly also a disposition for the epiglottis to hang lower than before the operation, so as to come in greater proximity to the arytenoid cartilages. The case was exceedingly interesting and important because the operation had been performed, not only on account of impairment of voice, but for relief of a vital symptom; and although there were dangers in the operation, they were in point of fact not so many nor so great as were frequently witnessed in attempts to remove growths *per vias naturales*. In this latter operation he had personally witnessed the following consequences:—Spasm of the larynx, resulting from the introduction of instruments, in two instances requiring immediate tracheotomy; removal of normal tissue, leading to ulceration; injury to laryngeal cartilages, especially the arytenoid, resulting in paralysis, caries, and death of the patient. There was further a much greater tendency to recurrence than was generally supposed, and the recovery of voice was by no means so complete as was frequently thought to be the case by those who had not an opportunity of personally witnessing the results. Mr. Browne considered that the removal of the tracheal tube so very shortly after the operation in the present instance had contributed greatly to the patient's rapid recovery, while the very complete enucleation of the contents of the larynx would lead one to predict with almost certainty that there would be no recurrence; and he believed that were these two points, justly insisted on as important by Professor Lister, rigidly adhered to in similar cases, there would be no necessity for the much more dangerous operation of extirpation of the larynx.

Dr. F. SEMON was curious to know why, before performing thyrotomy, no attempt was made to remove the growth by *endo*laryngeal operation, it being situated *above* the vocal cords. It had been said that it was too large and too hard to be removed by such an operation; but this reason did not at all seem sufficient to his mind to justify thyrotomy, it being clear that a large growth was easier to remove *per vias naturales*. Professor Stoerck of Vienna had proved, by removing enchondromata in several cases with his guillotine, that even the highest degree of hardness did not offer a serious obstacle to the endolaryngeal removal of laryngeal growths. If *trachcotomy* only had been performed, with subsequent *endo*laryngeal removal of the papilloma, he would not have raised any objection; but he did strongly object to thyrotomy, in consequence of his own experience, as well as from the perusal of a quite lately published book by Professor Paul Bruns of Tübingen—"Laryngotomy for the Removal of Intra-laryngeal Growths"—towards which he wished to draw the attention of the Society. In this work, the author, who is Professor of Surgery in the University of Tübingen, compared the value of the intra- and extra-laryngeal methods very impartially, based upon the statistics of *all* the cases on record until the end of 1877. He came, after careful consideration, to the result that the intra-laryngeal method was, in most cases, by far to be preferred. His results were very striking, and showed clearly the great danger of thyrotomy for the restoration of the voice, as well as for the possibility of recurrence. Out of thirty-nine *selected* cases of thyrotomy for the removal of growths (the result of *all* cases on record being still much more unfavourable), only eighteen ended in complete, or nearly complete, restoration of the voice; while in twenty-one—*i.e.*, in more than 50 per cent.—the voice was finally either completely lost or very much altered. At the same time, there was exactly the same unfavourable percentage of recurrence of the disease. In thirty-nine cases in which papillomata were removed by thyrotomy, the growth returned in twenty-one cases. This was not at all astonishing, if one remembered that thyrotomy was a very lengthy operation, which took from one to two hours; that almost during the whole time the narrow space in which one had to operate was filled with blood; and that, if there were *multiple* papillomata in the larynx, a single small one might easily escape the attention of the surgeon; or that the mucous membrane from which they grew might not be deeply enough destroyed. In such cases, experience showed that, after the operation, the papillomata grew very rapidly again. Hence the comparatively numerous reports of repeated thyrotomies on the same patients. On the other hand, the endolaryngeal method could already now show more than one thousand successful removals of growths. Even if the operation did not succeed, there was at least not a new factor added, by the operation itself, so dangerous for the voice as thyrotomy had proved to be. Further, Bruns' statistical tables showed that, in ninety cases of removal of papillomata (most of which were multiple) by endolaryngeal operations, there were only thirty recurrences *i.e.*, 66⅔ per cent. successes, against the 53 per cent. failures of thyrotomy. These numbers spoke for themselves. With regard to Professor Lister's physiological remarks, Dr. Semon did not doubt in the least their accuracy; but, as he had made his observations in two instances only, so small a number did not seem sufficient to base upon it any general conclusions. It was a well-known fact amongst laryngoscopists that some parts of the larynx could take vicariously the functions of others—*e.g.*, the epiglottis being destroyed by syphilis or any other disease, the aryepiglottic folds or the false vocal cords could protect the larynx against the entrance of food and fluids; or, the vocal cords being ulcerated and almost destroyed, the *false* vocal cords could act for them during phonation. Also, it was sometimes to be observed that the upper part of the larynx in some patients was so irritable, and at the same time so flexible, that it could be closed completely *above* the *false* vocal cords (in which fact the instances related by Professor Lister found their physiological explanations. Dr. Semon thought these cases were only *exceptions*, and not reliable at all to found upon them any principle of *acting*; and he did not think the single result obtained by Professor Lister in this case, however excellent, would induce him to perform thyrotomy as long as the much less dangerous endolaryngeal method was at his disposal.

Mr. ERNEST HART remarked that several of the speakers had referred to the aneurism with the intimation that it would be likely to prove fatal; but he was sure they would be pleased to say *Absit omen*. By way of practical postscript to that effect, he would like to say that, in all probability, aneurisms ought now to be considered as curable rather than incurable diseases, and that whether they were medical or surgical aneurisms. He had lately seen, in the museum of the Steevens's Hospital in Dublin, a preparation of a cured consolidated aneurism of the first portion of the arch of the aorta, of which the clinical history very much resembled that of the present case, so far as the aneurism was concerned. The patient had subsequently committed suicide, for reasons connected with his pecuniary affairs. The patient had been treated by Mr. Tufnell on his well-known method, and there seemed to be no reason why this patient should not be

treated by the same method of restricted diet and rest, with the prospect of an equally successful result.

Mr. LISTER, in replying, said that, with reference to Mr. Holmes's remarks, he must beg Mr. Holmes to take his word for the fact that both vocal cords were removed in their entire length and thickness, including the anterior processes of the arytenoid cartilages into which they are inserted; or, if that were not sufficient, he would appeal to Dr. Yeo, who was present at the operation. Mr. Wood also kindly assisted at the operation, and, if he had been at the meeting, he would have confirmed the accuracy of the statement.

Mr. BURNEY YEO, in replying, said there could be no doubt whatever that the whole of the strictly intra-laryngeal structures had been removed by the operation. He had had opportunities of demonstrating this fact laryngoscopically to several gentlemen present. The patient had not made so good an appearance that evening as he had done on other occasions, being probably a little disturbed by coming before so large an assembly; but his voice had been tested in every way, and he was able to pronounce all the vowel sounds, and to read distinctly anything that was put before him. With regard to his aneurism, it was possible that a cure might be effected; but of course that was always a matter of great doubt: at any rate, he was in a much better condition than formerly. Moreover, he was certainly *alive*, as the members present could testify, although he had heard it authoritatively stated that this patient was dead.

Mr. HOLMES, in answer to an observation from Mr. Lister, implying that he had questioned the justifiability of the operation, begged to explain that he had said nothing that would bear such an explanation. All that he had said was that, in a case so novel, and on which new physiological views were based, it would have been better if distinct anatomical proof had been adduced of the total removal of the vocal cords. Again, in answer to Dr. Yeo, who represented him as not believing that the cords had been removed, Mr. Holmes begged that he might not be misrepresented. All he had said was that distinct anatomical details would have made the case more complete.

(To be continued.)

MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—SCHOOL OF PHYSIC IN IRELAND.—At the Hilary Term Examination for the degree of Bachelor of Medicine, held on Monday and Tuesday, February 18 and 19, the successful candidates passed in the following order of merit:—

Neville, William C.	Daly, Ulick.
Cowen, Edward J.	Malley, Abraham.
Wilkinson, William C.	Tench, Charles H.
Young, Alexander G.	Smith, Thomas O.
Pentland, Alexander	Crofts, James G. W.
Egan, Constantine R.	Day, James D.
Inman, Arthur.	

At the examination for the degree of Bachelor in Surgery, the following was the order of merit in which the candidates passed:—

White, Edward W. W.	Daly, Ulick.
Mallins, Clement.	Taylor, Rogers W. G.
Young, Alexander G.	Fogarty, Thomas F. W.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Licentiates on Feb. 22:—

Battye, John Howard, 123, St. George's-road, S.W.
Bennett, William Charles Storer, 17, George-street, Hanover-square, W.
Blaxland, Herbert, University Hospital, W.C.
Chawner, Alfred, 73, Addison-road, Kensington, W.
Coates, Harcourt, 8, Granby-street, N.W.
Griffith, Charles William, Station Hospital, Dover.
Harris, George Francis Angelo, 55, Sutherland-gardens, W.
Pearse, Thomas Frederick, 62, Haverstock-hill, N.W.
Pointon, James, Birkenhead.
Ritchie, Arthur Fisher, 12, Charlotte-street, W.C.
Sykes, John Frederick Joseph, 20, Fitzroy-square, W.
Turner, George Robertson, 9, Sussex-gardens, W.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 21:—

Haslam, William Frederick, Reading.
Pearse, Thomas Frederick, Haverstock-hill, N.W.
Philpot, Joseph Henry, South Eaton-place, S.W.
Shaw, George, Blackheath-park.
Warren, Chas. Edward Henderson, Holywell, Flintshire.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Diggle, John Arthur, Manchester Hospital.
Hawks, Robert Shafto, St. Bartholomew's Hospital.
Rummalls, Harry Boyle, St. Mary's Hospital.
Skelding, Henry John, University College Hospital.
Walker, John Sydenham, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BAKER, F. GRENFELL, M.R.C.S., L.R.C.P., L.S.A., from Junior to Senior House-Surgeon to the Birkenhead Borough Hospital, *vice* E. Cretin, M.B., resigned.

BIRTHS.

BIRT.—On February 24, at 27, Tregunter-road, The Boltons, S.W., the wife of Louis F. H. Birt, L.R.C.P. and S. Edin., of twins, stillborn.

CAUSTON.—On February 19, at 1, Pomona-place, Hammersmith, W., the wife of William H. Causton, M.R.C.S.E., of a son.

FARRINGTON.—On February 21, at The Moat, Penshurst, Kent, the wife of W. B. Farrington, M.D., of a daughter.

FORD.—On February 17, at Croft House, Portsmouth, the wife of A. Vernon Ford, L.K.Q.C.P.I., M.R.C.S., of a son.

HOULBROOK.—On February 20, at Hendon, the wife of Edward Houlbrook, M.R.C.S. Eng., of a son.

MAIR.—On February 22, at Egmore House, Ledbury-road, Bayswater, the wife of R. S. Mair, M.D., of a son.

MEADOWS.—On February 24, at Otley, Ipswich, the wife of G. F. W. Meadows, M.R.C.S.E., of a son.

MORGAN.—On February 11, at Trefenai, Carnarvon, the wife of W. Taylor Morgan, M.D., of a son.

WILTSHIRE.—On February 22, at 57, Wimpole-street, Cavendish-square, the wife of Alfred Wiltshire, M.D., of a son.

MARRIAGES.

ATKINSON—FORD.—On February 26, at St. Jude's, South Kensington, Surgeon-Major John Atkinson, M.R.C.S. Eng., of Kirby Lonsdale, Westmoreland, to Mary Ann, eldest daughter of W. J. Ford, Esq., of 18, The Boltons, S.W.

BRAILSFORD—HALE.—On February 20, at Staveley parish church, Joseph Brailsford, jun., of Sheffield, solicitor, to Harriott Fanny, eldest daughter of Fredk. Thos. Hale, F.R.C.S., of Staveley.

CAMPBELL—HARPER.—On February 23, at the church of Our Lady of the Rosary, Marylebone-road, James Andrew Campbell, Esq., to Miriam Kate, eldest daughter of Philip Harper, F.R.C.S. Eng., of 30, Cambridge-street, Hyde-park.

CLERKE—CLATWORTHY.—On February 26, at the parish church, Chatham, Henry Clerke, L.K.Q.C.P. Ire., Surgeon R.N., youngest son of the late Thos. St. John Clerke, Esq., of County Cork, Ireland, to Louisa, youngest daughter of E. Clatworthy, Esq., of the Royal Dockyard, Chatham.

FINNIS—LEAHY.—On January 29, at Sukkur, Upper Scinde, India, Henry Finnis, Royal Engineers, fifth son of Sterikir Finnis, Esq., of Dover, to Mary, eldest daughter of John Leahy, M.D., of Sukkur.

DEATHS.

HEELIS, RICHARD, youngest son of Robert Heelis, M.R.C.S., of Brighton-at Lindoola, Ceylon, on January 9.

NAIRNE, CHARLES, M.R.C.S. Eng., at 72, Kennington-road, on February 22, aged 73.

RICHMOND, AGNES RUTH, youngest daughter of Sylvester Richmond, M.D., at Northallerton, Yorkshire, on February 16, aged 16 months.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

DENTAL HOSPITAL OF LONDON, LEICESTER-SQUARE.—Assistant Dental Surgeon. Candidates must hold the dental diploma of the Royal College of Surgeons of England. Applications to Geo. A. Ibbetson, Hon. Sec., on or before March 13.

KENT AND CANTERBURY HOSPITAL.—House-Surgeon. Candidates must be registered under the Medical Acts as legally qualified to practise medicine and surgery, unmarried, and not more than forty years of age. Applications, with testimonials, to the Secretary, on or before March 29. A copy of the laws regulating the duties of the House Surgeon may be had on application to the Secretary at the Hospital.

MANCHESTER ROYAL INFIRMARY.—Resident Surgical Officer. Applicants must not be less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. Applicants must be not less than twenty-five years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer for the Fever Hospital at Monsall. Applicants must be not less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer of the Convalescent Hospital at Cheadle. Applicants must be not less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

UNION AND PAROCHIAL MEDICAL SERVICE.

, The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Depwade Union.—Mr. T. H. Barton has resigned the Workhouse; salary £50 per annum. Also the First District; area 12,457; population 3783; salary £62 per annum.

Eton Union.—Dr. Charles S. Heap has resigned the Burnham District; area 12,880; population 4843; salary £115 per annum.

Fulham Union.—Dr. G. H. Blackmore has resigned the Workhouse.

Oakham Union.—Mr. Wm. J. Bonnor has resigned the Empingham District; area 14,692; population 2421; salary £30 per annum.

Stoke-upon-Trent Parish.—Mr. C. H. Greene has resigned the Longton District; area 1369; population 19,748; salary £100 per annum.

APPOINTMENTS.

Easingwold Union.—Bertraad Ede Lantour, M.R.C.S. Eng., to the Alne District.

Henley Union.—Wm. E. Young, L.R.C.S. Edin., L.R.C.P. Edin., to the Caversham District.

Lancaster.—James C. Brown, D.Sc., as Analyst for the Borough.

Llandilofawr Union.—James H. Davies, L.R.C.P. Edin., L.R.C.S. Edin., L.S.A., to the North District.

Narberth Union.—Vaughan D. W. B. Jones, L.R.C.P. Lond., M.R.C.S., to the Llanboidy District.

LINNÆAN SOCIETY.—We understand that at a meeting of this Society, to be held at Burlington House on the evening of March 7, Dr. Patrick Manson will read communications on *Filaria sanguinis hominis*, and on the Mosquito, and Dr. Spencer Cobbold will review the life-history of *Filaria Bancrofti*.

ROYAL VISIT TO THE HUNGARIAN WINE VAULTS.—During his stay in London, his Imperial Highness the Crown Prince of Austria paid a visit to the extensive wine vaults of Mr. Max Greger, in St. Thomas's-street, Borough. In replying to the address of welcome, the Crown Prince complimented Mr. Greger on his endeavours to introduce Hungarian wines into this country, and congratulated him on the measure of success that has attended his efforts.

PILLS IN AMENORRHŒA.—Prof. Courty employs a pill composed of powdered rue, savin, and ergot, of each five centigrammes, and aloes from two to five centigrammes. Of these thirty are ordered, and three are taken the first day, six the second day, and nine the third day—always in three doses. They are suited for cases of idiopathic amenorrhœa, without great reaction on the economy, and when there is reason to suppose that the suppression of the menses is due either to an insufficient determination towards the genital organs, or to a difficulty of discharge due to inertia of the uterus. In order to encourage the fluxion towards the genital organs, Dr. Courty orders, before beginning the pills, foot-baths, sitz-baths, and fumigations. He also applies leeches to the labia during the three days the pills are being taken. The pills generally induce colicky pains, and often a little diarrhœa.—*Union Méd.*, February 19.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Aberdonensis.—The gentleman affirmed a physical impossibility. The whole matter says more for the self-conceit than for the judgment of the writer; but it is often hard to understand that one has made a goose of oneself.

A Tea Drinker writes:—

"To express in a few words the advantages derivable from the use of tea, it may be said that it forms an agreeable, refreshing, and wholesome beverage. It cools the body when hot—probably by promoting the action of the skin; and warms it when cold—by virtue, it would seem, of the warm liquid consumed. In a negative way it may prove beneficial to health, by taking the place of a less wholesome liquid. Through the milk and sugar usually consumed with it in England, it affords the means of applying a certain amount—and not by any means an insignificant amount, viewed in its entirety—of alimentary matter to the system. It also tends to allay the excitement from, and counteract the state induced by, the use of alcoholic stimulants."

ADULTERATED WATER.

William Hulme, of Prescot Hall, a farmer, has been fined £20 and costs for adulterating the milk he supplied to the Union to the extent of 53 per cent. It appeared that about £200 a year had been paid to the defendant for what was little better than water alone.

SAN FRANCISCO.

Some statistics of interest, published by the *San Francisco Chronicle*, of the population of that city, show that the capital of California, which in 1815 was a village with only 100 inhabitants, contained a population of 150,000 ten years ago, and in 1872 the census showed that it numbered 178,276 souls. Four years later, upon March 1, 1876, the population had increased to 301,020, which was at the rate of 30,686 per annum during the four years. It is computed that at the present date San Francisco contains at least 330,000 inhabitants.

A PEOPLE'S PARK.

The Leicester Town Council have decided to purchase the Abbey Meadow, on the north side of the town, for the purpose of making it a people's park.

IN MEMORIAM.

Fleet-Surgeon J. S. Y. Adams, of her Majesty's ship *Pallas*, who was invalided from Port Saïd, died immediately on the arrival of the steamer *Teheran* at Malta on the 15th ult. His remains were conveyed with military honours, and interred in the cemetery attached to the Royal Naval Hospital, Bighi.

LEPROSY IN SPAIN.

Statistics of leprosy have been ordered to be collected by the Spanish Government. It is stated in a medical report, presented to the Governor of Valencia, that in that province there were forty-five lepers, but the disease being concealed or disguised under various names, it was difficult to procure detailed particulars.

THE OTHER SIDE OF THE QUESTION.

A recent return made by the Chief Constable of Glasgow to the Lord Provost and magistrates shows that the number of certificates granted to hotel-keepers, spirit dealers, and grocers to retail excisable liquors has only been an increase of 200 there during the last twenty years, whilst the gross rental of licensed houses has increased from £66,205 in 1858, to £169,989 in 1877, or 250 per cent., and the average rental from £40 16s. in 1858, to £93 6s. in the latter year.

MR. WILLIAM GILBERT.

It is not generally known that this gentleman, who has written so well, and so ably exposed the diversion of City charities, is a member of the Royal College of Surgeons of England, of which institution he was admitted a member so long ago as 1830. He will contribute an article on the Five Royal Charities to an early number of the *Contemporary Review*, in which it is stated that details will be supplied of the way in which the funds of these charities, amounting to upwards of £10,000, have been diverted from their proper uses.

HOW OLD SHOULD A NURSE BE?

At a recent meeting of the Holborn Board of Guardians, a discussion occurred, of which it may be of some utility to take note. The Visiting Committee had recommended that two night-nurses should be removed, and two more experienced nurses be appointed. The grounds for this suggestion were that the nurses were "giddy." There was a concurrence of opinion as to the "giddiness" of these nurses from the medical officer, the master, and the matron; and, subsequently, all those who spoke on the subject, characterised them as "young women and giddy girls," and in consequence unfit for the responsible duties of a nurse. It appeared, however, that these women were thirty years old—a fact only elicited late in the discussion, and which drew from one of the guardians the pertinent remark, "I wonder what age you would like them!"

THE CITY DISPENSARIES AND THEIR MEDICAL OFFICERS.

Dr. Sedgwick Saunders, the Medical Officer of Health for the City of London, in his last report, referring to four cases of typhoid fever which had occurred in the City, remarks—"These cases had been under the treatment of the medical officers of the dispensary in Bartholomew-close for the last six weeks, and the fact of their existence was only discovered by the sanitary inspector of the district making his daily inspection." Dr. Saunders adds—"I have again to call attention to the impossibility of taking measures to prevent the spread of contagion or disease in the absence of early information from the only persons competent to afford it; and I beg to repeat the recommendation made in my previous report—namely, that the authorities of all City dispensaries be urged to impress upon the medical officers the great importance of rendering the desired assistance."

PROVINCIAL SANITARY WORKS.

A Local Government Board inquiry has been held at Devonport, near Plymouth, in reference to the application of the Artisans' Dwellings Act to the town, and the proposed scheme agreed upon by the Town Council and the Lord of the Manor, Sir J. St. Aubyn, Bart., M.P. The borough will construct the new streets and sewers, and Sir J. St. Aubyn will erect the buildings, which are to be completed in fourteen years.——At Rochester, the proposals and plans of the trustees of Watts's Charity, for providing public baths for the city, have been unanimously approved by a large meeting of the inhabitants.——At Burnley, the Town Council have unanimously decided to petition the Local Government Board to extend their borrowing powers by £60,000—£20,000 to complete the sewerage scheme, and £35,000 for other improvements.

COMMUNICATIONS have been received from—

Mr. W. E. POOLE, London; Dr. J. MITCHELL BRUCE, London; Mr. B. R. WHEATLEY, London; Mr. JOHN CHATTO, London; Mr. T. M. STONE, London; Dr. THOS. BARLOW, London; Dr. F. CHURCHILL, London; Dr. BUZZARD, London; Dr. C. HANDFIELD JONES; Dr. TRUDICHUM, London; Dr. J. PEARSON IRVINE, London; Mr. R. BRUDENELL CARTER, London; Dr. R. NEALE, London; THE REGISTRAR OF APOTHECARIES' HALL, London; THE DIRECTOR-GENERAL OF THE ARMY MEDICAL DEPARTMENT; THE REGISTRAR OF THE ROYAL COLLEGE OF PHYSICIANS, London; THE HONORARY SECRETARY OF THE HARVEIAN SOCIETY, London; Mr. R. W. PARKER, London; Mr. MAX GREGER, London; THE SECRETARY OF THE METEOROLOGICAL SOCIETY, London; THE SECRETARY OF THE NEWSVENDORS' BENEVOLENT AND PROVIDENT INSTITUTION; Dr. HAYWARD, Liverpool; THE SECRETARY OF THE INDIA OFFICE; Dr. SPARKS, Mentone; Mr. HOWARD MARSH, London; Dr. JOHN WILLIAMS, London; THE SECRETARY OF THE ROYAL INSTITUTION, London; Dr. HARDWICKE, Sheffield; THE SECRETARY OF THE SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, ETC.; Dr. CARTER, Liverpool; Mr. J. HAMILTON CRAIGIE, London; THE SECRETARY OF THE STAFFORD HOUSE COMMITTEE, London; Dr. J. W. MOORE, Dublin; Dr. MOXON, Dublin; A STUDENT OF CHARING-CROSS; Dr. SPENCER COBBOLD, London; Dr. ROSS, Manchester; Dr. RUSSELL, Birmingham.

BOOKS AND PAMPHLETS RECEIVED—

Asiles d'Accouchement de la Ville de St. Petersbourg: Matériaux Statistiques pour la Prophylactique des Maladies Puerpérales, par W. Stolz—Rudolph Virchow, M.D., The Freedom of Science in the Modern State—W. R. Gowers, Diagrams for the Record of Physical Signs—Sydney Ringer, M.D., A Handbook of Therapeutics, sixth edition—Sir James Coxe, M.D., Lunacy in its Relations to the State—Seventh Annual Report of the Board of Trustees of the New York Ear Dispensary—Edward Gregson Banner, C.E., Wholesome Houses: being an Exposition of the Banner System of Sanitation.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hopitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Saint Louis Clinical Record—Sunday at Home—Leisure Hour—Indian Medical Gazette—Paris Exhibition—National Anti-Compulsory Vaccination Reporter.

APPOINTMENTS FOR THE WEEK.

March 2. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Mr. R. Bosworth Smith, "Carthage and the Carthaginians."

4. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON (Annual Meeting, 7½ p.m.; Election of Officers and Council, Ballot closes at 8 p.m.), 8½ p.m. Dr. Howard (U.S.A.) will give a Demonstration of "The Direct Method of Artificial Respiration." Mr. R. Brudenell Carter, "On Artificial Light in relation to the Comfort and Well-being of the Eyes."

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Professor W. H. Flower, "On the Comparative Anatomy of Man."

ROYAL INSTITUTION, 2 p.m. General Monthly Meeting.

5. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westmioster Ophthalmic, 1½ p.m.; West London, 3 p.m.

PATHOLOGICAL SOCIETY, 8½ p.m. Dr. Goodhart—Dilatation of the Heart and Aorta from Old Spinal Disease. Mr. Geo. C. Coles—1. "Lymph-Scrotum"; 2. Worms in the Heart and Œsophagus of a Dog. Mr. B. Squire—1. Drawing of a Rare Form of Psoriasis; 2. Drawing of a Case of Nævus complicated with Molluscum. Mr. Sangster—Case of Hypertrophic Lupus. Dr. Ord—1. Renal Calculus containing Indigo; 2. Renal Calculus of mixed Carbonate and Phosphate (from the same subject); 3. Two Specimens showing the Spontaneous Disintegration of Calculi. Mr. Spencer Watson—1. Polypus from the Antrum and Orbit; 2. Colloid Cancer of the Breast. Mr. Nunn—Sections of Tumour from the Pectoral Region of a Man aged eighty-one.

ROYAL INSTITUTION, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

6. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

OBSTETRICAL SOCIETY, 8 p.m. Specimens and Instruments: Dr. Hayes—Tube for Intra-Uterine Injection of Solution of Perchloride of Iron; Dr. Galabin—Metrotome; Dr. John Williams—Uterus, with portion of Placenta, three weeks after labour. Papers: Dr. Matthews Duncan, "On Traction by the Lower Jaw in Head-last Cases"; Dr. George Roper, "Case of Protracted Labour in which the forceps was typically indicated."

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Professor W. H. Flower, "On the Comparative Anatomy of Man."

ROYAL MICROSCOPICAL SOCIETY, 8 p.m. Mr. Adolf Schulze, "On an Easy and Simple Method of Resolving the Finest Lined Diatomaceous Tests." Mr. Chas. Stewart, "On a supposed New Coral Stylaster."

7. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

HARVEIAN SOCIETY, 8 p.m. Casual Communications. Dr. T. S. Dowse, "On the Treatment of Syphilitic Disease of the Nervous System."

ROYAL INSTITUTION, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

8. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

CLINICAL SOCIETY, 8½ p.m. Mr. Hulke, "Large Aneurism of Left Subclavian and Axillary Artery, treated by Rest and a very Restricted Diet" (living specimen). Dr. Broadbent, (1) "Sudden Death from Effusion into the Pleural Cavity, without Paracentesis"; (2) "Unusually Rapid Effusion of Bloody Fluid into the Pleural Cavity, at the age of seventy-six—Paracentesis—Recovery." Dr. F. Taylor, "Unilateral Atrophy, with Muscular Spasm (Athetosis?)" (living specimen).

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Professor W. H. Flower, "On the Comparative Anatomy of Man."

ROYAL INSTITUTION (Weekly Evening Meeting, 8 p.m.), 9 p.m. Prof. Goldwin Smith, "On the Influence of Geographical Circumstances on Political Character."

VITAL STATISTICS OF LONDON.

Week ending Saturday, Feb. 23, 1878.

BIRTHS.

Births of Boys, 1348; Girls, 1282; Total, 2630.
Average of 10 corresponding years 1868-77, 2358·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	872	884	1756
Average of the ten years 1868-77	819·5	800·0	1619·5
Average corrected to increased population ...	...	...	1733
Deaths of people aged 80 and upwards ...	...	...	84

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	10	3	6	3	21	...	1	1	1
North ...	751729	18	4	16	2	14	...	8	...	7
Central ...	334369	1	7	4	...	4	...	1	1	1
East	639111	5	8	2	...	20	1	3	1	...
South	967692	5	18	6	4	41	4	3	...	2
Total	3254260	39	40	34	9	100	5	16	3	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·208 in.
Mean temperature	45·5°
Highest point of thermometer	60·5°
Lowest point of thermometer	33·2°
Mean dew-point temperature	41·5°
General direction of wind	S.W.
Whole amount of rain in the week	0·80 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, February 23, 1878, in the following large Towns :—

Boroughs, etc. (Municipal boundaries for all except London)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Feb. 23.	Deaths Registered during the week ending Feb. 23.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Centimetres.
London	3577304	47·5	2630	1756	60·5	36·2	46·5	8·06	0·03	0·08
Brighton	103923	44·1	46	63	51·8	35·0	45·4	7·44	0·00	0·00
Portsmouth ...	129461	28·9	99	59	...	...	...	...	...	...
Norwich	84620	11·9	59	60	57·5	37·0	46·5	8·06	0·02	0·05
Plymouth	73599	52·8	34	45	54·5	38·0	46·5	8·06	0·19	0·48
Bristol	206419	46·4	139	89	59·6	35·0	47·0	8·33	0·12	0·30
Wolverhampton ...	74240	21·9	45	38	52·4	32·5	42·9	6·06	0·02	0·05
Birmingham ...	383117	45·6	338	211	...	...	...	...	...	...
Leicester	121473	28·0	99	37	59·0	34·8	45·5	7·50	0·11	0·28
Nottingham ...	165267	16·6	123	83	59·8	31·9	45·2	7·33	0·06	0·15
Liverpool	532681	102·2	450	299	61·9	38·2	46·4	8·00	0·05	0·13
Manchester ...	360514	84·0	254	202	...	...	...	...	...	...
Salford	170251	32·9	154	85	60·4	31·9	44·7	7·06	0·03	0·08
Oldham	107366	23·0	73	45	...	...	...	...	...	...
Bradford	185088	25·6	116	86	58·6	40·8	46·7	8·17	0·01	0·03
Leeds	304948	14·1	231	112	62·0	39·0	47·7	8·72	0·00	0·00
Sheffield	289537	14·7	229	152	58·0	37·0	46·8	8·12	0·01	0·03
Hull	143139	39·4	139	68	58·0	33·0	45·5	7·50	0·06	0·15
Sunderland ...	112459	34·0	95	57	58·0	33·0	45·1	7·95	0·00	0·00
Newcastle-on-Tyne	144570	26·9	90	56	...	...	...	...	...	...
Edinburgh	222371	53·1	147	111	55·8	36·2	46·4	8·00	0·12	0·30
Glasgow	566940	94·0	459	236	53·2	39·0	47·7	8·72	0·34	0·86
Dublin	314666	31·3	184	200	61·8	33·8	47·6	8·67	0·25	0·63
Total of 23 Towns in United Kingdom	8373953	37·9	6221	4148	62·0	31·9	46·3	7·95	0·08	0·20

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·21 in. The lowest reading was 29·93 in. on Monday morning, and the highest 30·46 in. on Friday morning.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

ON CHOREA IN OLD PEOPLE.

A LECTURE
DELIVERED AT THE SALPÉTRIÈRE.

By PROFESSOR CHARCOT.

Professor Charcot, who has recently lectured upon a morbid state to which he has given the name of "rhythmical hysterical chorea" (an account of which was given in an article published in the *Medical Times and Gazette* for February 23), has continued his course of lectures by the consideration of the ordinary form of chorea as it is met with in old people, and the differential diagnosis between it and analogous motor conditions occurring in old age. The following is in substance what he said on that occasion:—

We are now going to study chorea in old people. This is merely ordinary chorea—Sydenham's chorea,—and corresponds with that usually observed in children. It will not be uninteresting to note how this neurosis changes in character when it is transplanted into a soil in which we rarely see it developed.

In the whole of this asylum we have been unable to find more than two examples of disease—A. and C. It is evident, then, that chorea is but rarely met with in old people, and we ought not to be surprised if those authors who have written on the diseases of the old do not mention it. M. Roger mentions the case of a woman aged eighty-three; M. G. Sée that of a man of fifty-nine; Graves that of a man seventy years old.

Is ordinary chorea at all modified when it attacks an old person? Certainly not in any essential particular. The movements are slower and less varied, and the disease is essentially chronic. A. is seventy-one, and with her the disease began twelve years ago. C. is of the same age, and her chorea came on eleven years ago. The prognosis is not a serious one usually, inasmuch as life is not endangered by the disease, but there is no cure for it. I have never seen recorded a single case of cure. It would, however, be erroneous to suppose that the prognosis is *always* favourable. In one old woman, whose movements were extremely exaggerated, death supervened during a typhoid condition, with elevation of the temperature. In another case, notwithstanding the movements were limited to one side of the body, and comparatively moderate in character, maniacal delirium supervened, and was followed by sudden elevation of the temperature, and death. The greater number of old people suffering from chorea that I have seen appeared to be in a state of more or less decided dementia. There seems to be no connexion, so far as I can see, between rheumatism and the chorea of old people, and in this respect the latter differs from ordinary chorea. Nor do we find in old people afflicted with chorea those deformed joints due to chronic articular rheumatism, so often seen in asylums. In the few autopsies I have seen I have not found any cardiac lesion. Chorea in old people seems to be an emotional disease, as are so many other neuroses of the same kind. The disease came on in C.'s case after events of which, as she says, she cannot speak without tears.

Quite recently I have observed the disease in a man who had suffered from it for ten years. His upper limbs were the first to be affected, and they became so about two hours after he had had a violent altercation with one of his tenants. In a few days the movements became general, and for two years they were so violent as to render sleep impossible. They are now diminished in intensity, but the right side is weak and devoid of sensation. Strong doses of bromide of potassium were administered, but gave only slight relief.

Chorea occurring in old people must not be confounded with what is sometimes called "senile chorea," but which is in reality senile trembling. The latter is an affection not very interesting in itself, but which, for all that, must not be altogether neglected; nor must it be confounded with paralysis agitans. It is not a common disease, notwithstanding that it is popularly considered to be so; for in the Salpétrière, an asylum containing several thousands of old people, a careful search was rewarded by the discovery of only five cases. Hence it is an error in dramatists to represent, as they so frequently do, their old people as trembling violently in head and limbs. We do not find Shakespeare falling into this misconception, for though in several places he enumerates the signs of old age, in none does he give trembling as one of these signs. The error has, however, crept into many medical books, and we find in an article on trembling,(a) written in 1821, the author saying, "the general weakness arising from old age almost constantly gives rise to trembling. . . . It is rare to see an old man who is not affected by tremor." On the other hand, numerous authors who have paid special attention to the diseases of old age—amongst whom may be mentioned Day, Malcolmson, Durand, Fardel, Geist, and Bibra—do not even include senile trembling in the list of pathological conditions. Trousseau says in reference to this subject,(b)—"It is usual to speak of this kind of trembling as one of the results of the general feebleness induced by old age; but though this may be true in a few cases, it certainly is not so as a general rule, for, on the one hand, trembling is certainly not observed in all old people, not even in those of very advanced age, whilst, on the other hand, it occurs not unfrequently in persons of middle age, and even in young people."

In senile trembling it is the head which is chiefly involved. Sometimes it is an antero-posterior movement (the movement of affirmation) by which it is affected; in other cases, a lateral movement—as that of negation; whilst in other cases these two forms of movements alternate one with the other. A rarer form of the disease is seen in those cases where there are not only movements of the head as just described, but trembling also of the lower jaw; and in some few instances the tremor extends to the hands.

Senile trembling must not be confounded with rhythmical spasm of the muscles of the neck, which is met with in the same conditions as senile trembling. In these cases the head turns constantly in one direction, whether from left to right or from right to left, and the movements thus differ from those of senile trembling, which are more rapid, less regular, and may be accompanied by movements of the jaw or hands. Senile trembling generally comes on as the result of depressing emotions, and is sudden in its onset. It only remains to add that nothing is known of the pathological anatomy of this condition, and that no treatment has hitherto been found to be of any effect.

From all this it will be evident to you that senile trembling, which has sometimes been called "senile chorea," is a totally distinct condition from ordinary chorea, as it occurs in old people. Among the patients whom you see before you, you will be able to recognise well-marked examples of both of these pathological states.

We may say that there are two distinct types of chorea—1. A variety characterised by involuntary movements, which are increased if the patient attempts to make voluntary movements, and which only cease during sleep; 2. A variety in which there is no cessation of the movements, and they go on without muscular rest of any kind. To the first of these Gubler has given the name of "amyostasic chorea," and to the latter of "anamyostasic chorea." In chorea properly so-called the movements are gesticulatory; they cover a wide area, are irregular, unrhythmical, contradictory, and render the accomplishment of any definite act a difficult matter. Trembling, on the contrary, is not characterised by gestures, but by brusque oscillations. The movements are not irregular, but rhythmical; they are not contradictory, nor do they hinder the accomplishment of definite acts. Ordinary chorea is a good example of the type *chorea*, and senile chorea, or senile trembling, of the type *trembling*.

There are, then, these two types, around which we may group a certain number of other motor conditions analogous to, but not identical with, the former, which characterise certain pathological states that we must study in detail. To-day I shall merely point out some of the more general features of these morbid states, in order to contrast them one with another. In the same class as ordinary chorea we may place the *symptomatic choreas*—those which result from a localised material lesion. Among these, one of the most common is *post-hemiplegic hemichorea*. Lesions of the brain having their seat in the internal capsule are followed by hemiplegia, usually accompanied by hemianæsthesia, and sometimes by hemichorea. An example of this kind is

(a) "Ancien Dictionnaire Encyclopédique des Sciences Médicales."
(b) "Clinique Médicale de l'Hôtel-Dieu de Paris," fourth edition, vol. ii., page 280.

before you. The patient's voluntary movements are converted into violent gesticulations. To prevent these movements she is forced to catch hold of her dress, and to press her hand against her body. A year ago I showed you another patient (R.) who was afflicted in the same manner. Now both her hemianæsthesia and hemichorea have disappeared, so we must not look upon these cases as always incurable. I may mention that the rapid dissipation of these symptoms in her case took place after the application of metals to her skin, at a time when experiments of that kind were being tried in connexion with hemianæsthesia in hysterical patients.

Another variety of the choreic type is that to which Hammond has given the name of *athetosis*. I will merely remind you that this consists of almost constant movements of the fingers and toes, of forced attitudes which are exaggerated by voluntary movement, and make it impossible for the patient to seize or hold an object. Here are four patients of that class.

Before concluding, I wish to show you two other patients. The first is a case of *sclerosis in patches*. She is well known, and many of you may have seen her in M. Béhier's wards at the Hôtel-Dieu. When her hands are at rest there is nothing noticeable about them, but if she attempts to carry a glass to her mouth the movements of her hand become so violent as to render the act impossible. The character of these movements is well marked, and consists, as M. Gubler has said, not in an anamyostasia, but an amyostasia.

Our second patient had formerly an attack of *acute articular rheumatism* complicated by *cardiac affection*, and this latter afterwards gave rise to *softening of the brain*, due to embolism, which softening was followed by *hemiplegia*. This patient interests us now, inasmuch as she presents the *trepidation* seen in hemiplegic subjects. When her limbs are at rest they present nothing worthy of note, but, as soon as she attempts to use them, both the upper and lower limbs (the upper more especially) are agitated by a series of very slight oscillations. This phenomenon is very interesting on account of its relation to spinal affections, and I hope on a future occasion to speak of it more particularly.

CLINICAL LECTURE ON TWO CASES OF IMPACTED BILIARY CALCULI.

By C. HANDFIELD JONES, M.B. Cantab., F.R.S.,
Physician to St. Mary's Hospital.

(*Concluded from page* 218.)

Remarks.—The already published histories furnish us with several interesting matters for consideration. Before adverting to them, however, let me remind you that it is not unusual to find numerous gall-stones in persons dying of very various diseases, who had never apparently suffered any inconvenience from their presence. I mention this because the common expression, "an attack of gall-stones," might lead you to imagine that the said stones were *formed* at the time when the symptoms set in, and not merely set in motion along the outlet for the bile. Let me now enumerate the phenomena you may expect to meet with in cases where a gall-stone is, so to speak, setting out on its travels: Pain in the right shoulder, the lower part of the right chest back and front, and in the right hypochondrium, not associated—at first, at any rate,—with tenderness, or fever, or acceleration of the pulse; vomiting, perhaps rigors, and jaundice, usually of no long duration. These symptoms may be of very different intensity in different persons. The pain is often agony—nay, it may kill by arresting the action of the heart. The nausea and vomiting are often most distressing, and occasionally have caused rupture of the gall-bladder. The jaundice may be slight and transitory, or deep and persistent. Much depends on the constitution of the patient, and much on the character of the calculus. The irritation of the hepatic nerves may give rise not only to sensory, but to motor troubles—viz., clonic spasms, usually confined to the right half of the body, or even severe convulsions, attended with loss of consciousness. In both our patients attacks of this nature occurred, or had occurred. Those in Case 1 were not witnessed by any of us, and we only know that they were spoken of as "fainting fits"—an euphemism which I recommend you to distrust exceedingly,—which occurred about the same time as the right-side pain. Now, as this man's heart betrayed no indications of failure while under our observation, we may conclude that the "fits" were not syncopal, but were really attacks of insensibility, induced, probably, by the existing irritation. In Case 2 the ward sister applied the same term to the attacks, which were evidently convulsive, and in no degree dependent on failure of the circulation. In this instance—and, I imagine, also in the other—the epileptoid seizures did not depend on the severity of the pain, for in the former they ceased when the pain became extremely severe. This is not surprising, for it is notorious that *unfelt* irritations often give rise to very grave disorders at a distance. Perhaps the very circumstance that the irritation passes by, so to speak, the sensory centres, makes it fall more specially, and therefore more heavily, on the motor centres. It is remarkable that in Case 2 the convulsive movements were most marked on the *left* side of the body, contrary to what seems to be usually the case. As, however, the left pneumogastric nerve sends filaments to the liver, it may be that the irritation followed this route, and was then reflected downwards on the left side of the cord. It was not, however, confined to this side, for the right sterno-cleido-mastoid muscle was also affected. This affection of both sides is in harmony with Pflüger's law, that the medulla oblongata has the power of generalising all reflex movements. It is worth consideration, I think, whether, in some cases of epilepsy supposed to be essential, the malady may not really be produced by small calculi lodged in the hepatic ducts within the liver. Frerichs relates a case where rigors, followed by heat and sweating, depended on this cause, and continued for a long time. I have met with a similar instance, I believe, in my own experience. Now, rigors are a sort of spinal epilepsy. The hæmatemesis, which occurred several times in Case 1, is a very unusual symptom. Frerichs mentions it in the record of his seventy-fourth case, but I have not found it mentioned elsewhere. As the man had drunk hard, it is possible that cirrhosis of the liver to some extent may have existed; or an ulcer may have been present in the stomach. But though these lesions would predispose to hæmorrhage, yet its occurrence seems to have been so positively connected with that of pain—ensuing at night, when the pain mostly prevailed—that I cannot help thinking that the latter actually induced the bleeding. This it might do by causing inhibitory irritation of the vasal nerves of the stomach, and impairing the arterial tonus and the capillary retentivity. The sarcinæ which were found in the vomited matter on one occasion were only, I conceive, accidentally present. The effect of the belladonna, given so as to affect the throat very decidedly, was not what you are led to expect in works on therapeutics. Before its administration the temperature was 99°, respirations 27, pulse 105; two days later, temperature 98·6°, respirations 22, pulse 93; five days later, temperature 98·8°, respirations 27, pulse 96. The result certainly shows no tendency to pyrexia induced by the drug. When I have administered it in quinsy, in a still more energetic manner, I have always seen the previously high temperature notably reduced. Whatever, therefore, may be the case in animals, belladonna does not, that I can see, raise the pulse or temperature in man. It was most unfortunate that the substance passed at stool by T. S. was not preserved. In all probability it was a gall-stone. The previous suffering and the relief which followed its escape point strongly to this conclusion. But it was not a solitary calculus, as the subsequent recurrence of similar pain shows. Whether the great improvement which afterwards ensued was effected by the chloroform and turpentine which I administered, or was spontaneous, I will not decide. Evidently, however, these remedies caused no inconvenience, and I would advise you to try them in similar cases you may meet with. But remember that it is useless to give them for a short time. Durande directed his mixture of ether and turpentine to be given every morning for 125 days. Carlsbad water, however, and the various alkaline springs are more efficacious, according to Frerich's testimony; but they act more in the way of procuring the expulsion of the calculi by an increased bile flow, than of dissolving them, which Durande's remedy was supposed to do. The persistence of the jaundice in Case 2 was fully explained by the autopsy, which showed the ductus communis choledochus completely obstructed by a small and somewhat rough calculus. Since much larger calculi have

often traversed the duct, you will naturally inquire why this one did not. The most probable explanation I can offer is that the roughness of its surface rendered it more adherent to the mucous lining of the narrow channel, and so more difficult to move, as well as more paining in its movement. Yet it had worked its way down to about a quarter of an inch from the duodenal outlet, and it is grievous to think that only that small space remained to be traversed in order that life might be saved. True, as the narrowest part of the passage it was also the most difficult; but still, if life could have been sustained for a few days, the difficulty would probably have been surmounted, and recovery secured. One may, perhaps, affirm from this case that it is better to have several gall-stones in one's bladder than a single one, inasmuch as the former, by their mutual friction, will render their surfaces smooth, while the latter, for lack of this attrition, is likely to remain rough. The diagnosis might be pretty confidently posed in such a case as that of L. B., and, on the strength of it, I made the proposal, when danger became imminent, to one of my surgical colleagues to open the abdomen, and endeavour, by manipulation, to force the calculus out of the duct into the bowel. He declined the responsibility of such operative interference, and so the idea was given up. After death, before the autopsy was commenced, I tried to ascertain how far it would have been practicable to execute the proposed manœuvre. I found the calculus in the anticipated situation, but could not positively determine that it was such, or an enlarged gland, nor could I press it onward. However, if I should meet with another like case, I should be much disposed to advocate the operation, as it might save life. The fatty degeneration of the liver may be attributed, in some measure, to the retention of the bile within the ducts, as such change was found by Leyden to be produced when the bile-duct was tied in living animals. But it is not a necessary result, for it was only present to a slight extent in several experiments of this kind performed by Dr. W. Legg; and in two cases which I examined myself, where there was prodigious dilatation of the smaller ducts in consequence of blocking of the ductus communis choledochus, the hepatic cells were not in a state of fatty degeneration. But cases are on record where the cells were completely destroyed, reduced to fatty and granular *débris*, where the common duct had long been obstructed. The length of time that the obstruction lasts before death ensues has probably much to do with the result: the longer life perists, the greater probably will be the atrophy of the cells. But there may be also another cause, besides retention of bile in the liver, which I regret very much I did not search for in the case of L. B.—I mean the presence of bile salts in the blood It is true that Frerichs and many other inquirers have failed to detect these salts in the blood or in the urine of jaundiced persons after repeated examinations, so that it is not likely we should have been more successful. Lehmann, however, has found a large quantity of biliary acid in urine which was but feebly coloured with pigment, whilst only traces of it occurred when the pigment was abundant. This observation tends to support Frerichs' view that the bile acids may give rise to bile pigment, under conditions of arrested metamorphosis, when they do not undergo their normal conversion into taurine and urinary pigment. Now, mere bile pigment is innocuous, and Frerichs, as the result of very numerous experiments, declares the bile acids to be innocuous too; but there seems to be more or less risk that, when the blood is saturated with bile, not only pigment, but certain toxic matters may also be produced, which speedily destroy life. Frerichs states that even in apparently simple cases of jaundice symptoms of blood-poisoning sometimes appear suddenly and unexpectedly, and are soon followed by death. Whatever may be the exact nature of the change in these instances, there can be no doubt that we have to do with the operation of some inbred poison. This, then, assuming its existence, may have promoted the occurrence of fatty degeneration of the liver. Again, the tendency to putrescence in the whole body, which was so marked in this case, is suggestive of the operation of some deleterious matter in the blood. Neither ought we to leave out of count the general prostration produced by pain, loss of sleep, and vomiting, for fatty degeneration is apt to ensue in various morbid states, which agree only in being attended with grave impairment of the vital forces. The fact, which I have observed also in other instances, that the staining of the parenchyma with biliary matter was not general like the fatty change, but was restricted to separate spots, seems to me much more in accordance with the view I advocate of the limited distribution of the minute bile-ducts, than with that which affirms the existence of a lobular biliary plexus existing everywhere. The occurrence of profuse epistaxis in Case 2 calls for some notice. It is a rare event in jaundice, and I imagine is confined to the toxæmic cases for the most part. As there seems to be some reason to believe that the bile acids tend to break up the blood corpuscles, and to produce some amount of hæmaturia, it is possible that when present in the blood they may act in a similar manner on the capillaries of the nasal fossæ. Lastly, I invite your attention to the temperature chart in L. B.'s case. For more than a month before death there was a regular access of fever every night, though the thermometer never marked a very high figure. Such fever as this is a different matter, of course, from that which might attend on inflammation set up in the duct and surrounding tissues by the irritation of a calculus, or from that which ensues on severe rigors provoked in the same way. The latter is, no doubt, produced by the inhibitory action of the vexed nerves on the temperature-regulating centres, and is quite independent of the time of day. The evening pyrexia in our case was probably caused in the same way as the increase of fever occurring at the same period in typhoid and most febrile maladies, which may be referred to the failure of nerve-force taking place at the close of the day. But, however produced, there can be no doubt that the appearance of abnormally high temperature in cases of jaundice is always ominous of evil.

ORIGINAL COMMUNICATIONS.

COLOURED EXUDATES IN ECZEMA.

By W. LAUDER LINDSAY, M.D., F.R.S.E.,
Physician to the Murray Royal Institution, Perth.

About seven years ago (in 1871) I was for a time much puzzled with the blue, or occasionally green, discoloration of the dressings applied to the eczematous leg of a male patient, then aged thirty-five. The patient in question has been continuously under my observation, as an inmate of the Murray Royal Institution, for ten years, and he continues to be so. He is a tall, handsome, athletic man, who has been subject to eczema throughout the period of his residence under my charge, and he was so for years previously. At the time spoken of (in 1871) the disease, which has all along appeared in periodic acute attacks, chiefly affected his legs, one (the left) especially, or both; and it had done so for some years previously, as it did for a year or two subsequently. It sometimes involved also one or both hands and the face. Now it never appears in the legs, but confines itself to the face; but it was only during one attack in the legs that the peculiar exudation that forms the subject of the following paper exhibited itself. During the attack in question, which extended over several weeks, the various dressings applied to the leg, as well as the drawers, stockings, or other articles of clothing that came in contact with the copious eczematous discharges, became saturated with these discharges, which assumed various shades of blue, sometimes of green, whether the material was lint, rags of cotton or linen, or woollen (woven). The colour of the exudate most frequently resembled the blue stains that might have been made on the same textures by solutions of sulphate of copper or of indigo. And so artificial did these exudate stains appear, that I at first suspected the surreptitious use of some unauthorised lotion. But it was utterly impossible that, in this case, there could have been any sort of deceit or trickery on the part either of the patient or his attendants, even had any motive for it existed; for the case happened in hospital, where it was continuously under my own eye, and the phenomena all but disappeared and then reappeared long after it had become evident that the exudation and its coloration were genuine pathological phenomena. At different times all shades and combinations of blue, green, and yellow were to be seen on cloths or clothes of different textures; and these colours were so far fixed that they were distinct and apparently unchanged months afterwards—for I kept the stained dressing cloths for a considerable time, in

the hope of getting the colouring matter of the exudate chemically analysed. It may be added that the exudate varied in fluidity and viscidity as well as in colour. On a subsequent as well as on former occasions the eczematous exudate was yellowish, though of the same sticky, lymphy character.

At this particular time the patient was taking no medicine of any kind, while the local applications were simple water-dressings; there was no peculiarity in his diet, nor was there any in his urine. The latter was essentially healthy, both as to quantity and composition: its specific gravity was 1020, and it contained small quantities of mucus or urates, according very much to temperature; for I commonly find, in the same persons in whom the urine is quite clear in summer, that it may become clouded or loaded with urates in winter. Eczema is probably quite as common among the insane as the sane; nor are the cases less inveterate. But in no other case have I met with such a coloration of the exudate; nor, in the single instance in which I did meet with it, did it appear more than once—that is, during one attack of the skin disorder,—notwithstanding that the patient's previous and subsequent attacks were apparently of the same character, beginning under precisely the same conditions of residence, diet, exercise, and so forth. But not quite under the same conditions as to drug-giving or applying; for, in prior attacks, in deference to the opinions of our best dermatologists, I had tried a variety of local and general remedies of the most diverse and opposite kinds, including both acids and alkalies, ointments, lotions, and dry applications. Benzoated ointment of the oxide of zinc with carbolic acid added; carbolic acid separately, but variously diluted; vinegar; and various salts of soda in solution, were among the topical applications tried, and tried, I believe, with no beneficial result, save in so far as they may have relieved itching or itchiness—a relief quite as obtainable by simple water-dressing. Arsenic was administered internally, and occasionally Epsom salts or seidlitz powders were used to counteract, by gentle purgation, the effects of want of exercise. Nor did this constitutional treatment produce any appreciable result. That is to say, the eczema came and went at certain intervals, unaffected by the medication that was being used.

This being the result equally of medication and non-interference, I had given up all drugging and all local applications, save simple water-dressing, at the time when the coloration of the eczematous exudates occurred. The patient was resting quietly in bed; had given up (here again in deference to the views of our leading dermatologists) for the time being the malt liquor he was in the habit of using, substituting therefor soda or potash waters, or lemonade, or using none of these drinks in the middle of the day. In my patient the eruption and its discharge had an obvious relation to irritation by scratching—so much so, that I believe but for this the eruption would never have attracted notice.

He had long been the subject of a certain degree of mental imbecility—the result, it was affirmed by his friends, of a break-down at school at the age of sixteen; this the result, in its turn, of that "competition" and "cram" which now are so much (and too much) the order of the day in matters educational. This imbecility is mainly of the kind that simply disables a bodily strong man for taking part in any of the usual affairs of life; for making his own way in the world by his exertions in business or in the professions. But, unfortunately, he is further disabled by recurrent attacks of mania, varying in duration and intensity. And it is interesting to note that there is a striking correlation between the attacks of eczema and those of mania, the former immediately preceding the latter; and this precedence being most marked when the eczema is facial, or affects also the scalp, which has little hair upon it.

Now, it may be supposed that the morbid mental condition of the patient could have had nothing to do with the chemical peculiarities of the eczematous discharge, with its blue or green coloration—and possibly it had not; but quite as possibly it had. For we know that mental conditions—that emotions or passions, for instance (especially such a one as anger, whose alliance with mania need not here be pointed out)—produce chemical changes in the milk and other secretions in other animals as well as in man. And these changes are sometimes of a very local or limited and puzzling kind. Thus, we read of a "difference in the milk of the two breasts of the same woman"(a) at the same time—differences both as to chemical composition and quantity, so that the milk of one mamma was refused by infants, whilst that of the other was taken freely. It is not at all remarkable, then, that chemical differences should exist in other secretions or excretions in the same patient at different times, or in different patients under diverse conditions. Professor Laycock showed that certain morbid pigmentary changes are connected with emotional states; just as they are also with peculiar conditions of the genito-urinary organs.(b)

The whole phenomena of coloration of the exudates in the case now under review being new to me, and finding myself quite unable to account for it, or to form any definite opinion as to its nature, I consulted all the papers on eczema, and on the development of blue or green pigments in any part of the body, in all the medical works or magazines to which I had access, but without coming upon any instance of the occurrence of a case similar to the one above described. I was therefore led to regard such coloration of eczematous exudates as at least rare, while the nature of the pigment and the reason of its development furnish interesting questions for the chemist and pathologist; and hence, after waiting in vain during six or seven years to see whether any recurrence of the phenomena should happen—for the patient still continues under my care—I have deemed these notes on the incident likely to be of sufficient interest to those who have larger opportunities of clinical observation and experiment than I have, to warrant their publication.

In my difficulty as to the determination of the question whether such coloration is common, what is its nature (chemically speaking) and what its pathology, I applied (in November, 1870) to two gentlemen of large dispensary or hospital experience in Glasgow and Edinburgh respectively—viz., Professor McCall Anderson, of Glasgow, author of a well-known work on Eczema; and Dr. Peel Ritchie, of Edinburgh. The first-named physician did me the favour to write—"I have always found the eczematous exudation to be slightly yellowish in colour, certainly never blue or green, so that your case must be a complicated one. Perhaps it may be due to the medicine he is getting, or to simulation, or some such cause, which, without any knowledge of the case, I am unable to decipher." We have already seen, however, that the coloration could not have been due either to medicine or malingering.

Dr. Ritchie, on the other hand, remarked, also, in a letter which he was good enough to address to me—"As regards the case of eczema, I think such discharges are not uncommon. They are also, I think, sometimes found coming from scalded surfaces. I remember once supposing there might have been sulphate of copper on the lint which was applied to a scalded ulcer (it was the first case I met with), and tested for it, but found no trace of it. I do not know the pathology of the discharge, but recent observers have investigated the urine of eczematous patients, and have noted the increased nitrogenous elimination in the form of indican. May, therefore, the discharge in your case not be due to imperfect renal elimination? The treatment I find most successful in eczema is the administration of diuretics—a treatment I adopted long before I learned the changes which were found in the colouring matter of the urine." It has already been pointed out that there was no apparent urinary derangement in my patient—none, that is, not common without eczema. As respects treatment, I found the do-nothing system, so far as concerns drugging at least, quite as successful as any form of medication—that is, I saw that the eczema disappeared gradually or suddenly simply if let alone.

Whether in my case the blue pigment was indican, I do not pretend to say. The question is too purely a chemical one for my decision, even had a sufficiency of the colouring matter been obtained to enable chemical analysis to be effected. And I find among the chemists, pathologists, and physicians, who have described similar pigments as occurring in other parts of the human body, the utmost confusion of the following substances, at least three-fourths of which are probably mere synonyms:—(1) Indican; (2) indigo, including indigo blue and red, with indigo pigment and its "mother-substance"; (3) blue pigment; (4) altered

(a) *Lancet*, November 12, 1870. (b) "Clinical Researches," page 457.

hæmatin; (5) cyanurine; (6) uro-xanthine; (7) uro-indigo; (8) uro-hæmatin; (9) uro-rhodine; and (10) uro-glaucine.

(To be continued.)

ON CHINESE HÆMATOZOA.(a)

By PATRICK MANSON, M.D.,
of Amoy.

(Concluded from page 222.)

Case 36. *Hæmotozoa, Soft Cataract, and Enlarged Femoral Glands.*—Kiong, male, aged twenty; Tan-goa; farm servant. Came to hospital to be treated for double soft cataract and favus. No elephantiasis or leprosy amongst his relatives or neighbours. When twelve or thirteen had a tertian ague for about a month; been blind for four years; had a slight recurrence of his ague two or three years ago; has had enlarged femoral glands for many years; favus since childhood; no chyluria nor dysentery, and no other disease. Femoral glands indurated and distinctly enlarged. Scrotum normal. Six slides contained ten filariæ.

Case 37. *Hæmatozoa and Lymph-Scrotum.*—Tiok-na, male, thirty-nine; Tchiu-po; farmer. No leprosy or elephantiasis in his family; but in his town (Bor-lim), one of about 10,000 inhabitants, are a great many cases of elephantiasis, both of scrotum and leg. Until three years ago he enjoyed good health, but was then attacked with a painful feeling of tightness about the scrotum, swelling of the groin-glands, shivering, and fever. At first the scrotum did not swell. Such attacks occurred irregularly two or three times a month, and confined him to his bed three days at a time. The scrotum has been affected for one year only; it inflames and swells now with each attack of fever, and is very itchy in the intervals, often discharging a yellow fluid. Never had chyluria, hæmaturia, or dysentery. Glands and scrotum are most characteristic. Scrotum tends to elephantiasis, being considerably enlarged and thickened. Abundance of filariæ in the blood.

Case 38. *Hæmatozoa and a History of Ague.*—Liu, male, aged twenty-seven; Pho-lam; water-coolie at the hospital. No elephantiasis or leprosy amongst his relatives; but several cases of both diseases amongst his neighbours at Pho-lam. At seventeen had a quotidian ague for ten days, and about this time he remarked some slight swelling of his groin-glands. Again at twenty-five had ague (quotidian and tertian) for a week or two. Never had chyluria, hæmaturia, dysentery, or other serious disease, and his scrotum and glands are at present quite healthy. Filariæ abound in his blood.

Case 39. *Hæmatozoa and Recurring Inflammation of the Scrotum.*—Leng, male, aged twenty-two; Pho-lam. Came to hospital to have an adenoid tumour removed from posterior auricular region. None of his relatives have elephantiasis or leprosy, but both diseases are common in his neighbourhood. Until last year enjoyed excellent health. Last year, however, had an attack of fever. The scrotum became red and, after five days, swollen. In a month an abscess opened, discharging ten ounces of pus, and healing kindly. After an interval of a month the fever and inflammation of the scrotum returned, but no abscess formed; and again, about six months ago, had a similar attack. During these attacks the groin-glands were painful and swollen; but at present both glands and scrotum appear quite healthy. Never had chyluria, hæmaturia, or dysentery. His tumour was removed, and the wound healed without difficulty. Blood contains hæmatozoa in enormous numbers; twenty-one specimens were counted on six small slides.

Case 40. *Hæmatozoa and Hydrocele.*—Hoon, male, aged twenty-seven; Tchiu-po; farmer. Came to hospital to be treated for hydrocele. Han-liong (Case 41) is his relative, and lives within a few yards of his house. In his village are several cases of elephantiasis and leprosy. Suffered from ague—sometimes tertian, sometimes quartan—from twelve to seventeen, and became very cachectic. He recovered perfectly. Since this ague left him has occasionally had feverish attacks, lasting two or three days; and at these times his scrotum (hydrocele?) enlarges and becomes slightly heated; but there is no swelling of the glands. His hydrocele has been in existence for seven years, and is now a very large one, extending into the inguinal canal; it is on the right side. Glands on both sides are large and hard, but do not project much. Never had chyluria or hæmaturia. Blood contains abundance of filariæ.

Case 41.—*Hæmatozoa, Ulceration of the Cornea, and Enlarged Glands.*—Han-liong, male, aged fourteen; Tchiu-po; cowherd; neighbour and relative of Hoon (Case 40). No elephantiasis in his family, and himself has never had fever or any serious illness. His left eye has been liable to attacks of inflammation for the last two or three years. The lower half of the left cornea is inflamed, and has two small healing ulcers on it; there is considerable lachrymation and photophobia. His scrotum is small and healthy; but the groin-glands, especially those on the right side, are varicose, much enlarged, and stand out prominently. On both sides the swelling is divided into two parts, an upper and a lower, by Poupart's ligament. After he has been lying down for some time the swelling diminishes, and can be completely dispersed by pressure; pressure removed, swelling speedily returns. Says he never has had pain, only discomfort sometimes from these glands; and he is in good general health. Under suitable treatment the corneal ulcers readily healed, and the photophobia and lachrymation disappeared. His blood contains filariæ in greater abundance than in any case hitherto examined. In one drop, placed between two glass slides, 122 hæmatozoa were counted.

Case 42. *Hæmatozoa and Hydrocele.*—Tungui, male, aged forty; Kaugtau, Tchin-po; farmer. No leprosy or elephantiasis in his family; elephantiasis amongst his neighbours to some extent. He came to hospital in charge of another patient. He suffers from anæmia, and had ague when young. Nearly every year has attacks of evanescent fever, and at those times his legs swell slightly. He is very thin and anæmic, but has never had inflammation of scrotum or glands; no chyluria or hæmaturia. Many years ago had dysentery. Glands are normal; small hydrocele in right testicle. Hæmatozoa were found in the blood, but they were not numerous.

Case 43. *Hæmatozoa, Ulcer on the Arm, and Enlarged Glands.*—Liet-goan, male, aged thirty-seven; Tchiau-an, Loa-au; farmer. Relatives free from leprosy and elephantiasis; several cases of the latter disease amongst his neighbours. Came to hospital to be treated for a malignant-looking ulcer on the back part of one forearm, close to the elbow. This began from the breaking-down of a small tumour about three months ago; the tumour gradually enlarged during the last four years to the size of a big walnut. The surface of the ulcer is ragged, elevated, granulations uneven, discharge fetid; edges irregular, undermined in places, indurated in others. The sore is nearly circular, and is about two inches and a half in diameter. During the last four years has had several slight feverish attacks—eight or ten a year—lasting for a few hours only, and not accompanied by any kind of inflammation. Has bleeding piles; never had chyluria, hæmaturia, or dysentery. The left femoral glands are enlarged, projecting considerably. They feel soft to the touch, and form an irregular swelling about two inches in breadth. The scrotum is normal. Filariæ were found in the blood.

Case 44. *Hæmatozoa, Lymph-Scrotum.*—Seng, male, aged fifty-four; Pho-lam; farmer. Parents died of ague; no elephantiasis or leprosy amongst relatives or neighbours; up till forty years of age had good health. His present disease commenced then by an attack of fever, induced, he says, by washing in cold water while heated with work. The fever lasted four or five days, but he was confined to bed for a month, feeling weak and ill, the pain and swelling of the scrotum continuing. After he began to get about he was still extremely weak, and suffered much from pain in his scrotum, and if he walked or worked much this increased, and ended in an attack of inflammation. Simply standing up for a short time causes the scrotum to become distended with lymph; this is speedily relieved by assuming the recumbent position. Every year has fever three or four times, accompanied by inflammation of the glands and scrotum; lymph discharges have taken place altogether eight times, the first three years ago; the discharge is white like milk, coagulates rapidly, and amounts to fifty or sixty ounces every time. Never had chyluria, hæmaturia, or dysentery; is intensely anæmic and debilitated; cannot keep his feet for more than a few minutes at a time. After coming to

(a) These cases are in continuation of the fifteen already published in the *Customs Gazette*, and transferred to our columns. The new manuscript has been received from Dr. Cobbold, to whom our acknowledgments are due.

hospital his scrotum discharged, and in the course of three days one hundred ounces of lymph escaped, and was for the most part collected. He fainted frequently from the consequent debility, and had an attack of fever; every afternoon since has feverish feelings. Scrotum is most characteristic; groin-glands much swollen and varicose; the latter can be quite emptied by a little pressure. Blood was examined ten times before filariæ were discovered (discharge also). Next examination an assistant found one, and the following morning I found three in a single full slide.

Case 45. *Hæmatozoa, Lymph-Scrotum.*—Toon, male, aged thirty-two; Tchiu-po, Soa-pi; farmer. No leprosy or elephantiasis amongst his relatives. A neighbour residing at a village a "li" from patient's house has a large scrotum. When eighteen had a quotidian ague, passing into a tertian, for about a month. At twenty, a large abscess formed in his scrotum, and discharged after a time about a bowlful of pus; there was no fever or enlargement of the glands at that time. Has had lymph-scrotum for three years only; it set in with fever and swelling of the glands and scrotum; these were troublesome for a day only, but have recurred once every year since, and the scrotum has gradually enlarged. Never had any discharge. Glands are large and soft; scrotum big and much vesiculated—both are characteristic. Has a five- or six-ounce hydrocele on right testicle; never had chyluria or hæmaturia; had a slight attack of dysentery ten years ago. Filariæ found at the second examination; four in one large slide.

Case 46. *Hæmatozoa, Hydrocele, Fever.*—Hin-lo, male, aged forty-eight, native of Ankhor; lived in Amoy for many years, working as a cook in foreigner's employ. I saw him lately for an attack of ague of tertian type; it recurred four times, but was easily checked by quinine. All the stages of the fever were well marked; there was no inflammation of the glands or scrotum. He says that every year or two he has similar attacks, induced apparently by exposure to cold; he generally recovers in a day or two. Never had chyluria; has a hydrocele on left testicle; glands are marked, but apparently healthy; scrotum normal; hæmatozoa in very great abundance.

Case 47. *Hæmatozoa, Lymph-Scrotum.*—Tan-lo, male, aged forty-two; Tan-goa, Pia-tchiu; mason. Parents and brothers are dead; no elephantiasis in his neighbourhood. Between seventeen and eighteen had two attacks of fever, and again when a little over twenty had five attacks. When twenty-eight had chancre and bubo, and about the same time a discharge from his scrotum. After thirty his fever returned seven or eight times a year, but until he was forty-one there was no recurrence of discharge from his scrotum. Then he noticed for the first time vesicles on the scrotum; these when ruptured discharged ten ounces of lymph, at first clear like water, but after running for a day becoming white like milk, the scrotum the while contracting. These discharges happen frequently. When the flow has almost ceased the glands again enlarge, and he has smart fever, the scrotum swelling up again and becoming painful. The fever abating somewhat, the scrotum diminishes slightly; it is then his practice to prick it, and allow the accumulating lymph to escape, otherwise experience has taught him that the scrotum will become very painful. This is a well-marked case of lymph-scrotum and enlarged glands, and the blood contains hæmatozoa.

Case 48. *Hæmatozoa, Lymph-Scrotum.*—Tan-lok, male, aged thirty-six; Hooi-koah, Soa-pi; barber. Parents and brothers alive; no elephantiasis amongst relatives or neighbours. At fourteen had fever for a month; at eighteen fever recurred, the right side of his scrotum inflamed, suppurated, and discharged about ten ounces of pus. The abscess healed readily, and he kept well till his thirty-fifth year, when fever returned, and his groin-glands and scrotum enlarged. He pricked the distended scrotum with a needle, and it discharged during several days a clear fluid. After about a year he noticed vesicles on the scrotum; they itched excessively, but if he scratched and broke them he had fever. The disease is gradually becoming more troublesome. At times the dartos appears to contract violently, giving rise to acute suffering: to prevent this he rubs the scrotum between the palms of his hands; this has the effect of relaxing the spasm, and making the scrotum soft and flaccid. This is a good case of lymph-scrotum; the glands, however, are at present but slightly enlarged. Hæmatozoa in the blood.

Case 49. *Hæmatozoa, Hydrocele, and Enlarged Groin-Glands.*—Tan-tchiu, male, aged forty-three; Lamoa, Tug-tau; cook and farmer. Parents dead, brothers healthy; a neighbour has elephantiasis of the leg, another of the scrotum. Till thirty enjoyed excellent health; at that age a gland in his left groin swelled to the size of a fowl's egg (there was no pain), and that side of the scrotum enlarged (hydrocele). He had no fever; glands and hydrocele diminish and increase at the same time. Glands on the left side very large. The hydrocele was tapped and injected, and did well. Hæmatozoa found in the blood.

Case 50. *Hæmatozoa and Leprosy.*—Pory, male, aged twenty-two; Tchiu-kang, Oahai; shopkeeper. No leprosy in the family, or elephantiasis in his neighbourhood. With the exception of an anæsthetic patch, the size of the palm of the hand, on the back of the right shoulder, this man is quite healthy. His scrotum and glands are normal, and he never has had fever. He had slight swelling of the groin-glands when the anæsthetic spot first appeared, two years ago. Hæmatozoa in the blood.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

LONDON HOSPITAL.

SCALD OF MOUTH, PHARYNX, AND LARYNX, WITH MEMBRANOUS EXUDATION AND ALBUMINURIA, RESEMBLING DIPHTHERIA—RECOVERY.

(Under the care of Dr. STEPHEN MACKENZIE.)

Louisa D., aged thirty-one, admitted December 10, 1877. Family history good. No evidence of any special antecedent disease. Patient says that she was quite well until two years ago, when she had an illness lasting four months. She could not sleep, "had pains all over," and had a bad cold; was in poor circumstances at this time. She recovered, and remained well until two months ago, when she was confined; since that time she has been in indifferent health, feeling very well some days and very ill on others. A fortnight before admission, she says, she felt very ill, "had pains all over," and was very weak.

On December 7, when in her usual health, she drank some very hot soup. She did not take any notice of its being too hot at the time, but after she had swallowed it she felt uncomfortable about the throat. Soon after, she drank a quartern of brandy neat. Has had great pain in throat since; could not eat or drink; could not talk much, as her tongue was swollen; she had no difficulty in breathing. She says she has pain in abdomen when she coughs, and now has great pain in the tongue and at the back of her mouth.

Condition on Admission.—A wasted woman, with blistered lips, red marks and old vesications about the mouth, descending from angle of mouth on right side to margin of face; on the left side is a crescentic figure from her mouth down the side of neck nearly to episternal notch. On the clavicle and above are two other red marks, vesicated, but distinct from the general red marking, as though produced by the dropping of some irritant or hot fluid. Upon looking into her mouth the tongue is seen to be covered with scraps of membrane or superficial slough, the gums are covered with the same, also the insides of cheeks, hard palate, and both tonsils. Laryngoscopic examination shows deep congestion of the larynx. Phonation is well performed, the cords approximating accurately, but the arytenoid cartilages and ary-epiglottic folds are covered by this material. It is not firmly adherent, as it is readily detached by coughing, thus allowing all the parts to be seen. No dyspnœa; no stridor; swallows milk easily; lungs resonant; rather harsh breathing at apices; no murmur detected, but the heart's impulse is knocking.

The patient being a Swede, and not speaking English, a visit was made to her home in search of further particulars. A confused story was told of the patient going out of her mind about a month after her confinement, taking a dislike to her infant, and accusing her husband of attempting to poison her. She had also accused other persons of similar attempts. Instances were given of her making noises in the night, arousing the people in the house, saying, "all the

children were poisoned." She had had strange ways of this sort for some time. For the whole of two nights previous to her illness she stayed in the streets and wandered about; said she had been drinking hot milk. Her temperature on admission was 100°; urine 1010, acid, albumen one-tenth, deposit of lithates.

December 11.—There is much the same condition of parts: the larynx is filled with mucus, but the interior of larynx is seen to be still covered with the same material. Temperature normal. Dr. Stephen Mackenzie dictated the following notes:—"Almost the whole interior of the mouth is raw and covered with tenacious semi-solid white material. The epiglottis is coated with the same, so is the interior of the larynx. Owing to this secretion, the vocal cords cannot be seen, but the interior of the larynx above that point, the posterior surface of the epiglottis, arytenoid cartilages, and ary-epiglottic folds are covered with white material. Patient has no dyspnœa; lies or sits in an apathetic state, apparently suffering no distress. Coughs a little, spitting up moderate quantity of thick whitish material. There is an ulcer on each side of the tongue at the edge, and at the angles of the mouth. There are no abnormal auscultatory signs. The patients condition is that of great hebetude. There is no membrane to be seen on the nasal mucous membrane; none on vaginal mucous membrane. Pulse very small, regular, 105; evening temperature 100·6°. The patient was ordered a spray of sulphurous acid (one to three) and enemata of beef-tea, brandy, and ammoniacal solution of quinine."

12th.—She had a quiet night. The spray of sulphurous acid and water was used every half-hour, and a stimulating enema every three hours; temperature 100·8°. The mouth and pharynx the same; larynx filled with mucus; evening temperature 101°.

13th.—Temperature 99°; feels better; mouth full of tenacious muco-purulent matter; tongue also covered. Last night some of this material was scraped from off the hard palate; it has not been reproduced. Evening temperature 99·8°.

14th.—Condition much improved: tongue is cleaner, but still covered in parts; pharynx cleaner; larynx not filled with mucus. Pulse is very weak, but she is brighter and more cheerful; wants more food. Temperature 99°; evening temperature 99·6°.

15th.—She seems much better, but temperature has gone up (100°). Her hands are cold; enemata not well retained. Evening temperature 100°; urine 1010, acid, albumen a trace, lithates.

16th.—Very much better to-day; wants to get up. No membrane in mouth or pharynx; none seen on vocal cords; temperature 99°.

17th.—Continues to improve. Some material still on tongue; none seen elsewhere. Larynx free; pulse soft and weak; temperature 98·6°. Urine acid, albumen slightest trace.

20th.—Dr. Stephen Mackenzie dictated:—"The patient looks cheerful; her pulse is small. She feels so well that she wishes to go home. Her tongue is very red and raw-looking, but not ecchymosed. There is a little superficial abrasion on the right side and under surface of the tongue. The roof of the mouth, fauces, and tonsils are red and ecchymotic, so is the extremity of the uvula. The epiglottis is small, irregular, of a white colour, except one point in the centre, which is red, and presents the appearance of being covered by membrane. Vocal cords cannot be seen. Patient still has some difficulty in swallowing; her temperature is now normal. The albumen has disappeared from the urine."

24th.—The patient has continued to improve since last note; temperature remains normal; no trace of albumen. Was made an out-patient at her own request.

[The above notes were taken by Mr. S. H. Fisher and Dr. Newton.]

Remarks.—This case is an interesting one as presenting some difficulties in diagnosis. When the patient came to the hospital, the mouth, pharynx, and larynx were found to be coated with membrane. The patient being a foreigner, it was difficult to ascertain her exact antecedents, but she said something about swallowing some hot soup. Extending from the angles of her mouth were red lines running down the neck, suggestive of some irritant liquid having trickled down and excoriated the part. So far the evidence seemed clear that the mouth and throat had been scalded. It is well known, moreover, that false membrane may occur on the mucous membrane of the mouth pharynx, and larynx, consecutive to scalds and injuries to the throat. But though there was the large amount of false membrane upon the epiglottis and interior of larynx, there was absolutely no dyspnœa. Her pulse was very small, surface cold, and the urine was found to contain a considerable quantity of albumen. If the false membrane was the result of scald, how was to be explained the absence of dyspnœa, and the little swelling of the mucous membrane of larynx? Was the false membrane diphtheritic in its nature? The marked depression, the small pulse, and especially the existence of albuminuria, appeared to favour this view. But how get over the fact that the parts covered by membrane had undoubtedly been scalded? Was it that the damaged mucous membrane favoured the development of diphtheria? Though conceivable, this was highly improbable. No evidence could be found at her home that she had been exposed to the contagion of diphtheria. If it were not diphtheria, but simply the result of a scald, how was the albuminuria to be explained? When scalds cause membranous or œdematous laryngitis sufficient to obstruct respiration and embarrass the circulation, albumen does appear in the urine. But in this case there was no dyspnœa and no lividity. Was the absence of reactive congestion of the larynx due to the depressed state—mental and physical—of the patient? This seems the best solution of the difficulty. The patient unquestionably was in a state of mental aberration, and her bodily state was very greatly depressed. On this ground alone it appeared to me that the absence of œdematous swelling of the larynx after so severe an injury was to be accounted for. This explanation does not account for the albuminuria, which, it will be observed, diminished *pari passu* with the other symptoms, and completely disappeared before the patient left the hospital. Unless the patient had some independent renal disease, of which there was no evidence except the low specific gravity of the urine, or the albuminuria was brought about by an anæmic state, not very marked, I do not see how it was to be accounted for as accompanying the membranous pharyngitis or laryngitis, if due simply to scald. There remains the possibility that diphtheria supervened upon the scald. I have seen the patient since; though feeble, her health has much improved. There is some redness of the epiglottis remaining. She has had no paralysis. An interesting case was brought before the Clinical Society by Mr. R. W. Parker in 1875 (*Transactions*, vol. viii.), which presented some features similar to those of the above case, and in which Mr. Parker thought the membranous exudation was due to diphtheria supervening on a scald. The case elicited a good discussion, reference to which will repay those interested in the above case.

MEMBRANOUS LARYNGITIS AND TRACHEITIS TREATED BY CREASOTE INHALATIONS—RECOVERY.

(Under the care of Dr. LANGDON DOWN.)

[Reported by Mr. MITCHESON, House-Physician.]

Mary Ann W., a domestic servant, aged sixteen years and a half, was admitted into Charlotte ward, London Hospital, on November 30, 1877. She stated that she could only remember having had one illness, which she called "gastric fever," about six years before admission; said that her chest was very bad at the time, and she had poultices applied to both back and front. There was no history of other ailments. As far as she knew, no one in the house in which she lived or in the neighbourhood was or had been suffering from diphtheria, croup, scarlet or enteric fever. Six days before admission she was quite well and at work. The next morning, on awaking, she found that her throat felt sore, and that she could only speak in a whisper; in another twenty-four hours a cough came on, and she began to suffer from difficulty of breathing. She applied to a doctor, who ordered a poultice, gave her some white balls to suck (sal prunella?), and an aperient powder; but she continued to get worse, her breathing became more difficult, her cough worse, and she suffered severely from headache. She, however, kept at her work till two evenings before admission to hospital, when she was obliged to go home. During the day before admission she was very ill, and towards night she got so much worse that she was nearly choked: she said the sensation was as if something were in her windpipe stopping

it up. She made a crowing noise in breathing; had very troublesome cough, with profnse tough white expectoration, and difficulty in swallowing. She passed a very restless night, and felt often as if she should be suffocated, and she could only breathe with great difficulty. On the day of her admission her symptoms continued to increase in severity till the evening, when she was brought to the hospital. She was a delicate-looking girl, fairly nourished and intelligent. Her face was very pale; there was a dark areola round her eyes, but she was not livid. There was no distension of jugular veins. She appeared very anxious and distressed; had extreme dyspnœa; the alæ nasi dilated widely, and the epigastrium receded with each inspiration; both the inspiratory and the expiratory acts were impeded, and the respiration was loudly laryngeal. She had a short, sharp, metallic cough, and her voice was hoarse, harsh, and whispering. There was no pain or difficulty in swallowing.

A laryngoscopic examination revealed slight congestion of the larynx without swelling, the rima glottidis was well open, and the vocal cords could be distinctly seen. The inner surface of each vocal cord was covered, and the upper part of the trachea seemed to be filled with some whitish material. The thoracic respiratory movements were very feeble and symmetrical. There was no dulness anywhere on percussion. The breath-sounds were very feeble, and accompanied at every part of the chest by mucous râles. On auscultation of the upper part of the trachea the respiratory sounds were very harsh and high-pitched, and there was an occasional vibratile flapping sound. She was sent to bed, ordered a mixture containing three drachms of acetate of ammonia and ten grains of bicarbonate of potash every four hours, and ice to suck. Two hours after admission, she had a sudden violent and distressing paroxysm of coughing, and a choking sensation, which lasted, the nurse of the ward said, about a minute and a half, and the attack was brought to a sudden termination by the expectoration of a large quantity of tough curdy material and viscid mucus. She phonated well immediately after, and the symptoms of obstructed respiration disappeared, and she commenced to breathe quietly and comfortably. Within an hour of this attack her voice became again husky and then disappeared, and her cough, which had left her for a short time, returned. The expulsion of the curdy material was followed immediately by a severe burning pain in her throat, and went, she said, right through to her ears.

An examination of the material expectorated was made soon after the attack. The spittoon contained a large quantity of tough white opaque sputa, in which were mixed numerous flakes and pellets of curdy matter, some of them blood-stained; and amongst these flakes was a large tubular mass, about an inch and a half long, and quite one-eighth of an inch in thickness. The central portion of this tube was compact in structure, of an opaque white colour, and looking like a piece of boiled macaroni, and rather tough. The outer portion consisted of numberless delicate laminæ, soft, easily torn, semi-transparent, and gauze-like.

On admission, her temperature was 101·5° Fahr.; pulse 120, weak. The urine, unfortunately, was not examined. The laryngoscope was again used about an hour after the coughing paroxysm, and nothing abnormal was observed beyond the slight congestion of the larynx. The trachea appeared quite pervious. She was ordered a creasote inhalation every six hours, an ice-bag to the throat, and to suck ice.

The following notes of her condition were taken during the next two days:—

December 1.—Passed a comfortable night, and slept frequently for short intervals. Cough troublesome, but less than on the previous day; expectorates freely a quantity of opaque white flaky material and tough mucus. Respiration quiet and easy; is quite aphonic; tongue furred and moist; skin hot and dry; morning temperature 102° Fahr., evening 100°; pulse—morning 108, evening 100.

2nd.—Passed rather a restless night; had one very bad coughing fit. Her cough is rather looser, and she expectorates more easily. Expectoration of same character as yesterday, some of the curdy flakes being blood-stained. Is still aphonic. Says she has pain when she swallows, and also in her chest when she breathes. Feels better after the inhalations; skin cooler; tongue still furred and moist; temperature in the morning and evening 98·8°; pulse 104.

From this date the patient commenced slowly to improve; her temperature on the sixth day after admission was normal, and remained so. She had an occasional paroxysm of coughing, but the attacks gradually became less severe; the expectoration became less viscid, and lost the characteristic curdy appearance, and before she left the hospital it had quite ceased. The mucous râles rapidly disappeared from her chest. The urine, examined the day after admission, did not contain albumen, nor did it at any subsequent examination. On December 6 she was ordered five grains of ammonio-citrate of iron three times a day; on the 13th the creasote inhalation was ordered to be used twice daily, and she was allowed to sit up in the evenings. On the 17th the inhalation was prescribed "every morning," and, on account of a little pharyngitis, she was ordered an alum gargle. On the 20th she was ordered to be up all day, and on the 26th was ordered ten minims of perchloride of iron three times a day. She was sent into the country on January 2. She had gained flesh and strength, and looked well; had no cough, and had quite recovered her voice. She spoke a little hoarsely, but this, she said, was habitual. She had no paralysis.

No cases of a similar character have occurred in the ward. By request she came to the hospital for examination on February 20, and, beyond the slight hoarseness, there was nothing abnormal in her condition.

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Medical Times and Gazette.

SATURDAY, MARCH 9, 1878.

THE BRITISH MEDICAL ASSOCIATION.

If the remarks that we had occasion to make, in our issue of February 23, upon the proceedings of the Committee of Council of the British Medical Association needed any justification, they have been fully justified by the letter which appeared in the *Journal* of the Association, of the same date, from the President of the Council, Dr. Wilbraham Falconer, in reply to the complaints made by Dr. Grigg. The charges brought by Dr. Grigg with respect to the published minutes of the proceedings of the Committee of Council were, briefly, that the report was not published for weeks after the meeting took place; that it was an imperfect report, omitting—and therefore keeping back from the knowledge of the members of the Association—certain very important parts of the pro-

ceedings; and that the omitted parts concerned the interests of the Association with respect to membership; to finance, and to a peculiar and special disposal of a considerable amount of capital; and to the privileges of members at the annual general meeting. Dr. Falconer's reply to all this is so curt and bald that it strongly reminds us of the answer not long ago returned, from the same quarter, to a letter from Dr. Wilson Fox. Dr. Falconer says, in the fewest words possible—First, that he is responsible for the delay in the publication of the minutes; and he vouchsafes no more explanation of the delay beyond that it arose "from accidental circumstances." Secondly, he says that the selection from the minutes for publication has always been entrusted to the President of the Council; and that he has always been anxious to follow the practices of his predecessors. We do not know whether any one among his predecessors still lives to defend his practice as President, but we venture to remind Dr. Falconer that he cannot cast the responsibility of his acts in office on his predecessors; he alone must explain, and justify if he can, his own conduct. And thirdly, Dr. Falconer says that as to the publication of a fuller report of the Committee of Council, he shall be ready to give such directions to the General Secretary as may meet with the approval of the Committee of Council. That is, that having said that the selection of the minutes for publication is entrusted to him, he next throws the responsibility of giving or withholding a fuller report on the Committee of Council; and the significance of this will be perceived when it is remembered that the Committee meet once in three months, and that there must therefore be a delay of nearly two months before the matter can be brought before them. Dr. Grigg, of course, considers that Dr. Falconer's reply is anything but satisfactory, and we can scarcely imagine that it satisfies the Association at large. The actions of the Committee of Council and of their President have an appearance of high-handed independence and despotism which the members of the Association can hardly, it seems to us, suffer to pass unchallenged, and we shall be surprised if they do not make their voices heard, quickly and decidedly, in the interest of the financial position, and of the general good management, of the important and powerful body to which they belong.

We must allude again to another subject which is threatening to disturb the harmony and endanger the prosperity of the Association—the question of the admission of medical women to its membership. Our readers will remember that this question has been raised by a letter from Dr. Wilson Fox to the Council of the Association, inquiring if medical women are to be allowed to be present at the meetings of the Association; and that, having been informed by the Committee of Council that they had no power to prevent members of the Association from attending its meetings, Dr. Fox resigned his membership. We understand that it is now proposed to call an early special general meeting of the Association to consider the propriety of taking measures to carry into legal effect the opinion of the members, taken by vote, that women shall not be elected members; and also to consider what steps, if any, shall be taken in respect to the two medical women who had been elected members prior to that vote.

In regard to the first of the two subjects to be brought before the proposed meeting, it is not easy to recognise the utility of considering it in such a way. We believe that no alteration of or addition to the by-laws of the Association can be made except at the annual meeting; and as no medical woman has been elected to the membership of the Association since the vote on the subject in 1876, when as nearly as possible three-fourths of the four thousand and odd votes given were against the admission of medical women, it seems extremely improbable that any more will be elected before the next annual meeting. There may perhaps, however, be some feeling of mistrust of some of the branches, or of the Committee of Council, on this point, and it may therefore be desirable to get a formal expression of the opinion of the Association that no medical woman shall be elected to the membership till the subject has been brought before an annual meeting; and that is all, we imagine, that a special general meeting can well do. Whether or not a new by-law should be passed on the subject is a matter for very grave and careful consideration, for every alteration in the by-laws must, we believe, be submitted to the Board of Trade for approval; and we are inclined to think that a large meeting is not quite the best body to discuss a somewhat delicate question of policy and expediency. The second question is a still more delicate and difficult one. The two ladies who are already members of the Association were legally elected, and have done nothing contrary to the rules or spirit of the Association. It was a mistake to elect them, but that is not their fault. The special meeting may choose to recommend that they be advised to withdraw,—but that again is hardly a desirable question to be discussed, at first hand, by a large general meeting; and such a resolution would be rather superfluous, for those ladies must already know perfectly well what the feeling of a great majority of the members is in the matter. And supposing such a resolution were, in some shape, passed, and the members objected to declined to withdraw, what next?

We will not discuss the matter further now; but if the proposed special meeting is called, we may again comment on the questions to be considered at it. Meanwhile, we commend to the attention of the members of the Association the paper, published in our to-day's issue, by Dr. Moxon, on the Convocation of the London University. They may learn much from his acute and wise remarks on the extreme unwisdom of expecting any calm and deliberate discussion of a question from ill-constituted, unorganised assemblies. If the mass of the members of the Association gather at any special or annual general meeting without due previous consideration and organisation as to what they wish to do, and how they will try to do it, they will be entirely at the mercy of the Committee of Council, or of any organised section of the general body.

THE DENTAL PRACTITIONERS BILL.

The House of Commons was counted out on Tuesday evening before the adjourned discussion on the second reading of the Dental Practitioners Bill came on. But the situation of things has changed considerably since we last wrote on the subject, in our issue of February 23. It will be remembered that we then insisted that the Bill must be amended in, at least, two directions. First, that the right of every legally qualified medical practitioner to call himself a dental surgeon or a surgeon-dentist, or even a dentist only if he chose so to do, without possessing any special licence in dentistry, should be scrupulously and rigidly preserved. Secondly, that no one should be entitled to use the word surgeon, in any combination, unless he possessed a legal qualification to practise as a surgeon; and that "dentist" should be the only legal title of a person who possessed only a licence in dentistry. The Royal College of Surgeons of Edinburgh, the Parliamentary Bills Committee of the British Medical Association, and many medical societies, have also urged on the House of Commons the necessity of the alterations we have pointed out; and we understand that the promoters of the Bill have in consequence given way, and have agreed to strike out from the third clause the words "surgeon or

Dental surgeon," and to provide that legally qualified medical practitioners shall be altogether exempted from the working of the Act. This is well, and removes the chief objections to the Bill; but we would urge the profession to watch the progress of the Bill most carefully and jealously, so as to insure that the required amendments are thoroughly carried out. The Government have thus far taken no care whatever to protect either the profession or the public; and the General Medical Council have, apparently, been equally careless and indifferent about the matter. It is impossible, however, to believe that Government will allow the Bill to be carried much, if any, further till the General Medical Council have been given an opportunity of considering it and of giving an opinion upon it. The entire labour and responsibility of carrying out the provisions of the Bill are to be imposed upon that body. They are to make and to keep the dental register; they are to regulate the curriculum for dental students, and to supervise the examinations for licences in dentistry; and they are to have the power and responsibility of admitting persons to, or of removing them from, the dental register; and, notwithstanding all this, it does not appear that they have been asked whether or no they consider that they—having no dentist among them—are capable of undertaking these various and onerous duties, or are willing to do so. We cannot but believe that the Council will have a voice in the matter; but it seems to us that the profession have some right to complain that the Executive Committee of the Council have allowed the Bill to proceed thus far without their having made any representations to Government about it,—and there does not seem to be any evidence of their having stirred in the matter.

There is one other subject connected with the Bill which has been noticed in the petition from the Royal College of Surgeons of Edinburgh, and, we believe, in some of the petitions from medical men—viz., that the prohibitory clauses of the Medical Act of 1855 have been found inadequate for preventing unqualified persons from calling themselves surgeon-dentists, dental surgeons, or dentists; and it is suggested that the present opportunity should be taken of rectifying this deficiency in the Act. This is a matter of great importance, and demands the immediate consideration and action of the General Medical Council; for we believe that it will not be sufficient to forbid such use of the titles referred to by a clause in the Dental Act only, but that the prohibitory clauses of the Medical Act must also be amended with that view.

REPORTS ON PUBLIC HEALTH.

We have now before us what is termed the "Annual Report of the Medical Officer of the Local Government Board for 1876." It is called annual, yet it has not appeared for some years: the present volume is said to be for 1876, yet it contains papers of the date 1874—and we are now in 1878! Most of our readers know that on the resignation of Mr. John Simon, Dr. Seaton, formerly the Inspector of Vaccination, succeeded to the post left vacant by this resignation. At the time, we indicated our objection to this appointment, the importance of which objection time has amply verified, for we believe that it has been mainly through Dr. Seaton's influence that steps have not been taken to remedy that defect in our vaccination laws which has given such a handle to the anti-vaccinators. We mean, of course, the refusal on the part of Government to keep up a supply of true vaccine lymph from the heifer; but Dr. Seaton is so intensely prejudiced in favour of human vaccine lymph, that little may be expected from him in this direction.

The following are the contents of the volume now before us, and we may say at once that the papers are of the very utmost value. They constitute a perfect mine of wealth on ground almost untrodden; portions of which, from time to time, we hope to lay before our readers, for to attempt to give anything like an analytical review in the ordinary sense of the word would be mockery. We find—1. Digest of the Vaccination Officers' Returns for 1874. 2. List of the Unions inspected in 1876 as to Vaccination, and an account of the awards made to Public Vaccinators. 3. Statistics of the National Vaccine Establishment and the Educational Vaccinating Stations. 4. Abstract of the Medical Inspections made in 1876 with regard, generally, to the Incidence of Disease on particular places, and to consequent questions concerning the Local Sanitary Administration. 5. Papers on Hospital Hygiene by Mr. Netten Radcliffe—*a*. Report on Erysipelas in the Radcliffe Infirmary, Oxford; *b*. Report on the Norfolk and Norwich Hospital; *c*. Report on the Manchester Royal Infirmary. 6. Report by Dr. Edward Ballard on the Effluvium Nuisances arising in connexion with various manufacturing and other branches of industry (part i.). 7. Memorandum by Mr. Netten Radcliffe on the Progress of Levantine Plague in 1876 and early part of 1877. 8. Official Memoranda issued during the year 1876—*a*. Instructions to Medical Officers of Health for the preparation of their Annual Reports; *b*. Memorandum on Precautions against Scarlatina (re-edited); *c*. Memoranda for Local Arrangements relating to Infectious Disease (re-edited); *d*. Memorandum on Revaccination (re-edited); *e*. Memorandum of the National Vaccine Establishment on Lymph-Supply for Revaccination.

THE WEEK.

TOPICS OF THE DAY.

Although, thanks to vigilant supervision, there is not much fault to find with the quality of the meat supplied to the London markets, it is not with feelings of unmixed satisfaction that the report of an inquest on a man recently deceased at West Wickham, near Beckenham, can be read. A cattle salesman, living at Addington, on returning home, is told by his foreman that a beast has dropped down. The animal is immediately killed, two men are sent for to dress it for market (deceased being one of them), and the carcase is despatched to a butcher at Croydon to "do the best he can with it." From the evidence of the surviving man who dressed the carcase, it appears that a day or two after the job his hands and feet were very tender; he consulted a doctor, and soon recovered. The deceased was reported to have died from blood-poisoning through dressing the diseased bullock; and it was stated that a pig which had eaten some of the offal died about a week afterwards. At the adjourned inquiry the jury returned a verdict of "Death from blood-poisoning, caused by dressing a diseased bullock, there being no evidence to prove that anyone was aware that the disease existed." But if the owner of the bullock believed the meat to be perfectly good, why did he only venture to ask the butcher at Croydon "to do the best he could with it"?

The recent annual meeting (the thirty-ninth) of the managing body of King's College Hospital elicited some very satisfactory statements as to the financial position of the charity. Mr. R. Twining presided at the meeting, and recommended the adoption of the report, which showed that the establishment now possessed 205 beds, of which 107 were devoted to medical, and ninety-eight to surgical cases. The year's receipts, including £1083 from the Hospital Sunday Fund, and £249 from the Hospital Saturday Fund, amounted to £10,250; the expenditure had been £13,361, as against £11,117 in 1876. The deficiency thus created had been met

by drawing on the invested funds, but, in spite of this, the capital account of the institution had increased by £2336. The report was unanimously ordered to be adopted.

Last week a deputation from the Associated Chambers of Commerce waited upon the Home Secretary with a view of endeavouring to induce him to make an alteration in the present law, which insists that the cost of certifying surgeons should be paid in the shape of fees by the mill and factory owners. The deputation urged that this expense should be borne by the National Exchequer, as the service performed was not in the interest of the factory owners, and the payment of the fees was a tax which ought not to be borne by them. In reply Mr. Cross observed that he could not ask the Treasury to pay for the certifying surgeons, as he was quite sure that that department would not assent to such a proposition.

Everyone who is acquainted with the pungent and peculiar odour of carbolic acid must be surprised at the remarkable number of deaths which have occurred from drinking this fluid in mistake for beer or spirits. Recently, Dr. Hardwicke held an inquest on a retired constable, aged fifty-two, of Hampshire-grove, Camden-road. Some days before he drank carbolic acid from a bottle, supposing it to be beer. He became very ill, and died before medical assistance could be obtained. It was stated in evidence that there was no label on the bottle, and that the acid had been obtained from a firm of oilmen in Kentish Town-road, for disinfecting purposes. Dr. De la Cour, of Camden-road, deposed that death had undoubtedly been caused by drinking carbolic acid. The jury, while giving a verdict in accordance with the medical evidence, strongly recommended that persons selling the poison should in all cases see that the bottle containing it was labelled with the word "poison." This should undoubtedly be insisted upon, though it is to be feared that in many cases it will be of little use if the smell of the acid itself fail to warn the drinker.

A handsome provision for the town of Glasgow has been made by Mr. John Freeland, formerly of that city, who recently died at Nice. By his will he has bequeathed the sum of £40,000 to be applied to the erection and equipment of the necessary buildings for carrying out the original design of the Western Infirmary of Glasgow, and so doubling the extent of accommodation therein; but full power is conferred on the trustees to postpone the application, in whole or in part, of the said legacy "until they are satisfied that the same, and any income to accrue thereon, shall be adequate for the said erection and equipment, or that, if insufficient therefor, other funds are available to make up the deficiency."

Small-pox is reported to have broken out in a very serious form at Belfast; the local authorities are making arrangements for providing accommodation for patients, and special meetings of the Board of Guardians have been held in reference to the matter. Small-pox has also appeared at Leek; a gentleman, lately residing at Glasgow, returned to the former town ill, and died after a short illness. Several persons who were present at the funeral suffered from a rash about a fortnight after, and there are now several distinct cases of the disease; these have been isolated, and are stated to be progressing favourably. In Dublin some alarm is caused by the steady increase of small-pox. There are at the present time over seventy cases in the Cork-street Hospital.

The Russian paper, the *Golos*, publishes the following telegram, dated Jassy, February 28:—"The number of typhus cases among the Russian wounded soldiers who were brought to Jassy in the course of January and February has considerably increased, and now reaches 19 per cent., whereas it was previously only 5 per cent. All the railway-carriages on the Fratesti-Jassy line are infected, and disinfecting processes have only been applied to a partial extent, as they appear to have no effect. All along the Simnitza and Fratesti line large numbers of unburied corpses are lying in a state of decomposition. It is, therefore, absolutely necessary that the Russian troops returning from Bulgaria and Roumelia should be conveyed by way of the Black Sea, and not *viâ* Simnitza, Fratesti, and Jassy. The sanitary committee in Jassy remains inactive." After reading such an account it is easy to understand that the horrors of war are not confined to the actual fields of battle.

The movement for the establishment of home hospitals is steadily progressing. The following City Companies have become governors of the Invalids' Home Association, and have voted the sums enumerated towards the first provisional capital of £10,000:—The Clothworkers' Company, £105; the Fishmongers' Company, £105; the Merchant Taylors' Company, £105; the Goldsmiths' Company, £100; the Grocers' Company, £100; and the Salters' Company, £52 10s. The amount collected up to the present time is stated to be £7000.

The projected association, in Edinburgh, for securing sanitary supervision in the shape of periodical inspections of the drainage of the dwelling-houses of members, held a meeting last week in the Freemasons' Hall of that city. Sir Robert Christison, who presided, stated that 418 members had already enrolled themselves, and he moved that the Association be constituted. Professor Hodgson moved the election of a council; and in the course of his remarks said that the houses of the present day were not usually constructed as they ought to be, with a view to sanitary advantage; it was singular, but nevertheless true, that the mass of the community were indifferent to this subject, on which their own health and that of their families so much depended; and he referred this indifference to the peculiar character of the education received in schools. It seemed to him that no school could be said to answer its proper object if pupils were not taught the importance of endeavouring to preserve health. The meeting closed with a cordial vote of thanks to Professor Fleeming Jenkin, the author of the scheme, who has devoted much time and trouble to its development, and who, in acknowledging the compliment, expressed himself sanguine of the ultimate success of the Association.

A shocking case of overcrowding, and its necessary consequence, disease, occurring in the Chalk Farm-road, was made public at an inquest recently held by Dr. Hardwicke on the body of William Moore, aged two, the infant son of John Moore, woodcutter, of Hetherset-street, in that locality. The father, who had lost five children out of nine, was found to be living with his family in one room, under conditions of a most insanitary character. Dr. John Hall deposed that he found the room in a very dirty condition, and the mother, who had been recently confined, attending to two children suffering from scarlet fever; the dead body of the deceased child was in the same room. Death had been caused by blood-poisoning from overcrowding and exposure to infection. The jury agreed in a verdict in accordance with the medical evidence, but apparently did not think it necessary or desirable to call the attention of the parish authorities to such a disgraceful state of things.

MR. HARDY ON THE ARMY MEDICAL DEPARTMENT.

THE Secretary of State for War moved the Army Estimates on Monday last, and in dealing with the Army Medical Department was by turns apologetic, eulogistic, and deprecatory. He had not meant anything unkind or harsh when he said that the Department was always asking for more, and

that he had quite given up all hope of satisfying it. He had merely intended a playful allusion to a certain character in one of Dickens's novels; and, after all, the medical was by no means alone among departments in going on asking for more. And anyhow he must say that, whether ill-treated or not, and whether offended or not, the medical officers did justice to the Army, for the health of the troops had never been better than during the past year. As to what he had said a few days before about the Army Medical Department being in a most unsatisfactory state, Mr. Hardy would not have people make too much of that. For the Indian Medical Service the number of candidates did not greatly exceed the number of vacancies; in civil life medical men were getting fewer in comparison with the increase of population; and the opening of the Civil Service and the competition of appointments in India attracted young men away from medical pursuits. And, after all, there would, by the end of March, be only eight vacancies unfilled in the British Medical Service, so that the condition of the Department was not so very bad. How this can be the case exactly, when in February last only nineteen candidates appeared for the forty advertised vacancies, we fail to understand; but Mr. Hardy admitted that, notwithstanding all he had said, it was unsatisfactory that he could not get as many candidates as he wanted, and that it was clear that we must have medical men for the Army somehow or other. He has therefore "referred the questions of complaint to a very small committee, having only one medical man upon it, and two others perfectly qualified to deal with the complaints." The committee are to formulate the complaints made on every point, and to report to him with respect to such amendments as they may deem necessary in order to render the service more acceptable. That is all the information given about the committee, and we can only hope that their services will be satisfactory and faithful; for everyone will agree with Mr. Hardy's final remark, that it is very bad when medical officers in the Army happen to be dissatisfied with the service. Perhaps the following petition, showing that even Irish medical students are ceasing to care for the Army Service, may help to convince Mr. Hardy and his committee of the necessity for change:—

To the Right Honourable Gathorne Hardy, M.P., Her Majesty's Secretary of State for War,

The Memorial of the President, Vice-President, and Council of the Royal College of Surgeons in Ireland,

Humbly sheweth,—That your memorialists, upon the 3rd of June, 1875, officially expressed to her Majesty's Government their conviction that, unless active steps were taken to amend the condition of the Army Medical Department, "serious public inconvenience would be felt in consequence of there being a deficiency of properly educated surgeons for the service of the Army"—a state of things which your memorialists regret to learn has come to pass.

Your memorialists beg to state that, in pursuance of charters granted to them by her most gracious Majesty and her Royal predecessors, they have "provided a sufficient number of properly educated surgeons for the Army," but your memorialists find with regret that, with hardly one exception, these gentlemen will not take service in the Medical Department as at present organised.

Your memorialists therefore feel that they would be deficient in their duty to the Crown and to the public were they not to call your attention to these facts, and again to urge her Majesty's Government to take such measures as will tend to restore the Army Medical Service to its former position in professional estimation and public favour.

Robert MacDonnell, President.
Philip Crampton Smyly, Vice-President.
J. Stannus Hughes, Secretary.

LECTURES BEFORE THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

The fifth lecture of this year's series on subjects connected with medicine was delivered on Monday, March 4, in the Hall of the College, by Dr. Thomas Wrigley Grimshaw, Physician to Steevens's and Cork-street (Fever) Hospitals. It was the first of two lectures on "The Present State of our Knowledge of the Intimate Pathology of Contagion, and its Relation to the Prevention and Cure of Zymotic Diseases." The lecturer, while disclaiming any title to be considered an original investigator of pathological questions, showed that it was the duty of every practical physician to study the researches of physiologists and pathologists with a view of applying their precepts to practice. He pointed out four separate lines of investigation bearing upon the study of contagion, and observed that they had been confounded by many, and inferences had been drawn from them which were not warranted. These lines of investigation were—(1) that into the nature of fermentation; (2) that into the question of spontaneous generation; (3) that into the nature of septic infection; and (4) that into the nature of the contagia of specific diseases. The first two of these inquiries had no necessary connexion with disease; the last two were essentially pathological, and necessarily included the study of disease. All four lines of investigation, without necessary connexion, were so interlaced that they could not be studied separately. The lecturer then discussed the results arrived at from each series of observations. First, the relation which the study of fermentation bears to pathology is that the septic fermentation promoted by the presence of bacteria is capable of producing the septic poison, just as vinous fermentation produces the alcoholic poison. Secondly, spontaneous generation is, up to the present, unproved, and all experiments in its support have been disproved. The theory, however, bears an important relation to the etiology of disease; for if spontaneous generation is possible, then we have not only to guard against the introduction of contagion from without, but also to prevent its origin within the human economy. Thirdly, the results of the introduction of the septic poison were shown to depend upon the coagulation of the blood, consequent on disintegration of the blood-corpuscles by the action of the septic poison. This poison might cause the illness or death of an individual, whether (already elaborated) it was introduced into the blood-stream from without, or whether it was manufactured in a wound by the growth of bacteria on the congenial soil provided by the discharges from that wound. This twofold action of the septic poison was illustrated by an account of illnesses from which the lecturer had himself suffered. The special characters by which the septic poison was distinguished from the contagium of specific diseases were its incapacity for self-multiplication and the direct proportion which the effects produced by it in the system bore to the dose administered, a large dose being succeeded by death, a small one by recovery. The question of the contagia of the specific diseases will form the subject of the next lecture—the concluding one of this year's series. It will be delivered on next Monday, the 11th inst.

MEDICAL SOCIETY OF LONDON.

It is announced that the Fothergillian gold medal of the Medical Society, for the best essay on "The Antagonism of Therapeutic Agents," has been awarded to Dr. J. Milner Fothergill. There were three competitors for the distinction. The silver medal of the Society, for the best paper read during the session, has been presented to Dr. Julius Althaus, for his communication upon "Diseases of the Anterior Cornua of the Cord."

THE HUNTERIAN SOCIETY.

At the recent annual meeting of the Hunterian Society the following gentlemen were elected officers for the ensuing year:—*President:* T. B. Crosby, M.D. *Vice-Presidents:* Walter Moxon, M.D.; J. McCarthy, M.B.; Buxton Shillitoe, Esq.; C. G. Lichtenberg, M.D. *Trustees:* H. I. Fotherby, M.D.; D. de Berdt Hovell, Esq. *Orator:* W. Rivington, M.S. *Librarian:* P. L. Burchell, M.B. *Secretaries:* R. Clement Lucas, B.S.; Stephen Mackenzie, M.D. *Council:* J. E. Adams, Esq.; A. E. Durham, Esq.; T. R. Fendick, Esq.; R. Fowler, M.D.; J. Greenwood, M.D.; A. L. Galabin, M.D.; C. R. Nicoll, M.D.; A. H. Smee, Esq.; G. J. B. Stevens, Esq.; W. C. Toulmin, Esq. The annual dinner of the Society was held at the "Albion" on the 22nd ult., when the retiring President (Mr. A. E. Durham) took the chair. He was supported by Professor Owen, the President of the Royal College of Surgeons, the President of the Medical Society, and many other distinguished members of the medical profession.

PORTRAIT OF PROFESSOR BALFOUR, F.R.S.

Steps have been taken to secure a portrait of the late Dean of the Medical Faculty of the Edinburgh University for the Library Hall, and we are sure all graduates will cordially support such a project. The indefatigable and esteemed Professor has devoted his great energies for the last thirty years to the interests of the University, medicine, and science, and such a recognition seems a peculiarly fitting one for his many valuable services. The maximum amount of the subscription has been limited to £1 1s. The hon. treasurer in Edinburgh is David Smith, Esq., Secretary R.S.E., 64, Princes-street; and subscriptions may also be forwarded to Dr. Dyce Duckworth, 11, Grafton-street, Piccadilly, London.

THE MEDICAL DEFENCE ASSOCIATION AND THE GOVERNMENT.

The Council of the Medical Defence Association having a short time since applied to the Lord President of the Privy Council, requesting him to appoint a day to receive a deputation from the Association to urge the importance of an immediate amendment of the Medical Acts, have received a communication from the Lord President, the Duke of Richmond and Gordon, to the effect that a Bill to amend the Medical Acts is being prepared by the Government, and that his Grace considers it would be best for him to defer seeing a deputation from the Association until the members of that body have had an opportunity of seeing and examining the proposed Bill.

MEDICAL OFFICERS OF HEALTH.

In recognition of the services rendered to the Society of Medical Officers of Health by Dr. Buchanan, the late President, it was agreed to invite all the members and associates of this Society to entertain their late President at an evening reception, followed by a dinner, at the Grosvenor Gallery. Dr. Stevenson, the President, was in the chair. At the conclusion of the dinner, allusion was made to the valuable services rendered to the public and to the Society by the guest of the evening. Dr. Buchanan briefly replied.

THE THROAT HOSPITAL.

We have received, too late for satisfactory discussion this week, the report of a special meeting of the subscribers to the Throat Hospital, convened to discuss the charges recently made against the management of the institution. Suffice it to say that it was made clear to the meeting that these charges were either entirely unfounded or were susceptible of a perfectly satisfactory explanation.

MEDICAL PARLIAMENTARY AFFAIRS.

The Medical Acts.—In the House of Lords, on Thursday, February 28, the Duke of Richmond gave notice that on an early day he would call attention to the Medical Acts, and bring in a Bill on the subject.

Infection through Army Clothing.—Mr. Hardy, replying to Mr. Torrens, in the House of Commons, said that there was no ground for the apprehension that workpeople engaged in the manufacture of uniforms for the army would be likely to convey infectious diseases to the troops. Among the *employés* at Pimlico there has only been one case of small-pox known within five years. Instructions have been given to the medical men to use every effort to prevent contamination.

Factories and Workshops Bill.—On Clause 67 of this Bill (appointment of certifying surgeons) Dr. Ward moved to insert the following words after "workshop":—"Provided always that this shall not apply to a person who is a shareholder in a public company." As the clause stood, if a man had a share in the Bessemer Steel Company he could be prevented from becoming a certifying surgeon. Mr. Cross explained that the only obligation was that the certifying surgeon should not go into a factory in which he was pecuniarily interested. The amendment was, therefore, withdrawn. Mr. Starkey thought that certifying surgeons should be placed on the same footing as inspectors with regard to their appointment and remuneration. He held that the patronage should be in the hands of the Secretary of State. On Clause 68, Dr. Playfair said that at present certificates might be granted at the residence of the certifying surgeon, where the number of children or young persons employed in the factories was less than five; but the Bill proposed to raise it to ten, which would be a very serious augmentation. In Wolverhampton one-half or more of the factories would be under this clause. He also thought the fee allowed for examination as to age, bodily health, and fitness for a particular kind of work was very small, being only 6d. for each child. Mr. Cross desired that examinations should be made in factories to avoid imposition, and he was quite willing to adopt the amendment proposed. Some discussion then followed upon the rate of remuneration for certificates furnished by the surgeon. Dr. Ward remarked that in Ireland the Act had been practically a dead letter, because sufficient remuneration was not provided. The law and the church received proper professional remuneration for similar duties, and the medical profession was the only one treated in a parsimonious fashion. On Clause 69, which lays down the scale of fees to be paid to the certifying surgeon, Dr. Cameron moved the omission of the word "five," his object being to provide that the surgeon should receive 6d. for each person examined after the first, instead of after the first five. The effect would be to leave the scale of payment exactly the same as it had been since 1871. Mr. Cross opposed the amendment, and pointed out that the surgeon would receive a much greater number of fees than hitherto, because more persons would be examined. Dr. Brady remarked that though, as Mr. Cross said, for every vacancy there were many applicants, cheap work was not satisfactorily done. It would be remembered that the system of vaccination had been a failure as long as the medical officers were underpaid. The amendment was lost on a division. On Friday, March 1, Mr. Mulholland moved for the addition of a new clause, with the view of placing flax and cutch mills on the same footing as respects the employment or non-employment of children and women as is proposed for ordinary workshops. Dr. Ward quoted the report of the Commission to show that the mills were unhealthy, that women were employed fifteen or sixteen hours a day, and that the mortality from many diseases among the *employés* was exceptionally high. The clause as amended was inserted.

Army Medical Department.—In the House of Commons, on Monday, March 4, Mr. Hardy, in bringing forward the Army Estimates for the current year, said, with reference to the Army Medical Department, that it had done justice to the service. He believed the condition of the army as respects health had never been better than at present. The death-rate had not been higher than 8 per 1000 during the year in the United Kingdom, whilst the number in the hospitals had been 41 per 1000. In India there were only 56 per 1000 in hospital, while the deaths were not quite 14 per 1000. From the Cape of Good Hope the latest account given of the health of the troops was most favourable, especially considering that the men were really young soldiers. He denied the accusation of having described the condition of this Department as hopeless; he certainly thought it was unsatisfactory.

Even in the Indian Department, where the service was so popular, the candidates at present very little exceeded the number of vacancies. He was told that there was a considerable diminution in the number of medical men in proportion to the population, and that the demands upon them for civil employment were very great. Therefore, he could not attribute the want of candidates altogether to the terms which they were ready to give. There were at present twenty-seven vacancies in the Army Medical Department, to meet which nineteen candidates had entered. The War Office had done what it could to make the labours of the medical officers less burdensome. He was quite unable to ascertain exactly what it was they wanted. There were those who wished to return to the regimental system, but that had gone, and the grounds upon which it was abolished were economy, and that it did not permit the unification of hospitals in time of war. He had introduced a short service system, which was, no doubt, on its trial; but he thought it was entitled to a little longer experiment. He had referred all complaints to a small committee perfectly qualified to deal with the subject, and they would report to him such amendments as they might think necessary in order to render the service more acceptable to medical men. Dr. Lush hoped the Secretary for War would try to find out the causes which made army service unpopular with the medical profession.

In the House of Lords, on Tuesday, March 6, the Contagious Diseases (Animals) Bill was read a second time. The Marquis of Ripon referred to the possibility of stamping out pleuro-pneumonia and foot-and-mouth disease as contemplated by the Bill, which he thought would prove ineffectual, besides seriously interfering with trade. He said that the proposal to slaughter all cattle at the port of debarkation would be ineffectual, because the persons engaged in the slaughter might carry the disease over the country. He believed the trade preferred the system of leaving restrictive measures to be put in force by the Privy Council, when deemed necessary, to any hard and fast rules. Restrictions placed upon such an important article of commerce were so serious that he hoped the measure would be, if passed, only a temporary one, by way of experiment, and that modifications would be made in committee. He would not oppose the second reading, as the proposal, on the whole, was valuable. The Duke of Richmond explained that none of the ports for embarkation of Irish cattle would be closed unless disease existed around them; as also the proposal for placing an infected district immediately in quarantine, the district being large or small, according to the area of the epidemic. He quoted figures to show that the dead meat trade might be carried on very efficiently and without increased cost to the consumer.

Bounties for Vaccine Virus.—Some cases of variola having broken out in the Lyons garrison, the military administration has ordered arm-to-arm vaccination or revaccination of the various troops that compose it. As, however, there is found a difficulty in obtaining vacciniferous infants, the authorities have decided to grant a bounty of fifteen francs to every woman who brings a vacciniferous infant to the military hospital.—*Lyon Méd.*, February 24.

The Paris Assistance Publique.—M. Michel Moring, the new Directeur de l'Administration de l'Assistance Publique, has addressed a circular to all the surgeons and physicians of the Paris hospitals, declaring that he has the most entire respect for so eminent a body of men, and that he is quite determined to enable them to take a large part in hospital administration. In all scientific matters their advice, which will always be sought for, will become preponderant; and he will not consent that the Administration shall refuse to execute the measures deemed of utility to the patients by those whose office it is to attend to and cure them. "I shall then," he adds, "constantly have recourse to your enlightened opinion, and shall seek for your advice; and I believe that you will find that the new director will take a firm resolution to insure the initiation, in concert with you, of all the useful reforms demanded in the interest of the suffering population, which it is our common mission to succour and solace.—*Gaz. des Hop.*, February 26. [This must be good news for the hospital medical officers, who have so often proffered good advice that has remained unheeded.]

MEN'S BRAINS AND WOMEN'S BRAINS, AND THE CONVOCATION OF THE LONDON UNIVERSITY.

By W. MOXON, M.D.

When anything reaches the dimensions of a social movement, a certain sublunary worship pertains to it, so that it is fashionable to commend it, and old-fashioned to oppose it. Little does it matter whether that which thus comes into prominence is important in itself. Long-tailed dresses, chignons, dados,—from such things up to a run on a new extension of the forms of public worship,—anything that becomes mobilised, if I may so speak, as a thing of social interest,—holds a commanding position above individual control, almost above individual criticism. Thinking that perhaps the mystic relations of material shapes and dynamic forces could be studied more fruitfully in their more elaborate manifestations, I have earnestly questioned leading bonnet merchants on the origin of styles of head-dress, and might believe, so little do they know on the point, that the present limpet-shell shape—very becoming—arose in as obscure and perhaps divine a manner as the various species of patella in the pleiocene strata. Most gladly would I listen to anyone who would explain the origin of even these superficial popular movements; for the quiet set of common impulse towards a longer-tailed dress, or a coat more like an exaggerated policeman's, is, no doubt, in its nature very similar to graver popular movements. The individuals are governed into acquiescence much as they are in the interesting process of "table-turning." The acquiescence creates the common movement. But who knows what creates the acquiescence? People sitting round to turn a table almost make each other's hair stand on end, it seems so certainly the work of spirits. The "origin of species" question is very parallel to this. Perhaps, indeed, table-turning is about as good a key to that kind of inquiry as you could find; although I do not promise you that it will unlock the difficulty. Whatever you like to think of all this, it is often most incomprehensible how some popular movements obtain their existence. And you never can hope to comprehend any such question in the most elementary way unless you have clearly before you this one principle on which I have just been touching—namely, that all popular movement is *towards something new*. The table must turn. It must move. It can't stop still whilst all those people vibrate around it, some of them almost flopping with excitement. What initiates the determination of direction is a question perhaps known only to one. Perhaps the spiritualist is right; it may be something supernatural—superior, that is, to nature vulgarly conceived, which is the usual import of the word. But, whatever it is, the table-turning process should be studied by all who would understand the movements of social circles, of any groups of individuals; but more especially of assemblies of people who are to each other as atoms in fortuitous concourse. The one thing which such a crowd will not be induced to do is *nothing*, however proper and prudent it may be to do nothing. If you observe what occurs in ill-constituted assemblies—in assemblies, that is, where that which has to be settled and done is not prepared for by due organisation—you will find that such assemblies favour the active and positive side of any issue raised amongst them. Negatives have no chance in ill-organised assemblies. It is quite wonderful, and not a little mortifying, to observe how a gathering of men, each of whom would when alone take a circumspect view of the occasion, when together allow one aspect of the case to overcome all others, so that some big thing is done which each one may know to be fraught with strange and disturbing issues. The mob of clever fellows glide down the incline into an absurdity, just as a shovelful of wheat will go tumbling down a slope upon which individual grains would stand securely.

Perhaps no assembly is so little organised in proportion to the importance of the matters occasion may submit to its decision as is the London University Convocation. Now, if any member of Convocation consider the question, he will scarcely think it a suitable and a desirable thing that

women should sit in the Convocation. Most of the graduates when alone and cool would probably see certain inconveniences from the presence of women in a deliberative assemblage of ever so learned male persons. Little reflection on the inevitable and inexorable results of natural constitution would convince him how likely a mixture of sexes in such a conclave would be to conduce to such a course of affairs as, save in the ladies' presence, he would not desire in his own. Most unhappily, when Convocation last met, the positive before this ill-organised assemblage was towards admitting women to degrees, and, as a positive, it was irresistible. The Senate, and the Senate party in Convocation —as subtle as the Russian party in Parliament,—adroitly made their proposal to take the form of a positive movement to admit women to the ordinary hitherto masculine degrees, yet, at the same time, to exclude them from Convocation. The ill-organised assemblage took the bait, with the usual want of circumspection; and this illogical, unfair, unjust, and entirely insupportable situation has been decreed. Now, in conversation with many graduates since the vote, I have found each in accordance with all the rest in agreeing that if women take the same degrees as men, they cannot be kept out of Convocation. To keep them out of Convocation would involve the assumption that the determining title to sit in that assembly is the sex of the graduate. But when sex has become such a trifle that it is not able to protect its favoured ones from the labours for University attainments, how shall it be allowed to rob them of the fairly earned privileges their attainments have entitled them to? Talk of the "subjection of women"! What tyranny they have yet suffered would equal the arbitrary wrong there is in allowing them the pains of a career, and then refusing them its proper reward? The degree is a man's sole and only title to sit in Convocation. With that very degree how could a woman be kept out? The thing is absurd, and suggests ridicule. Perhaps it might be necessary to allow smoking, or to have a public gymnasium and bath in the chamber. Even this might, alas! fail to keep out horrid medical women.

But, in truth, we ought to know why the Senate sent down to Convocation—sure of the positive impulse of that assembly, and itself guided by a great political leader—such a proposition as that which allows women the degree and deprives them of its reward. Convocation had never decided that it would not admit women; Convocation had only decided that the Senate was not acting constitutionally in taking steps which would alter the composition of Convocation. But the ill-organised assembly was easily tempted by the false appearance of an apparent concession to its dignity, and so it passed a clause purporting to exclude women under conditions which every member says are unjust and untenable. The temptation is too strong, and Convocation commits itself to an impossibility, while the Senate smiles. When analysed, the Senate's proposal assumes two things as desirable—first, that women should have those degrees which admit to Convocation; second, that women having those degrees should be excluded from Convocation.

And the Senate assumed these two desirables to be compatible with each other, as though trusting that their incompatibility would escape notice in the ill-organised assembly until too late. And the device succeeded. But the two parts of the proposition are nevertheless incompatible, and one or other will annul the other. As the matter stands, the Senate appears to be sure of the ultimate success of its original endeavour. The Senate had already, by its first unconstitutional act, shown that of the two incompatibles it attached to the first; let the second perish! But the Convocation had indirectly suggested, in its bold reply to that act, that of the two incompatibles, it would stand by the second; perish the first! How clever, then, of the Senate! how keenly alive to the weaknesses of Convocation-nature, to send down to that impulsive body a positive proposal—"Pass both incompatibles, and let us live in peace; peace is sweet; and your gentle Earl himself will be your leader" (your gentle Earl, by the way, not a child in political combinations, skilled in timing the communication of suggestive impulse); and persuasive and persuaded voices in Convocation cried, and said, and mumbled—"Peace! yes, peace!" and a voice said "Victory!" whereat a suppressed laugh ran round the Senate, and Convocation passed both incompatibles.

Well, since the first incompatible is on the way to certain triumph, why support the other? It is the decree of fate. And, indeed, why keep women out of Convocation? Surely the mode of decision which belongs to this ill-organised assemblage is one for which women are, by nature and practice, not inapt. Decision by impulse, because the strain of further consideration is not to be endured—such is the privilege of womanhood. Cool reflection requires something women are not born with. That something is, no doubt, to be found in the about ten ounces by which the male brain exceeds the weight of the female. Having weighed many hundreds, I cannot lose sight of this difference. Do you suppose it means nothing? That great mass of additional nervous matter. Think of the minuteness of its filaments and cells, and of their multitude, so that no numerical conception can approach the numbering of them. Myriads of fibrils affording space for currents to and fro as many and various as the shifting winds that now are moving over the expanse of the sea. Do you suppose this extra bulk of nerve-matter will go for nothing? Is it not for the want of those ten ounces that women are always in such a fidget with what they know?—so overmuch thrilled by their learning that study has a distressing effect on them?—as any physician knows who has been consulted by women-students. It must be allowed that some small-brained men-students are not much better. They want a mass of nerve-fibre in which any too intense vibrations can grow easier by reverberation, and can allow readjustment before action is prematurely decided on. By the want of these ounces they suffer in all positions approaching responsibility, being thrown into vibrations of wasting terror, always dreading lest they should be on the point of doing something wrong, like a Foreign Minister; so that they may be sickly, pusillanimous, and tractiously hesitative when the crisis comes. These ten extra ounces in the male brain are required to superintend, and sit upon, and keep under sudden impulses, and reduce strong vibrations. Ten invaluable ounces, so related to the rest as to be withdrawn as much as possible from connexion with the acting apparatus, so that thought may there hold due consideration apart from fear of too soon becoming action, and may mature for the guidance of impulse, making action not timorous, but even and steady, and subduing pulsatile trepidation, as the air-chamber of the fire-engine pump steadies its stream. Just also as a Committee of Convocation would have brought reflection to prevent such a preposterous concession to a designing Senate as that I have just shown to be unjust, if not impossible. Truly the way of man is not in himself. Nature is subtle to perceive similitudes, and to direct his steps to the combination of things suitable. By all means let the ladies in. Affairs are on the type of the feminine mind. Unless Convocation can be got into an impulse to petition the Senate not to send the ladies until the said Convocation has duly considered the incompatibility of the incompatibles which it took together when offered by a politic Senate, which at best allowed the Convocation to decide to do an unjust thing, that it might be induced to do a foolish one.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN FEBRUARY, 1878.—The following are the returns (by Dr. Meymott Tidy) of the Society of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, etc.	Nitrogen: As Nitrates, etc.	Ammonia.		Hardness. (Clarke's Scale).	
				Saline.	Organic.	Before Boiling.	After Boiling.
Thames Water Companies.	Grs.	Grs.	Grs.	Grs.	Grs.	Degs.	Degs.
Grand Junction ...	22·40	0·052	0·165	0·000	0·010	14·8	3·7
West Middlesex ..	21·40	0·063	0·159	0·000	0·009	13·7	3·3
Southwark and Vauxhall ...	21·90	0·049	0·150	0·000	0·009	14·3	3·3
Chelsea	21·40	0·052	0·165	0·001	0·009	14·3	3·3
Lambeth	23·60	0·049	0·165	0·001	0·009	14·8	3·7
Other Companies.							
Kent	28·40	0·003	0·315	0·000	0·003	18·8	6·5
New River ...	21·80	0·038	0·195	0·000	0·009	13·7	2·7
East London ...	24·90	0·066	0·135	0·000	0·009	15·9	4·2

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases.

FROM ABROAD.

Effects of Section of the Spinal Cord on Temperature.

Some time since the Smithsonian Institute made a grant of $500 to Prof. H. C. Wood, of Philadelphia, to enable him to prosecute a series of experiments upon the effects of artificial lesions of the various parts of the nervous system upon the evolution and production of animal heat. In the *New York Medical Record* for January 19 he communicates the results he has arrived at as regards the effects of the section of the spinal cord, the dog being the animal exclusively employed. These are thus summarised:—

"A wooden box was constructed, open at the top, and about three feet square; also two metallic boxes, the larger of them open at the top, and three inches smaller each way than the wooden box; the other about three inches smaller each way than the first, and having its top-piece perforated with three holes—a large hole in the centre, and on each side of this smaller apertures, into which gutta-percha tubes could be screwed. The larger metallic box was then placed inside of the wooden chest, and the interstices surrounding it carefully and tightly packed with sawdust. Water enough was poured into the larger metal box completely to surround the smaller metal box when placed inside it. After cutting its cord, the dog was then placed within the innermost box, the gutta-percha tubes were screwed into place, and a closely fitting lid to the whole apparatus so adjusted as to cut off both the dog and the water surrounding the vessel which held it from the outer air of the room. A suction-pump was attached to the end of one of the gutta-percha tubes (the end of the other tube being left patulous), so that air might be drawn through the metal box which held the animal. A cut-off from the tube of exit was so arranged that specimens of air could be received into it, and analysed for heat by a thermometer, and for moisture by a calcium tube. The difference in the number of heat-units existing in the air after its passage through the box, and in the water surrounding the box which held the dog whose cord was cut, was then estimated by means of the following formula:—$Q = W \times T \times SH$; Q = heat units; W = weight of air or water; T = rise of temperature of air or water; and $S H$ = specific heat.

"The bulk of the air was reduced to the bulk of air at 32°. This was weighed and the specific heat obtained. After a number of painstaking and laborious experiments, Prof. Wood has been able to reach the following conclusions, viz.:—At a low external temperature, after section of the cord, there is increased evolution with diminished production of heat; at a high external temperature, both the production and evolution of heat are diminished. After the section of the cord, the animal dies in winter of cold, and in summer lives much longer on account of the high external heat. It will be at once noted that this fact has a very important application to narcotic poisoning, to collapse as seen after exhaustion by heat, etc., and to thermic fever—the hot bath being the best treatment for collapse and narcotic poisoning, and the cold bath for thermic fever. Collapse from heat and thermic fever are usually confounded. In collapse the internal temperature is below normal, while in thermic fever it is above. Prof. Wood has also discovered the fact that the instant fall of temperature after section of the cord is due to vaso-motor paralysis, producing paralysis of the arterioles at the surface, thus obliterating the superficial cold layer of the body, and removing the only barrier to the animal's internal heat. He has thus shown that temperature is no guide to the amount of heat given off in such cases, and that fever simply reduces itself to a question of the difference in the relation of the heat-producing and heat-evolving powers: that the heat-evolving power is no longer compensatory to the heat-producing when the cord is cut. The experiments of Owsjannikow, which located the governing vaso-motor centre of the brain in a space whose upper boundary is one or two millimetres below the corpora quadrigemina, and whose lower boundary is from four to five millimetres above the point of the calamus scriptorius, have received full confirmation at Prof. Wood's hands."

Elephantiasis Arabum treated by Excision of Nerve.

The *Philadelphia Medical Times* for January 19 gives a prominent place to a case of elephantiasis Arabum, treated in a new way by Dr. Morton of that city. The patient, a coloured man, aged thirty-four, formerly a slave in Virginia, was admitted to the Pennsylvania Hospital, December 1, 1873. Fourteen years before he had noticed the increasing size of his right leg, which, however, did not prevent his working, and only inconvenienced him from the weight of the limb and a serous oozing which, issuing from some abrasions, kept his foot cold and wet. From the middle of the thigh to the instep the limb was markedly ichthyotic, the skin and superficial cellular tissue being very much hypertrophied and hanging down in large folds over the ankle. Under some portions of the thick, scaly epidermis there were effusions of pus. The left leg above the ankle was slightly enlarged, but its surface seemed natural. Dr. Morton tied the femoral artery on December 12, and the temperature of the limb on the eighth day after the operation was 98° between the toes, and 105·5° on the surface of the calf, that of the axilla being 99°. The ligature came away on the twenty-first day. Compression was steadily employed, and the patient was discharged March 21 very much benefited, the limb having gradually and steadily decreased in size. He was subsequently admitted into the Philadelphia Hospital, when the limb had become nearly as large as prior to the ligature. An account of the case at that time was given by Dr. Morton in the *American Journal of the Medical Sciences*, April, 1876, page 337.

The patient was readmitted to the Pennsylvania Hospital on November 9, 1877, the limb having greatly increased in size, and measuring twenty-one inches in circumference. On account of its cumbrousness, the patient requested that amputation might be performed. Dr. Morton having noticed the frequency with which operations of nerve-section are followed by atrophy of the parts supplied by the nerve which is divided, resolved to attempt the artificial production of atrophy of the extremity by section of the motor nerve of the limb. Accordingly, on November 17 of last year, the right sciatic nerve was laid bare, and an inch and a half of its length exseeted at the upper third of the thigh. No unpleasant symptoms incident to the section have followed, and there has been a steady diminution in the size of the limb ever since. On January 3 of this year it was found to be but twelve inches and a half in circumference—a reduction of about eight inches and a half. An interesting feature in the case has been the desquamation of all the thick skin that covered the limb from the knee to the ankle and foot, especially about the lower third of the leg. Patches of the skin, one-sixteenth of an inch thick, have peeled off from time to time, leaving a perfectly clean, soft, and pliable skin beneath. There has not been the least disposition of the skin to ulcerate, and the lost sensibility is confined to the extreme anterior portion of the dorsum, all the sole of the foot, and a strip of integument (about two inches wide) running directly up the posterior portion of the leg to about the middle point between the heel and the popliteal space. On all portions of the leg, except this anæsthetic strip, the patient is able to distinguish between the compass points, provided that they are held at a distance not less than an inch apart. This shows that the sensibility of the larger portion of the limb operated upon has been but very slightly impaired.

Queen's University in Ireland.—At a meeting of the Senate of the University held on Friday, March 1, his Grace the Duke of Leinster, Chancellor, and Sir Dominic J. Corrigan, Bart., M.D., Vice-Chancellor, presiding, the following examiners were appointed for a period of two years:—*Medicine*: Thomas Wrigley Grimshaw, M.D., M.A. Univ. Dub., Fellow and Censor K.Q.C.P., Physician to Steevens's and Cork-street (Fever) Hospitals. *Surgery*: William Mac Cormac, F.R.C.S. Eng., Surgeon to St. Thomas's Hospital. *Midwifery*: Richard John Kinkead, M.D. Univ. Dub., Professor of Obstetric Medicine in Queen's College, Galway. *Materia Medica*: John William Moore, M.D. Univ. Dub., F.K.Q.C.P., Physician to the Meath and Cork-street (Fever) Hospitals. *Medical Jurisprudence*: John Frederick Hodges, M.D., Professor of Medical Jurisprudence in Queen's College, Belfast.

REVIEWS.

Diseases of the Nervous System: their Prevalence and Pathology. By Julius Althaus, M.D., M.R.C.P. Lond., Senior Physician to the Hospital for Epilepsy and Paralysis, Regent's-park, etc. London: Smith, Elder, and Co. Pp. 366.

In dealing with a book like that now before us, we are placed in a difficulty. We stand thus: the work may be said to consist of two parts—one statistical and one purely medical. The greater part, or at least the basis, of the former, relating to the statistics of mortality from nervous diseases in this country, has already appeared in our columns. We may therefore all the more boldly pronounce an opinion on them. The labour entailed by them must have been enormous, but the bases, in the shape of the registered causes of death, have been, especially in days gone by, unsatisfactory in the extreme. The foundation of the statistical portion of the volume consists, in short, of the Registrar-General's Returns as to the causes of death in cases we would designate "nervous." The figures include all returns since 1838 to 1871, saving those for 1843-46, with regard to which there is no information. We need hardly say that Dr. Althaus is keenly alive to the uncertainty of the value of some of these statistics—that he plainly shows; but we fear that he places too much reliance on grounds which are not reliable. If we can fathom his ideas aright, they indicate a belief that out of the multitude of facts which he has collated truth will come; but is it not more likely that out of a multitude of errors, errors still may be the result? At all events, the care, the labour, and the difficulty of compiling and collating such an array of figures as is here presented to us is something well worthy of our admiration, and something far surpassing that displayed in collating even a hundred or two of our ordinary surgical and medical cases. This portion of the book cannot fail to be of importance to the statisticians, who will be sure to pick holes in it—as who cannot with statistics?—but let us turn to what is far more congenial to us, the physiological and medical portions of the volume.

In dealing with these we find ourselves altogether at a loss for a standard of comparison. We know no book like it. Dr. Althaus is a consummate master of neural physiology and pathology; he is, besides, a practical physician, and one well skilled in the literature of nervous diseases in French, German, or English. To put it on its lowest ground, such a knowledge as that indicated, of the literature of these subjects in these languages, is a post of vantage of which few can boast; and, having it, Dr. Althaus has most successfully employed it to the advantage of the student and the practitioner. With a fair knowledge of nerve physiology and pathology, we do not know any work which gives such a succinct and, we may add, accurate account of the physiology of the brain and spinal cord as is given in a few pages in this book. And when we come to consider the remainder of the work, the same remarks will, we think, fully apply. It is not a book of purely personal observation; it is not a book of mere quotation of authorities; it is both, and more than either—it is the outcome, as we have already said, of much study, both of books and of cases. But, as a basis from which to start in the study of neuro-pathology, it is of first-rate excellence.

The part here given to the world is but a portion of a more complete work; but, as far as it goes, it is, as they say of Scotch houses, "self-contained." It consists mainly of articles on diseases of central origin, and includes such chapters as these—Eclampsia, Apoplexy, Paralysis, Cephalitis, Epilepsy, Hysteria and Catalepsy, Insanity, Delirium Tremens, Tetanus, Chorea,—together with many other diseases of the central nervous system. These are but the headings, so to speak, for under each of them many pathologic phenomena are dealt with; and in his grouping we cannot always agree with the author. Thus, under the heading of Apoplexy are discussed such diverse topics as cerebral hæmorrhage, meningeal hæmorrhage, and cerebral hyperæmia—all cognate subjects; but there are also discussed such conditions as acute alcoholic intoxication, opium and hydrocyanic acid poisoning, sunstroke, etc. Nevertheless the book is one to be welcomed. To advanced students of medicine it will be especially useful, for we know no work where so full justice is done to a most difficult subject, and that too in a handy and compact volume. To the busy practitioner, who must take his knowledge, so to speak, in a condensed form, it will be still more valuable.

GENERAL CORRESPONDENCE.

THE NEW ANTISEPTIC—THYMOL.

Letter from Messrs. P. and P. W. Squire.

[To the Editor of the Medical Times and Gazette.]

Sir,—As many of your readers, who have been interested in your article last week on thymol, may wish to hear some detailed information about it, its price, and the various forms in which its preparations are to be had here, we beg to inform you that, at the desire of Mr. Spencer Wells, we procured from Germany, last January, some of the thymo-gauze prepared with spermaceti, as described in your article. We have supplied this gauze during the past month to several of Mr. Wells' patients; and, before ordering or preparing more, we were anxious to ascertain his opinion as to its utility. His reply (which we are permitted to send you) is to the effect that, "while appearing to be quite as trustworthy an antiseptic as carbolic gauze, it is free from the objections of stiffness, of irritating action on the skin, and of the disagreeable odour of the carbolic acid. It readily permits transudation of any fluid escaping from a wound, but does not appear to increase any secretion, nor to irritate the edges of a wound, nor the skin surrounding it. The wound, as a rule, does not require dressing until it is time to remove the sutures, and one more dressing is all that is required. A solution of one part of thymol in 1000 of water appears to answer well for irrigation, for spray, and as an antiseptic bath for instruments and for sponges."

We observe that a mixture of one part of thymol, ten alcohol, twenty glycerine, and 1000 water is recommended; but this is quite unnecessary if a solution of thymol in water of a strength of one in 1000 is all that is required; as in this strength thymol is soluble in warm water, and there is no separation on cooling. As your readers may wish to know the price at which this gauze can be supplied, we may add that at present it is sold in packets of six yards long by a yard wide at 3s. 9d., or 8d. per single yard. When manufactured on a large scale some reduction may be effected. Thymol itself cannot be sold here for less than 2s. 6d. per ounce. Calvert's No. 1 carbolic acid can be sold at 6d. per ounce; but if, as is expected, a solution of 1 thymol in 1000 prove as efficacious as 1 carbolic acid in 40, the relative cost is in favour of thymol in the proportion of five to one.

It may interest your readers to know that we have prepared for Mr. Wells an adhesive plaster, containing one part thymol in 1000 of plaster, which appears likely to fulfil the desire so often expressed of a non-irritating antiseptic adhesive plaster.

We are, &c.,

London, March 6. P. and P. W. Squire.

Letter from Messrs. F. C. Calvert and Co.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your paper of the 2nd inst. we observe an article on thymol, wherein the statement occurs implying that "carbolic acid" has a corrosive effect upon instruments which have been put into it—or a solution of the acid. We take leave to question this point, as we are given to understand that the solutions of our medical acids do not in any way injure instruments. We can, however, easily comprehend how the corrosive effect named may happen if impure glacial carbolic acids were employed; but the action of an impure acid should not be considered a proper reason for a general statement such as the one to which we refer. If—as would seem quite probable—an impure acid has been employed, that fact might reasonably be held to be a possible explanation of other results named in the article to which we refer.

We are, &c., F. C. Calvert and Co.

Manchester, March 4.

THYMOL IN CHOREA.

Letter from Mr. W. H. Stone.

[To the Editor of the Medical Times and Gazette.]

Sir,—With reference to your article in the current number upon thymol, allow me to say that for the last three months

I have administered it internally in several cases. The dose has varied from two to five grains thrice daily. In no case has it caused any inconvenience, except slight nausea in a patient suffering from malignant disease of the stomach, who has been equally unable to tolerate even milder drugs. In three cases of chorea it has appeared to be decidedly beneficial; all were children, and females. The first was discharged well in twenty-seven days. The second—a very severe case, with excoriations of the ears, elbows, and prominent parts generally—after getting worse under the use of bromide of potash and arsenic, instantly improved with thymol, and was sent out cured in three weeks from the date of its administration. The third is still in the ward, and has improved, though more slowly. The dose has been raised from two to three, four, and five grains thrice a day. She can now walk steadily about the ward, and feed herself. She has not yet been a month in hospital. The first and last cases have taken no other drug whatever.

It is, of course, impossible to come to a definite opinion from so few facts. But there may be sufficient evidence to warrant a further trial of the drug in similar cases. None of the patients have suffered from rheumatism.

I am, &c., William H. Stone.

14, Dean's-yard, Westminster, S.W., March 2.

THE ARMY MEDICAL DEPARTMENT.

[To the Editor of the Medical Times and Gazette.]

Sir,—I suppose every member of the medical profession is vexed at heart that the Army Department should be unpopular. Some may wish for a return to the regimental system, and others for a further development of the short service system; a few may sigh for the comparatively easy times that are past, and some may be ready for harder work than the common run of civil practice affords. Opinions may be various, grievances may be nourished, and complaints may be well founded, but still everybody would be sorry if the public service should suffer. I have little doubt that the Secretary of State for War would satisfy the real wants of the Department if he only knew what they were, but I am rather inclined to believe that he does not know. He may hear one story of grievances to be redressed from one set of medical officers, and quite another version from equally honest men who have got suited under the new system, and so require no redress at all. But the different views of members of the Medical Department are, in my opinion, of no great consequence. What is wanted is a supply of candidates for service, and it seems to me time is wasted altogether in mutual recriminations. The masters of the situation are the teachers of the medical schools. If they recommended service in the army their pupils would listen to them. I think they might do a good work now. A public meeting attended by the leading men of the great schools would tell the Secretary of State what chance he has of obtaining a steady supply of good medical men. The great question is one which requires no military medical officer to solve it. It is a common-sense matter of the pay that should be given for limited service. Short service and return to civilian life is the rule at present. The only dispute is with regard to the length of service and the bonus given at its termination. Are ten years too many to be given to service in bad climates, and will £1000 fairly warrant a man in risking his health and future prospects? If not, what terms would satisfy the teachers—a shorter service or a larger bonus? An expression of opinion on these points at a public meeting would, I believe, be of greater value just now than any number of letters as to the merits of the old regimental system or the shortcomings of Whitehall-yard.

I am, &c., A Student.

THE DELICATE ATTENTIONS OF AN UNDERTAKER.

[To the Editor of the Medical Times and Gazette.]

Sir,—Scotch, Irish, and colonial medical men are surprised at the low estimation in which our profession is held in England—particularly in London. The enclosed, which I received this morning, and which, I have no doubt, is all in the way of legitimate business as understood here, points to a state of things of which I, a recent arrival from another land, had no idea. I am intimately acquainted with the state of the profession in many lands, but have never before known the doctor become the tout of the undertaker, which he evidently does here. I am, &c., A. B. M.

"Sir,—In returning the profession my sincere thanks for the liberal patronage and recommendations which I have received from them for the last ten years, I beg respectfully to intimate that, owing to my largely increasing business, in future, instead of remitting cheques half-yearly as hitherto, they will now be sent regularly every quarter. Furthermore, in reference to silk hat-bands, etc., I have made arrangements when they are returned in future to allow the full value of them, and place the same to the credit of the account. I would also here advise, when favouring me with your recommendations, that you will, as soon after as possible, send me your card with name of deceased, so that there may be no mistake made in crediting you with the same. I also deem it necessary, in recommending or sending servants, that you will warn them against making any mistake in the name and address, as there is another establishment within a few doors of me with which I have no connexion whatever.

"I am, &c., ——.

"Funeral Establishment, London."

[We most fully sympathise with the indignation and disgust excited in our correspondent by the circular he has sent us; but we would suggest to him to be more charitable in judging his professional brethren. "Charity thinketh no evil"; and a man ought to require much unquestionable evidence before believing that medical men are guilty of the practices so coolly assumed in the undertaker's letter. We are anything but young in the profession, but we never before saw or heard of any similar circular, nor do we remember that during the long correspondence on the evil of commission-taking which not long ago filled so much space in some of the daily journals, any hint even was given of the existence of this form of the tax. And we should now assert our absolute disbelief that any member of the profession descended so low as to sully himself by such a revolting practice, but for two things. It is difficult to believe that any tradesman would have gone to the expense of issuing such a circular broadcast—and copies of this one have reached us from several quarters,—unless he had some ground for feeling confident that it would pay to do so; and a well-known physician in the West-end tells us that it has once in his practice occurred to him to be asked to give the name and address of some undertaker, and, having done so, the man not long after called on him, and, after obsequiously thanking him for his kindness, to his astonishment and indignation laid two guineas on his table as an acknowledgment of his recommendation; and our friend had some difficulty in getting the man and his guineas out of the house. Nevertheless, we are most loath to believe that any appreciable proportion of medical men soil their fingers with such ill-gotten gains. We must add that, judging from the tone of "A. B. M.'s" letter, he appears to have been singularly unfortunate in the professional acquaintances he has made since his return to England.—Ed. *Med. Times and Gaz.*]

THE CLINICAL SOCIETY.

Letter from Mr. Howard Marsh.

[To the Editor of the Medical Times and Gazette.]

Sir,—In your notice of the meeting of the Clinical Society held on February 22, you state that Dr. Burney Yeo's and Mr. Lister's paper, "although last on the list, was nevertheless called on first." I beg to say that it is a rule of the Society that when patients attend their cases are taken first. It was on this ground alone that the paper you allude to was read in the order you mention; Mr. Hulke's paper having to be deferred, as his patient could not be present.

I am, &c., Howard Marsh.

[We meant nothing more than the statement of a fact; and as the rule mentioned by Mr. Howard Marsh is perfectly well known, it did not occur to us that the fact could require any explanation.—Ed. *Med. Times and Gaz.*]

REPORTS OF SOCIETIES.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, FEBRUARY 15.

Dr. DUDFIELD, Vice-President, in the Chair.

THE minutes of the preceding meeting having been read and confirmed, letters from the School Board, the Local Government Board, and the Education Department were read in answer to communications sent by medical officers of health. The Local Government Board replied that they would consider the suggestions of the Society for regulating dairies and milk-shops.

Dr. TRIPE said that the Local Government Board had informed the Metropolitan Board of Works that the order for including amongst offensive businesses the keeping of cows could not be carried out except by authority of Act of Parliament.

Dr. Browning, of Bermondsey, was elected an associate; and Mr. F. M. Corner, Medical Officer of Health for Poplar, was nominated as a member.

A paper was then read by Dr. TRIPE,

ON THE NECESSITY FOR MEDICAL OFFICERS OF HEALTH ADOPTING A UNIFORM PLAN FOR THE STATISTICS OF THEIR ANNUAL REPORTS.

The author began by stating that on examining a considerable number of reports for metropolitan and country districts he found so much difference in the statistical tables as to make them almost useless for comparison, and he had therefore written the present paper in the hope of inducing the Society to take some further steps for obtaining uniformity, at any rate amongst its members. He said that after writing to all the metropolitan medical officers of health he had received twenty-three reports. On examining them he found that fourteen of these made up their reports to the end of December, eight to the end of March, and one to the end of June in each year; whilst out of twenty-three country reports as many as twenty-two were made up for the calendar year. That in comparing the tables he found less uniformity, as five only out of the twenty-three metropolitan members had used the Society's forms, the remainder having adopted others which were, as a rule, less troublesome. That in one point only—namely, in the adoption of the age-period of "under one year"—was there anything like uniformity. The extra-metropolitan reports, which included those for most of the great boroughs, were almost as varied; five had adopted the Society's forms, six those of the Local Government Board, and the others used various tables not capable of comparison one with the other, except as regards the age of one year and under. Dr. Tripe then pointed out that there is almost as little uniformity amongst the metropolitan reports as regards the death-rates, as some medical officers cast out the deaths in institutions situated in their parishes without adding on any deaths of non-parishioners in hospitals or other institutions in other districts. That in eight only out of the twenty-three reports were the death-rates corrected for deaths in hospitals. The next point discussed was the method of calculating the normal death-rate of a district, as Dr. Tripe justly said that in order to judge as to the value of a death-rate, even when properly calculated, there must be a standard for the district. This was not obtained by ascertaining the number of inhabitants at different age-periods—say up to five years, five to fifteen, fifteen to thirty-five, etc., and applying the annual life-table rate of mortality to each age-period. The ages could be obtained from the last census tables, as they had varied but little, except in a few districts, during each ten years. There are, however, far more important differences in the mode of calculating death-rates of districts which could scarcely have been caused by anything except want of due care and consideration. The most usual course is for the medical officers of health to cast out all the deaths in hospitals and other public institutions situated in the parish or district, except the parish workhouse, and to retain all the inhabitants of these institutions amongst their population, but not to make any allowance for deaths of their parishioners in hospitals, and in some instances in the metropolis to exclude even the deaths in the Asylums Board hospitals for small-pox and fever. Of course such a one-sided process reduces the death-rate in some instances more than 2 per 1000 inhabitants below the true number. In other districts due allowance has been made for deaths by eliminating all deaths in hospitals except those of the Asylums Board, and adding on the proportional number for the mortality amongst their parishioners in extraneous hospitals. Other medical officers retain all the deaths in the public institutions situated in their districts as a compensation for deaths of parishioners in extraneous hospitals; and when the number so retained approximates to the proportion which should be added on, it is a very fair method of procedure. In one or two cases the medical officer casts out all deaths of non-parishioners in public institutions, and adds on all the deaths of inhabitants which occur in the hospitals. This is, of course, the right method, especially in the metropolis, as the number added on by calculation would be too great in a wealthy, and too small in a poor district. Thus, in Whitechapel in 1876 there were 205 deaths of residents in the London Hospital, 15 in the German Hospital, 6 in the Small-pox Hospital, and 19 in the Asylums Board Fever Hospital, making a total of 246 deaths in these hospitals, without any allowance for deaths in other hospitals and public institutions. Now, if we add on, say, only thirty-eight additional deaths for these, we get 3·71 deaths per 1000 inhabitants, against an average of 1·52 for all London. It is clear, therefore, that to have deducted all these, and to have added only 1·52 deaths per 1000, would have reduced the death-rate of Whitechapel more than 2 per 1000 below the true number. Before discussing the best method of obtaining the true death-rate of a district, we should consider how to calculate the *normal* deaths, as the mortality of a given locality is modified by the sex, and especially by the age of the inhabitants. We should therefore allow for these by ascertaining the number of inhabitants living at different age-periods from the last census tables, and then applying the annual life-table rate of mortality to each age-period. The periods of five years, five to fifteen, fifteen to twenty-five, etc., are quite sufficient for the purpose, or even larger periods if we desire to shorten the calculations. This will not take very long, and as it can be done only once in ten years (after each census), and as the ages do not vary very greatly in ten years, the normal rate so calculated will show what the death-rate for the district should be if it were not disturbed by bad sanitary arrangements, by poverty, drunkenness, unavoidable overcrowding, and other factors of excessive mortality, or, on the other hand, by an unusual proportion of servants to total population and other causes reducing the death-rate. The next point for consideration is, how to obtain the *actual* as contradistinguished from the normal death-rate. It is quite clear that all known sources of error must be eliminated, and that the population of the public institutions as well as the deaths must be cast out; that the returns of deaths of parishioners in hospitals should be obtained, and added on to those registered in the district, and that the proportion of the residents in public institutions should be added on, and the death-rate then calculated in the usual way. The calculated population should also be checked from time to time by ascertaining the number of houses on the rate-book, and by multiplying these by the average number of inhabitants in each house at the last census. Dr. Tripe concluded by advising that the questions raised in his paper be referred to the Council for consideration and report.

Dr. DUDFIELD proposed a vote of thanks to Dr. Tripe, which was carried. He agreed as to the desirability of uniformity in the mode of keeping sanitary statistics, which should be made up for the calendar year, and thought so few used them because they found them so troublesome to make out; but perhaps some had forgotten all about it, so he proposed that they should be published in some journal. The age periods up to one year, from one to two years, two to five, five to fifteen, fifteen to twenty-five, etc., were too numerous, and might be reduced with advantage. He agreed as to the necessity of obtaining a list of the deaths in all hospitals, especially for working out the death-rates in particular localities.

Mr. LOVETT observed that the yearly statistics should be made to the end of December. As to deaths in hospitals, he thought they could be got only by going to the hospitals. The Registrar-General would not help them. He found no difficulty in getting access to the hospital books,

but it occupied a great deal of time. There was difficulty in ascertaining the parish the patient came from in some cases; part of the street might be in one parish, and part in another.

Mr. RENDALL said that the deaths in the county asylums are referred to the district the patients came from.

Dr. TRIPE then replied. He had but little to say, as all were agreed. He did not complain of the Registrar-General's department. The work was admirably done. When differences occurred between his own and the Registrar's returns, he found they arose from errors of duplication, etc., in the local registrar's returns, which errors are allowed for in the annual reports.

The meeting was then adjourned.

CLINICAL SOCIETY OF LONDON.

FRIDAY, FEBRUARY 22.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

(*Continued from page* 341.)

SEQUEL OF A CASE OF SUBPERIOSTEAL EXCISION OF THE OS CALCIS.

MR. HOLMES brought forward the sequel to this case, which is to be found recorded in the Society's *Transactions*, vol. viii., page 77. The operation was performed on January 31, 1874. The boy recovered, but with much inflammation, and loss of motion of the ankle. He died of phthisis last autumn, having had a fairly useful foot, though by no means so good an one as was usually obtained by the ordinary excision. The specimen showed that the posterior tarsal bones, astragalus, cuboid, and scaphoid were anchylosed together by bony anchylosis, and the astragalus to the bones of the leg. There was a very small shell of bone reproduced to represent the os calcis; and to this the tendo Achillis and the muscles of the calcaneum were attached. But this was of no practical utility, nor was the heel more filled out than it usually is after the common operation. On the whole, the anatomical examination of the foot proved beyond doubt that, in this case at any rate, the subperiosteal had given a less satisfactory result than is usually obtained by less tedious dissection.

Mr. MAC CORMAC asked Mr. Holmes had the suppuration in his case been long continued after the operation, for the retention of the bone-making properties of the periosteum depended very largely on the absence of any protracted suppuration, by which these properties were, in point of fact, destroyed.

Mr. FURNEAUX JORDAN said that he had lately performed the modification of Syme's operation as proposed by Professor Bell—viz., dissecting off the periosteum from the os calcis and applying it to the sawn end of the tibia. The result was the formation of a convex plate of new bone, which gave a rounded form to the stump and made it more like a new heel. He asked whether this new bone would be liable to caries, just as so frequently happened in partial operations on the foot for disease to the tarsal bones which had been left behind.

Mr. MAUNDER said he thought the reproduction of bone in subperiosteal excisions depended upon the amount of force requisite for its removal. Rough usage with the raspatory, often unavoidable, gave rise to acute inflammation and destruction of the membrane; whereas, in some instances, the periosteum peeled off so readily that it would be difficult to take it away with the condemned bone. Mr. Maunder deemed it desirable to save even the shell of the os calcis, lest the natural elasticity of the foot should be damaged by section of plantar ligaments, and so the astragalus, being unduly compressed, might also take on caries.

Mr. HOLMES, in answer to Mr. Mac Cormac, who had inquired about the length of the period of suppuration, stated that the suppuration was extensive and protracted, and very probably testified to a severe inflammation in which the periosteum was more or less destroyed. This was one of the risks attending the protracted violence necessary to separate it from the bone.

EXCISION OF THE LOWER END OF THE RECTUM.

Mr. HOLMES also related this case. The operation had been performed upon a woman for disease apparently of an adenomatous character. The lower end of the bowel was occupied by a series of tumours which very nearly filled it, producing almost total stoppage—a case which would certainly justify colotomy in the opinion of most surgeons. About two inches of the whole circumference of the bowel, together with a great quantity of the surrounding tissues, were removed; and, as one of the tumours trenched on the vagina, an opening was necessarily made into the latter cavity. The case did very well; the patient regained her health rapidly, which had been much impaired, but did not recover any sphincter-power. The object of the communication was to show that the operation was superior to colotomy in cases of limited disease of the lower end of the bowel, and to urge the surgical members to give it a trial in appropriate cases. Its main advantages were: 1. That it removed the disease, which was left to make progress when colotomy was performed; 2. That in some cases (probably those in which the parts around the anus were not very freely removed) some amount of sphincter-power was retained, and the patient had sometimes entire control over the motions; and 3. That the artificial anus, even when no more control existed than after colotomy, was in a more convenient position.

Mr. HULKE mentioned that his former colleague, the late Mr. Charles Moore, had, in the Middlesex Hospital, excised the lower end of the rectum in three cases. There was very copious bleeding, checked with difficulty, and the patients soon succumbed. These cases were not well suited for this operation, inasmuch as the tissues outside the gut were much infiltrated. Where this had not happened and the disease was limited, as in Mr. Holmes's case, he quite concurred with him in the advantage of excision. From his own experience of colotomy, done often at a relatively early phase of the cancer before obstruction, and for the relief of the suffering caused by the contact of the fæces with ulcerated surface, Mr. Hulke was disposed to place the duration of life after colotomy as much longer than the time mentioned by Mr. Holmes. With regard to the relative facility of excision and colotomy, to which reference had been made, Mr. Hulke thought that, whilst colotomy where the gut was distended must be looked upon as an easy matter, this was not so when the gut was empty, where often much difficulty was experienced.

Mr. THOMAS SMITH remarked that, whatever might be the respective merits of the two operations, colotomy and removal of the rectum, they could not fairly be compared the one with the other. In the event of a patient needing colotomy for cancer of the rectum, the disease would be so far advanced that no question of removal of the rectum could be entertained; whereas, if the disease were in an early stage and so limited as to be within reach of removal by operation, the necessity for colotomy would not have yet arisen.

Mr. HENRY MORRIS did not consider that the operations of colotomy and excision of the lower part of the rectum were not comparable, as they were respectively required in such different conditions. With respect to the comparative difficulty of the operations, it was true that colotomy was exceedingly easy when performed under favourable circumstances and when the colon was distended, but so was the excision of the rectum. Mr. Morris had never had an opportunity of performing the latter operation himself on the living, but had practised it on the dead subject, and had come to the conclusion that the only trouble likely to arise during the operation was hæmorrhage. He inquired of Mr. Holmes whether he found hæmorrhage occurred more freely during the detachment of the bowel from the ischio-rectal fossa, or from the division of the gut itself by a transverse section. Referring to the risk of injuring the peritoneum during the operation, he quoted certain experiments by Dr. J. B. Roberts of Philadelphia, to show that, when the anus and bowel were undisturbed, the average distance of the peritoneum from the anus was from one inch and a quarter to two inches; but that, when the bowel and anus were detached from their surroundings and straightened out, the average distance was from three inches and a half to four inches and a quarter. This showed the great importance, in order to avoid wounding the peritoneum, of detaching the tube freely from its ischio-rectal surroundings, and of making traction upon the anus before severing the diseased portion of the rectum from the rest of the bowel. He next inquired if any union took place between the lower end of the gut and the edges of the wound, or if the parts healed entirely

by granulations; and also if, after healing, there was any tendency to stricture of the artificial anus. Finally, he asked for details respecting the exact mode of operating in this particular case. Three methods had been adopted by different operators, viz.:—1. The oval incision, whereby the anus was encircled and the bowel with the anus was loosened from its attachments; 2. Lateral flaps made by one straight incision from the central point of the perineum to the coccyx; 3. A posterior flap made by a transverse incision in front of the anus. In both the latter operations the external sphincter was saved with the skin of the anus; but these methods were, of course, only feasible when the anus was not involved to any extent in the disease. Was this the case in Mr. Holmes's patient?

Mr. F. Jordan said that a few years ago he had excised the rectum of a middle-aged woman for epithelial cancer. He removed it by a circular incision around the rectum, and cleared out the ischio-rectal fossa. About two inches of bowel were taken away, and the hæmorrhage, which was less than he expected, was controlled by sponges and pressure. The rectum acted as before the operation, although no sphincter had been left. No sutures were employed, on account of the high position of the bowel. The woman made an excellent recovery, and he believed she lived some eighteen or twenty months afterwards. In a case of cancer of the vulva, he had removed the whole vulva, the vaginal orifice, and two-thirds of the rectum. That was two years ago, and the patient remains well.

Mr. Holmes agreed with Mr. T. Smith that, if the operation became a recognised one, it might hereafter become possible to assign a different province to it and to colotomy. But at present the operation of excision of the rectum was hardly practised at all in our London hospitals; at least he had never seen it done or heard of it; for the operations referred to by Mr. Hulke, as performed by the late Mr. Moore, had not, as far as he knew, been published. [Mr. Hulke assented.] With regard to the number of persons surviving a year after colotomy, he was quoting from memory out of Mr. Cripps's essay. He had no information on the point himself, but could easily believe it. In answer to another speaker he said that the bleeding in dividing the wall of the bowel itself was quite insignificant. The only free hæmorrhage was in the ischio-rectal fossa. In answer to Mr. Morris, he said that he was acquainted with the observations of the American surgeon referred to. They were, perhaps, as trustworthy as any other observations made after the admission of the air into the peritoneal cavity; but it was quite evident that the latter fact detracted seriously from their practical value.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, February 26.

Charles West, M.D., President, in the Chair.

Case of Amnesia with Post-mortem Examination.

Dr. W. H. Broadbent gave particulars of the above case. He began by recalling some of the hypothetical conclusions of a previous communication on the "Mechanism of Speech and Thought," in vol. lv. of the *Transactions* of the Society. Dr. Bastian's hypothesis of a special "perceptive centre" in relation with each sense was adopted and extended. It was considered that these "perceptive centres" would be situated in convolutions which received radiating fibres; and Ferrier's researches have since located the centres for vision, hearing, smell, taste, and touch in some of the convolutions into which these fibres had been traced, more particularly fibres from the extra-ventricular portion of the thalamus. It was further considered probable that the formation of a complete idea of external objects would be represented structurally by the convergence of arcuate commissural fibres from each perceptive centre to some part of the cortex, not in direct relation with the crus or basal ganglia. A part of this intellectual process would be the association with the idea of a name. On this hypothesis it would be possible for a breach to be made in the channel of communication between one of the perceptive centres and the "idea-centre" or "naming centre," and a case was related in which the effects producible, hypothetically, by a lesion between the visual perceptive centre and the naming centre had actually been observed. A patient, otherwise quite intelligent, could not name the simplest object at sight, or read a word of his own writing. A post-mortem examination was made. It was pointed out that a lesion cutting off the "naming centre" from the "auditory perceptive centre," or involving the former centre itself, would produce far more complicated symptoms, since the subject would, *ex hypothesi*, not only fail to understand spoken words, but he would not know what he himself was saying. Cases were briefly given exemplifying this condition, but no examination had been obtained after death. In the case which forms the subject of the communication, and which is believed to afford another illustration, the brain was examined after death. An omnibus driver, aged 56, of intemperate habits, had a fit, of which no accurate account could be obtained, about October 1, 1877. He had from that time been in the condition in which he was found on admission into St. Mary's Hospital on the 16th. He walked into the hospital, and no paralysis could be detected except very slight paresis of the right side of the face. Sensibility, however, was defective over the entire right half of the body, limbs, and face. The striking feature of the case was that the speech consisted almost exclusively of an inarticulate jargon, in which, however, from time to time, a distinct word or phrase would be heard, such as "if you please," "thank you," "thank you." It was difficult to make out how far he understood what was said to him, as his replies, though mere jabber, were often appropriate so far as length was concerned, natural in tone and accent, and accompanied by natural gestures and facial expression. He would also address long speeches to those around him, evidently making some urgent request, and he frequently ended by crying. It was obvious that he thought he was giving expression to ideas present in his own mind, but he did not recognise the fact that his language was inarticulate. It was by telling him to do something that his want of comprehension of spoken words was made apparent. His invariable response to the command to give his hand was to put out the tongue, and in one or two doubtful instances only was his action appropriate, and then he was probably directed by signs. He did not understand writing. The patient died suddenly on November 6, and on post-mortem examination softening was found involving a considerable part of the posterior half of the convex surface of the left hemisphere. The greatest depth (three-quarters of an inch) and breadth of the morbid change was seen in a transverse vertical section made at the end of the fissure of Sylvius. Here the softening reached from near the superior longitudinal margin to within an inch of the inferior and internal edge of the hemisphere. The convolutions affected were, proceeding from before backwards, the supra-marginal lobule, and corresponding part of infra-marginal or first temporo-sphenoidal gyrus; more deeply and in a more advanced degree, the postero-parietal lobule, the angular gyrus, and the first and second temporo-sphenoidal convolutions in the same plane; less extensively, the middle annectent gyrus, and the part of the occipital lobe adjacent. The softening involved the temporo-sphenoidal lobe more completely than the parietal lobe. The arteries of the brain were fairly healthy, membranes of vertex opaque, and raised by fluid from convolutions. No other morbid change observed. It was considered that the loss of comprehension of words, whether spoken by others or himself, and the confusion of mind consequent upon his inability to understand or to make himself understood, would account for the condition of the patient; and the interpretation was that this was due to destruction of the channel from the auditory perceptive centre to the higher centre, in which the name is associated with the idea which it symbolises, or to destruction of this name-centre itself. Whether the interpretation offered is exact or not, the case is interesting as an example of the association of a certain loss of intellectual faculties with a lesion of definite extent and seat. It is worthy of attention that the left hemisphere is the one affected, but that the lesion did not involve the third frontal gyrus; and it would appear, from this and similar cases, that the exclusive employment of this hemisphere, as the way out for language, involved its use as the way in. A comparison of the effects of lesions of identical parts of the two hemispheres would be fruitful of results.

In reply to the President, Dr. Broadbent said there had been no trial of the patient's writing. He was quite unable

to write, holding the pen in a listless, aimless sort of way, without attempting to use it.

Mr. Spencer Watson thought there was a fallacy in connexion with the one-sidedness of the brain, just as it might be said that the loss of one leg took away the faculty of walking properly.

Dr. Broadbent said that it was simply by facts we were compelled to accept the doctrine of speech being localised on one side. He was inclined to hold with Broca and Moxon, that the constant use of the right side of the body, and the left side of the brain, in a certain way involved the faculty of speech also; but, in reply to Dr. Barnes' query as to the conditions in ambidextrous persons, said that these, like many other questions, he could not answer.

Anchylosis of both Knee-Joints, with Shortening of the Femora, from Oblique and Comminuted Fractures.

Mr. B. E. Brodhurst described a case in which there was fracture of both thigh-bones, together with injury to both knee-joints. Shortening to the extent of two inches took place in each thigh-bone, and anchylosis followed the injuries to the knee-joints. He related the mode of restoring motion, which, it was stated, was ultimately as perfect as before the accident; and further, that, notwithstanding the shortening of the femora, the patient was not less active, whether on foot or on horseback, than before his accident.

Mr. Morrant Baker suggested that it might have been as well to produce the instrument.

Mr. Brodhurst described his instrument.

A conversation then ensued between Mr. Hulke and Mr. Brodhurst as regards the use of such an instrument in posterior subluxation of the tibia.

Annual Meeting, Friday, March 1.

Dr. Charles West, President, in the Chair.

At 8 p.m. the ballot for the election of officers and Council for 1878-79 was opened; Dr. C. Fish and Mr. E. Newton being scrutineers. The abstract of the income and expenditure of the Society for 1877, which had been previously distributed among the Fellows, was taken as read.

Mr. Hulke, Hon. Sec., read the Report of the President and Council, which gave the usual details as to the numbers and position of the Society. These were of a favourable character. The deaths of Fellows had been three below the average of many past years, and the number of new Fellows elected seven above the average. The deaths comprised two honorary Fellows, five resident, and five non-resident Fellows. The new Fellows elected were in number twenty-four resident and three non-resident. There has been an upward movement in the number of subscriptions, from 258 to 265; and the total number of Fellows, honorary, resident, and non-resident, had risen from 651 to 665. The receipts exceeded those of the previous year by about £100; but the year having commenced with a deficit instead of the usual balance in hand, the available income was slightly less than ordinary. The expenditure was also less, its details varying little from those of the previous year, with the exception of an excess of £50 expended on the library, and a decrease in the cost of the *Transactions* of about £70. The balance in hand was £33 19s. 3d. The report then gave some details as to the founding and the settlement of the regulations relating to the Marshall Hall Memorial Prize. It was moreover stated that the Council recommended to the Society that the prize should be for the first time awarded to Dr. Hughlings-Jackson for his investigations into the pathology of the nervous system. The report also stated that the Committee on Membranous Croup and Diphtheria were still engaged in sifting the materials in hand, and that their final report would not be long delayed. The Council recommended that a slight change should be made in the days of the Society's meetings. Under the old arrangements the meetings had been held from "November to June," but in 1871 an alteration was made to the six months between "October and May." It was now recommended that the meetings should be held from the fourth Tuesday in October to the second Tuesday in June. The Hon. Librarians gave their annual report as to the increase of the library, the number of works added last year being 443, and they stated that the new catalogue and index were making progress through the press, and would probably be in the hands of the Fellows by the close of the year.

The adoption of the report (subject to a distinct motion on the paragraph relative to the alteration of the times of meetings, which involved an alteration in the by-laws) was then moved by Mr. Charles Hawkins, who congratulated the meeting on the improvement in the financial condition over that of the previous year, and seconded by Dr. Buzzard. Dr. Buzzard especially referred to his gratification at the excellent adjudication of the Marshall Hall Prize, and the motion was carried unanimously.

The alteration of the by-laws relative to the proposed change in the days of meeting was moved by Mr. Cooper Forster, and seconded by Mr. Spencer Wells. The Secretary (Dr. John Harley) explained the reasons which had led the Council to adopt the recommendation in the report, among which were the injurious effect of too early a commencement of the session in diminishing the numbers present at the first meeting, and the increase of the difficulty always felt by the Secretaries in obtaining papers for reading at that period. Mr. Cooper Forster, in moving the alteration, supplemented the Secretary's remarks by suggesting that some of the papers in excess at the end of one session might be held back to supply the probable deficiency at the beginning of the next. Mr. Curling stated one objection to the change, in that it would again throw the consideration of some of the papers by the Council to a late period of the summer, when the Councils were not so well attended; and Mr. Thomas Smith referred to the small attendance at the June meetings —which, however, was replied to by the Secretary, who stated that in making up the average, the numbers of the June meetings had been found to exceed those of the October ones. The motion was carried by a considerable majority.

The President then called upon Dr. Hughlings-Jackson to come forward to receive the diploma of the Marshall Hall Prize, and addressed him in the following short oration:—

Dr. Hughlings-Jackson,—I could have wished that for this night at least the chair might have been occupied by another than myself, so that you might have received your well-won honours from the hand of some one who had himself gathered laurels in the same field as you. But as this cannot be, I have at least the satisfaction of assuring you how much I am your debtor for the light you have thrown on my path in the daily practice of my profession; how often I have found your doubts worth more than many another man's assertions; how, even when I have hesitated to adopt your conclusions, it has been with the feeling that probably you were right and I was wrong, that your keener insight had shown you clearly facts the outline of which seemed to me still blurred and indistinct. Though all the Fellows acquiesce in the justice of the Council's award, it is yet perhaps fitting that I should mention the three chief grounds on which that award was made:—First, your contributions to the increase of our knowledge of aphasia, and to the increased certainty of that wonderful discovery by which we are now enabled to localise the power of intelligent articulate speech in a certain district of the brain. Secondly, your careful clinical observations on epilepsy, and the light you have therefore thrown on many points connected with the structure and functions of the brain. Thirdly, your researches with the ophthalmoscope—that instrument by means of which we see through the eyes as through windows to the brain. I hope that, in time, we may arrive by its means at something approaching that certainty of diagnosis which auscultation has enabled us to attain in diseases of the chest. In handing to you this diploma, which records your selection as the first Marshall Hall prizeman, I need not engage you to continue your investigations with the same diligence as heretofore, for "the labour we delight in physics pain." But do it with the same absence of self-seeking as has characterised your work hitherto, and you will continue to enjoy still the rare good fortune of praise without detraction, of honour without envy.

Dr. Hughlings-Jackson, in receiving the diploma, made a reply, thanking the President and Society for the very high honour conferred upon him.

The President then addressed the meeting, and, after a few introductory remarks, entered upon his obituary notices of such Fellows as had been lost to the Society during the past year. The deaths were not so numerous as usual. Among them were five resident Fellows—Mr. William Coulson, Dr. Thomas Heberden, Dr. Basham, Mr. Robert Dunn, and Dr. Cotton; five non-resident—Dr. William Carr (of Blackheath), Mr. Julius Jeffreys (of Richmond),

Mr. George Cooper (of Brentford), Dr. Charles Mayo, and Dr. Frederick Davies; among the honorary Fellows the losses were Dr. William Stokes (of Dublin) and Prof. Claude Bernard (of Paris). [The details of these obituaries appear in the Society's *Proceedings*.] The President concluded his address in the following words:—One thing has struck me much in drawing up these short notices of the deceased Fellows of our Society: that almost without exception they may be said, in words used long ago, to have "served their own generation," not themselves. The sphere in which one worked was a wider, in which another, a narrower one—this man threw his energies into the welfare of the parish where he lived; another devoted himself to the interests of the dwellers in the great continent of India; a third, to the vindication of the principles which seemed to him to underlie the highest interests of our profession; while a fourth, not greedy of the gain which he might have had every day, nor thirsty for public distinction which would have been bestowed on small seeking, helped the poor and taught the student almost to his dying day. I know that to praise the days that have fled—to live in the long retrospect, rather than in the short remaining future—is the natural disposition as life goes on and its sun declines. But, for all that, I cannot refrain altogether from the question, whether the spirit of the present day, the hurry to get on, the anxiety for wealth in order to meet a needlessly lavish expenditure, do not tend to emasculate the character by putting self—and that not a high self—in the place of something wider, nobler, better. Pardon me for raising the question here. Some may deem it out of place. It appears to me, however, that the first medical society in the kingdom should assert the highest principles in conduct as well as the soundest in science; and, strong in the strength which the position I owe to your kindness has given me, I have ventured to ask a question which of myself I dare not ask, which even now I crave your pardon for the asking.

At the conclusion of the President's address it was moved by Mr. J. Moncrieff Arnott, and seconded by Sir James Paget, both speaking in highly eulogistic terms, and carried with applause—"That this meeting expresses its best thanks to the President, Dr. Charles West, for his most excellent address, and that he be requested to allow it to be printed."

Votes of thanks were also moved by Mr. George Pollock, and seconded by Mr. Erichsen, to the retiring members of Council; and by Mr. Curling, seconded by Mr. Thomas Smith, and carried with acclamation, to the retiring officers, Dr. John Harley and Mr. J. W. Hulke (Hon. Secretaries), and Dr. Chas. Murchison and Mr. Timothy Holmes (Hon. Librarians), for their zealous and valuable services to the Society during the periods they had respectively held their offices.

The two Secretaries returned thanks; and on the motion of Dr. Harley, which was seconded by Sir James Paget, a vote of thanks was also given to Mr. Wheatley, the Assistant Librarian.

The scrutineers having returned from examining the lists, the President announced the result of the ballot for officers and Council for 1878-79 as follows:—*President:* Charles West, M.D. *Vice-Presidents:* William Wood, M.D.; *Richard Quain, M.D., F.R.S.; John Cooper Forster; John Wood, F.R.S. *Treasurers:* William Wegg, M.D.; John Birkett. *Secretaries:* *James Andrew, M.D.; *Timothy Holmes. *Librarians:* *George Johnson, M.D., F.R.S.; *William Scovell Savory, F.R.S. *Other Members of Council:* Robert Barnes, M.D.; William Chapman Begley, M.D.; *Charles Handfield Jones, M.B., F.R.S.; *Octavius Sturges, M.D.; *E. Symes Thompson, M.D.; *William Morrant Baker; *Henry Howard Hayward; *Matthew Berkeley Hill; *Arthur B. R. Myers; *Robert John Spitta, M.D. (Those gentlemen to whose names an asterisk is prefixed were not on the Council or did not fill the same office last year.)

STRETCHING OF NERVES.—Dr. Blum terminates, in the *Archives Générales* for February, an elaborate review of what has been done on this subject, with the following general conclusion:—"Elongation acts sometimes by disengaging the nerve from the neighbouring tissues which compress it; but its efficacy is chiefly due to the modifications which it produces on the structure, and especially the circulation, and that not only at the spot where the distension is made, but also at points more or less distant from the wound."

MEDICAL NEWS.

UNIVERSITY OF DUBLIN.—At the Spring Commencements, held according to custom on Shrove Tuesday, March 5, 1878, the following degrees in Medicine and Surgery were conferred by the Caput Senatus Academici in the Examination Hall of Trinity College:—

Baccalaurei in Chirurgiâ.—Ulysses Arturus Daly, Thomas Frederick Willoe Fogarty, Clemens Mallins, Eduardus Guilelmus Ward White, Alexander Georgius Young.

Baccalaurei in Medicinâ.—Henricus Lawrence Cox, Eduardus Jacobus Cowen, Constantinus Ricardus Egan, Ulysses Arturus Daly, Jacobus Dunne Day, Abraham Cowley Malley, Jacobus Acheson M'Cullagh, Gulielmus Cox Neville, Alexander Pentland, Guilelmus Craven Rockliffe (*ad eund. Cantab.*), Carolus Higatt Tench, Alexander Georgius Young.

Magistri in Chirurgiâ.—Cedric Herbert Hurford, Rogers Wetherall Gore Taylor.

Doctores in Medicinâ.—Jacobus Alexander, Ephraim M'Dowell Cosgrave, Georgius Gibson, Johannes Arturus Irwin, Gulielmus Craven Rockliffe.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, February 28:—

Appleton, Thomas Alfred, Cathcart-road, S.W.
Atkinson, John Mitford, Wincheater.
Davis, Arthur Randall, Langport, Somerset.
Pitt, Francis Dingley, Edward-street, Hampstead-road.
Wright, Harry Claude, Wynbery, Cape of Good Hope.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Curde, Charles, Charing-cross Hospital.
Hughes, Thomas Montgomery, Charing-cross Hospital.
Hume, Walter Augustus, St. Bartholomew's Hospital.
Hope, William More, University College Hospital.
Pegge, William Joseph, Manchester Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

BARLOW, WILLIAM H., M.D., Consulting Physician to the Dispensary of the General Hospital and Dispensary for Sick Children, Manchester and Pendlebury.

EVANS, B. D., L.R.C.P., L.R.C.S.E., L.M., L.S.A., Surgeon to Festiniog Slate Quarries.

TAAFFE, R. P. B., M.D. Lond., Consulting Physician to the Sussex and Brighton Infirmary for Diseases of the Eye.

NAVAL, MILITARY, &c., APPOINTMENTS.

WAR OFFICE.—MEDICAL DEPARTMENT.—Surgeon-Major William Fletcher retires upon temporary half-pay. Surgeon Vivian Wearne to be Surgeon-Major 3rd West York Militia. Surgeon Lawrence Kiernan resigns his commission.

BIRTHS.

BAINES.—On February 27, at Eltham, Kent, the wife of A. H. Baines, M.R.C.S., L.R.C.P.L., of a son.

BARTLETT.—On February 27, at 40, Elgin-road, St. Peter's-park, W., the wife of Edward Bartlett, M.R.C.S.E., of a son.

KINGSLEY.—On February 28, at Church House, Stratford-upon-Avon, the wife of Henry Kingsley, M.D., J.P., of a daughter.

KIRK.—On January 21, at the Consulate-General, Zanzibar, the wife of John Kirk, M.D., her Majesty's Political Agent, and Consul-General, of a son.

SIMPSON.—On March 1, at Highgate, the wife of G. A. Malcolm Simpson, M.D., of a son.

THOMPSON.—On February 28, at 9, Cranley-place, South Kensington, the wife of Reginald E. Thompson, M.D., of a daughter.

MARRIAGES.

BRIDGWATER—MOZLEY.—On February 27, at the parish church, Harrow, Thomas Bridgwater, M.B., of Harrow, to Eliza Blanche, youngest daughter of the late Elias J. Mozley, of Liverpool.

BARRON—TONGE.—On February 28, at the parish church, Worsley, Norman, younger son of G. B. Barron, M.D., J.P., of Southport, to Jessie Florence Sothern, youngest daughter of the late J. S. Tonge, of Liverpool.

DAWES-BRAID.—On February 28, at the Church of St. John the Evangelist, Burgess-hill, Sussex, Edward Alleyne Dawes, Esq., of the Oaks, Burgess-hill, to Margaret Lucie, eldest daughter of James Braid, M.D., of The Grove, Burgess-hill.

HEMMING—STRICKLAND.—On February 12, at St. James's Norland, W., William Douglas Hemming, M.R.C.S., of Notting-hill-terrace, to Harriet Isabella, eldest daughter of Major Strickland.

ROWNTREE—KIRKBY.—On February 27, at Marton parish church, William G. Rowntree, M.R.C.S., etc., of Islington, to Annie, third daughter of the late John Kirkby, Esq., of Marton, Yorkshire.

SHEA.—PHILCOX.—On February 28, at St. Andrews, Wells-street, William Leonard, youngest son of John Shea, M.D., of Kingston-on-Thames, to Margaret, elder daughter of James Philcox, Esq., of Preston, near Brighton.

TYLDEN—TYDD.—On January 31, at Bangalore, William Tylden, Lieut. Royal Artillery, to Alice J. C., daughter of Surgeon-Major B. Tydd, L.R.C.S.I., Royal Horse Artillery.

DEATHS.

COWARD, GEORGE WILLIAM HENRY, M.D., at 17, Church-road, De Beauvoir-square, N., on February 25, in his sixty-eighth year.

HENDERSON, EMMA, wife of William Henderson, M.B., of 26, Delancey-street, N.W., and daughter of H. T. Wells, Esq., of 6, Stanhope-terrace, on February 27.

SWAIN, ELIZA CLEEVE, wife of William Paul Swain, F.R.C.S, at 20, Kerr-street, Devonport, on February 26.

SELWOOD, JOSIAH HENRY, F.R.C.S., at 4, Ampton-place, Gray's-inn-road (formerly of Bridport), on February 28, aged seventy.

THOMAS, ELIZABETH MARY, wife of Grant E. Thomas, M.D., at Villa Nova, Barbadoes, on February 9, aged sixty-eight.

TREDENNICK, WILLIAM MAGEE, M.D., youngest son of the Rev. G. N. Tredennick, formerly vicar of Kilbarron, Co. Donegal, at Ballybrack, Co. Dublin, on February 26, aged thirty-two.

WHITFIELD, ARTHUR, M.R.C.S., at Elm Villa, Seaside Ride, Eastbourne, on February 28, aged forty-three.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

DARTFORD UNION.—Medical Officer. Candidates must be duly qualified according to the General Orders of the Local Government Board. Applications, with testimonials, to the Clerk's Office in Dartford, on or before March 15. The personal attendance of the candidates, at their own expense, at the Board-room of the Workhouse on March 16, is required.

DENTAL HOSPITAL OF LONDON, LEICESTER-SQUARE.—Assistant Dental Surgeon. Candidates must hold the dental diploma of the Royal College of Surgeons of England. Applications to Geo. A. Ibbetson, Hon. Sec., on or before March 13.

KENT AND CANTERBURY HOSPITAL.—House-Surgeon. Candidates must be registered under the Medical Acts as legally qualified to practise medicine and surgery, unmarried, and not more than forty years of age. Applications, with testimonials, to the Secretary, on or before March 29. A copy of the laws regulating the duties of the House Surgeon may be had on application to the Secretary at the Hospital.

MANCHESTER ROYAL INFIRMARY.—Resident Surgical Officer. Applicants must not be less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. Applicants must be not less than twenty-five years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer for the Fever Hospital at Monsall. Applicants must be not less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer of the Convalescent Hospital at Cheadle. Applicants must be not less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

UNION AND PAROCHIAL MEDICAL SERVICE.

. The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Barrow-upon-Soar Union.—Mr. H. Nuttall has resigned the Belgrave District; area 8015; population 3679; salary £40 per annum.

Gravesend and Milton Union.—Mr. R. O. Arnold has resigned the Milton District; area 858; population 13,073; salary £85 per annum.

Louth Union.—Mr. William Fawssett has resigned the Binbrook District; area 12,510; population 2365; salary £40 per annum.

Salford Union.—Mr. James S. Orchard has resigned the office of Assistant Medical Officer at the Workhouse.

West Derby Union.—Mr. George Andrews has resigned the office of Medical Officer for the Workhouse.

APPOINTMENTS.

Cumberland.—James W. Montgomery as Analyst for the County.

Haslingden Union.—Mr. John Snell, M.R.C.S. Eng. and L.R.C.P. Edin., to the Bacup District.

Hampstead Parish of St. John.—Mr. Charles Heisch, F.C.S., appointed Analyst until December 25 next; salary £50 and fees.

Lewisham Union.—Wm. R. Brunton, M.R.C.S. Eng., L.S.A., to the Sydenham District.

Newent Union.—William Blockley Boughton, L.R.C.S. and L.M. Edin., L.S.A. Lond. (first half), to the Redmarley District.

TENDERNESS OF STERNUM IN CONSTITUTIONAL SYPHILIS.—This case (at Bellevue) was one in which syphilis was suspected, and yet no history of the primary lesion could be obtained, nor could the evidence of secondary manifestations be made clear. Tenderness on pressure over different parts of the sternum, especially the epigastric portion, was regarded as exceedingly strong evidence in favour of the presence of constitutional syphilis, for it was said that there is nothing except that disease which produces such tenderness. —*New York Med. Record*, January 12.

MONUMENT TO CLAUDE BERNARD.—The Paris Société de Biologie, of which Claude Bernard was one of the founders, where almost all his great works were first produced, and of which he was President for eleven years, has just formed a committee for the purpose of organising a subscription in order to raise a monument to the deceased in some public place. The committee is composed of M. Houel, the Vice-President, M. Dumontpallier, the Secretary, M. Vidal, and Professors Paul Bert and Ranvier, and it invites the co-operation of the various other scientific bodies. M. Bardoux, the Minister of Public Instruction, has announced his intention of heading the list. Subscriptions may be forwarded to any of the medical journals, and to M. Bouchon-Brandeley, Secretary of the Collége de France.

DEATH OF GEH. MEDICINALRATH PROFESSOR ERNST HEINRICH WEBER.—This renowned master in physiology died at Leipzig on January 26. He was born at Halle in 1795. He read his introductory address in the Leipzig University, to which body he has ever since been attached—therefore for sixty-two years—speedily becoming, and since remaining, one of its greatest ornaments. His younger brother, Edward Weber, who worked in common with him, died before him; and a third brother, Wilhelm, is still a professor of physics at Göttingen. Ernst Heinrich Weber was the originator of the doctrine of the mechanism of the propulsion of the blood, and Edward Weber was the creator of the doctrine of inhibition of the nervous system (*Hemmungsnervensystem*), discoveries of a powerful epoch-making signification.—*Berlin. Klin. Woch.*, February 11.

PARIS MEDICAL STUDENTS.—The number of medical students inscribed at the Faculté de Médecine for the first quarter of 1878 is 4870. Of these 341 have taken their first inscription, 42 have come from other faculties, 39 commenced their studies in *écoles de plein exercise*, 81 in the secondary schools, 10 have obtained inscriptions for studies pursued abroad, 23 are foreigners, having foreign diplomas equivalent to the *baccalauréats es sciences et es lettres*, 11 belong to the naval service, and 39 form part of the Preparatory Medical School at Val-de-Grâce—*i.e.*, 609 (or, according to the above figures, 586) students matriculated for the first time, or forty-nine more than in the first semester of 1877.—*Archives Générales.* [Thus, according to the official figures, the number of students in course of regular inscription has been a mean of 2435—2)4870=2435—in November, 1877, and January, 1878. Admitting that there were 1500 students in course of examination, the total number of the students of the Paris Faculté is actually 3935, somewhat less than the 6000 which a professor stated them to be in an official report.—*Lyon Méd.*, February 24.]

CORNS.—In a lecture at the St. Louis, on hypertrophy of the epidermis, M. Guibont observed that, while in callosities the hypertrophy takes place at the surface, in corns the hypertrophied part becomes pyramidal, and takes the form of a nail with its point directed towards the deeper-seated parts. This sharp point, lodged in a kind of cupola, which exactly boxes it in, has a tendency to penetrate into the substance of the dermis whenever the base of the corn is compressed. The portion of the dermis which is in permanent contact with the epidermic induration becomes inflamed and altered in character, its papillæ disappearing, so that at last it becomes a true matrix, destined to form deep new horny epidermic layers in proportion as the more superficial layers are eliminated. Changes of the weather often give rise to great pain in corns, which has been supposed to be due to their hygrometric nature, which, by causing their enlargement, adds to the suffering. But, in fact, the exacerbations are less severe during the time that it rains than they are for some days preceding; and they are also met with when the weather is about to change from wet to dry. These painful exacerbations of the pain of corns are quite as remarkable and as inexplicable as are those of rheumatic pains. The sole efficacious treatment is excision, but care must be taken that this is complete. The summit of the cone must be cut down to, so as to entirely empty the dermic cupola. And then it is quite necessary to destroy by cauterisation the inner surface of this cupola—*i.e.*, the matrix of the corn—which will otherwise be reproduced. The best caustic is sulphuric acid, of which we may deposit a drop by a match or glass rod on the excised part. If the corn recurs the same processes of excision and cauterisation must again be resorted to.—*Gaz. des Hop.*, February 7.

THE POWER OF WORK.—Our readers who have learned the election of Prof. Peter at the Académie de Médecine are perhaps not aware what energy and force of will the learned Physician to La Pitié has required to reach the brilliant position he has attained, and which he has acquired solely by his own merits. In his youth he was a printer's compositor, living with his mother on the fruits of his labour. Later he became a corrector at the printing-office, and began to study medicine; and yet he is one of the youngest, if not the youngest, of the professors of the Faculté. It would seem, indeed, that they who have to struggle with difficulties only get on all the quicker. Velpeau, who was apprenticed to a farrier, hardly knew how to read and write when he came to Paris. Demarquay worked as a peasant from eleven years of age, and when he came to Paris at fifteen could scarcely read or write. M. Péau, one of the most employed and fortunate of surgeons, takes a pleasure in relating that he tilled the farm of his father until he began to study medicine. Good encouragement to work this for the young. *Labor improbus omnia vincit.—Paris Méd.*

QUININE IN INTERCOSTAL NEURALGIA.— A female patient at Belleville complained of pain in the left (the usual) side of the chest, which had continued for six weeks, and was sometimes severe. She was somewhat anæmic, and the diagnosis of intercostal neuralgia was arrived at by exclusion, and then by direct evidence, the points of tenderness being in the course of the intercostal nerves—viz., the intercostal spaces near the sternum, in the axillary and infra-axillary regions, and close to the spinous processes—the intercostal nerves sending out cutaneous branches in these three situations. The treatment recommended was to develope slight cinchonism and maintain it for *two weeks*. It was regarded as necessary to thus prolong the cinchonism in order to determine whether quinine was to prove efficacious. Many cases do not yield until nearly the end of two weeks; but if slight cinchonism is kept up for that length of time, and the neuralgia has not benefited, some other measures are required.—*New York Medical Record*, January 12.

RICHMOND LUNATIC ASYLUM, DUBLIN.—We regret to learn that on Monday evening, the 4th inst., the male hospital of this institution was entirely consumed by fire. The building, which was constructed about seven years ago, was 300 feet in length by forty feet in width. The ground floor was used as a dining-hall, and the two upper storeys as hospital wards. About sixty patients, many of them bedridden or epileptic, were in these wards when an alarm of fire was given. Shortly before five o'clock in the afternoon a chimney in the hospital wing was found to be on fire. This was at once looked after, and it was believed all danger was averted; but subsequent events show that some smouldering fire must have lurked in what are technically known as the "snow plates," for about half-past four flames were seen breaking out through the ceilings and along the rafters. The alarm was promptly conveyed to the fire brigade, and as promptly responded to by the despatching of the whole of the firemen on duty and all available hose to the scene of the fire. Unfortunately the water-pipes at the asylum would not fit the hose, and considerable delay ensued in the procuring of a supply of water from the neighbouring streets. A light wind also fanned the flames, so that the fire may almost be said to have burned itself out about 10 p.m. Unhappily, at a late hour the charred trunk of one of the inmates was discovered, otherwise there was no loss of life reported.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

*** If "Croix Rouge," Charing-cross, will kindly send us his name and address (not for publication), we shall be able to make use of his communication.

Archæologist.—The Dr. Doran recently deceased was *not* a member of our profession. His son, Mr. Alban H. G. Doran, is a Fellow of the College by examination, June 10, 1875.

Anti-Quack and H. M.—As no name appears in the circular, we are unable to state whether the medical officer of the "Hounslow Self-Supporting Dispensary" for the poor is, or is not, a qualified member of the profession. "Advice and medicine included for 6d." is certainly most reasonable. Why not write to the Secretary of the Hall?

"*Births, Marriages, and Deaths.*"—The person so advertised is *not*, as stated, a Fellow of the College of Surgeons.

"*A Bad Omen.*"—A correspondent draws attention to the fact, that during the delivery of Professor Flower's introductory lecture at the College of Surgeons, on Monday last, the mace suddenly fell off the table at the foot of the President, and, as may be expected, created no little sensation, and some gossip after.

Dr. Campbell.—Mr. George Southam, of Manchester, died on April 24, 1876, aged sixty-one, and was interred at St. John's Church, Pendlebury.

G. J. F., Cambridge.—Professor Humphry, F.R.S., of your town, will, we believe, deliver the next Hunterian Oration. Sir Wm. Fergusson delivered it in 1871.

A Candidate.—You will obtain the desired information on application to the Secretary of the College of Surgeons, and also by reference to our advertising columns. We have ascertained for you that the pass examination for the Fellowship will take place on Thursday, May 30; the written examination and the practical examination of patients the following day; on Saturday, June 1, operations; and on Monday, the 3rd, the *viva voce*.

A Member.—The name of the person mentioned by you was ordered to be struck off the list of members at a meeting of the Council of the College on Thursday last, and at the next meeting of the General Medical Council will be removed from the Register.

Italia.—A medical officer visits each of the Communal Schools of Florence weekly for sanitary inspection, and registers his observations and records of sickness. Every parent presenting a child for admission must bring a certificate of birth and vaccination for entry on the register. The direction of these schools is in the hands of a delegation appointed by the Municipal Council, consisting of eight members, citizens of eminent station and character.

Cabmen's Shelters.—The Cabmen's Shelter movement appears to have been attended with marked success, financially and otherwise. Eighteen shelters, under the control of the Committee, have now been placed in various parts of the metropolis. No complaint as to misconduct at any of the shelters has been made by the police. Public interest in the movement is spreading. Applications for information are frequently received by the Committee, not only from various towns in the provinces, but recently from Vienna, Lisbon, Berlin, and Montreal. The Committee have succeeded in making each shelter self-supporting as soon as erected. Nine of the existing eighteen have been erected by individual liberality. A contribution of £100 is sufficient to start one.

Vaccinator.—The public vaccinators of Brighton have made their reports to the Board of Guardians with reference to the charges brought against them by implication by the local branch of the Anti-Vaccination League. They state that each case had been fully inquired into by them, and in every instance it was found that the children were scrofulous or were constitutionally weak, the symptoms alleged to be due to vaccination being those of other complaints. The vaccinators had further examined the children from whom lymph to perform the operations was taken, and other children vaccinated from the same lymph, with the most satisfactory results in all cases.

No Surrender.—Joseph Abel, of Farringdon, against whom twenty-one summonses had been issued, and £29 10s. paid by him during the last two years for refusing to have his children vaccinated, was last week again summoned for similar neglect and fined in full penalties and costs and the prosecuting attorney's fee, making altogether £3 18s.

Compulsory Notice of Contagious Diseases.—It appears that the Nottingham Improvement Bill, which is being promoted in Parliament by the Corporation of that city, contains clauses compelling householders and medical practitioners to give notice of the existence of contagious or infectious fevers. To these clauses Mr. North, a medical practitioner, takes exception, and moved, at the meeting of the Town Council last week, that the clauses be omitted from the Bill, as their tendency was opposed to the liberty of the subject and to the common law of the realm. If medical men were to be converted into spies and informers, he said that those who employed them would be perfectly justified in kicking them out of their houses. The motion was rejected by a large majority.

INDIAN JOTTINGS.

It is said that the office of the Surgeon-General of her Majesty's British Forces in India, and of the Surgeon-General of the Indian Forces, are to be amalgamated, and Dr. Kerr Innes will have charge, and be chief of the medical department under the government of India.——The Bombay Drainage Commission has reported in favour of Colonel Tulloch's scheme, as modified by Mr. Walton, executive engineer of the Bombay Municipality.——The rate of mortality in Bombay for the week ending the 2nd ult. was 40·990 per 1000 of the population per annum. The total number of deaths was 528, inclusive of 190 from remittent fever.

BOOKS AND PAMPHLETS RECEIVED—

W. H. Wathen, M.D., Clinical Gynecology: Sterility and its Treatment—Dr. Albert Adamkiewicz, Die Secretion des Schweisses—Sixth Annual Report of the Local Government Board—The Public Medical Services; being Hints to Candidates for Commissions on the Choice of a Service—Alexander McCook Weir, M.D., L.R.C.S.E., Vaccination Reform—Reginald F. D. Palgrave, The Chairman's Handbook—R. E. Dudgeon, M.D., The Human Eye: its Optical Construction popularly explained—John Dewar, L.R.C.P.E., Indigestion and Diet.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Transactions of the Odontological Society of Great Britain—Veterinarian—Hardwicke's Science Gossip—Monthly Homœopathic Review—Glasgow Medical Journal—Gazeta Medica da Bahia—Analyst—Practitioner—American Practitioner—Clinical Work—Social Notes—Obstetrical Journal of Great Britain and Ireland—Edinburgh Medical Journal.

COMMUNICATIONS have been received from—

Mr. W. E. Poole, London; Dr. Moxon, London; Mr. J. Chatto, London; Dr. W. Lauder Lindsay, Perth; Mr. T. M. Stone, London; Mr. B. R. Wheatley, London; Dr. W. H. Broadbent, London; Dr. Sturge, London; Dr. F. Churchill, London; Dr. Octavius Sturges, London; Dr. Bauce, London; The Registrar of Apothecaries' Hall, London; Dr. W. McIntosh, Murthly; Mr. R. C. Lucas, London; A. B. M., London; Dr. James McCraith, Smyrna; Dr. W. H. Stone, London; Mr. W. Haward, London; The Secretary of the Clinical Society, London; Dr. Barlow, London; Dr. Meymott Tidy, London; The Secretary of the Royal Institution, London; The President of the Royal College of Surgeons, Ireland; Messrs. Yardley and Co., London; Mr. G. Brown, London; The Secretary of the Society of Engineers, London; Messrs. Calvert and Co., Manchester; Dr. Whipham, London; The Secretary of the Royal College of Surgeons, Edinburgh; Mr. William A. Frost, Hartshill, Stoke-upon-Trent; Mr. J. W. T. Bacott, Seaton; Dr. J. W. Moore, Dublin; Mr. J. H. Faulkner, London; Dr. G. P. Bevan, Brighton; The Secretary of the Royal Victoria Dispensary, Northampton; Messrs. P. and P. W. Squire, London.

APPOINTMENTS FOR THE WEEK.

March 9. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

Royal Institution, 3 p.m. Mr. R. Bosworth Smith, "Carthage and the Carthaginians."

11. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Mr. Lund (of Manchester) will read a short Paper and show a Patient from whom both Astragali were Removed for Severe Double Talipes. Mr. R. Davy will show Cases in which he has Subdivided the Tarsal Arch for Confirmed Talipes. Mr. Adams will exhibit an improved Scarpa's Shoe for the Treatment of Talipes Equus-Varus.

Royal College of Surgeons of England, 4 p.m. Professor W. H. Flower, "On the Comparative Anatomy of Man."

12. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

Royal Medical and Chirurgical Society, 8½ p.m. Sir Henry Thompson, "Analysis of 500 Cases of Operation for Stone in the Bladder of the Adult Male" (the calculi will be shown).

13. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Hunterian Society (London Institution), (Council Meeting, 7½ p.m.), 8 p.m. Dr. Fletcher Beach, "On the Diagnosis and Treatment of Idiocy, illustrated by Cases." Mr. Jacobson will show a Child whose Tibia has been divided for Rickets.

Royal College of Surgeons of England, 4 p.m. Professor W. H. Flower, "On the Comparative Anatomy of Man."

14. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

15. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal College of Surgeons of England, 4 p.m. Professor W. H. Flower, "On the Comparative Anatomy of Man."

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Lord Rayleigh, "The Explanation of certain Acoustical Phenomena."

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 2, 1878.

BIRTHS.

Births of Boys, 1221; Girls, 1220; Total, 2441.
Average of 10 corresponding years 1868-77, 2375·6.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	816	821	1637
Average of the ten years 1868-77	801·4	774·7	1576·1
Average corrected to increased population ...	...	...	1686
Deaths of people aged 80 and upwards ...	...	...	61

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	2	6	5	1	17	1	4	1	3
North ...	751729	25	5	16	4	19	1	6	...	4
Central ...	334369	...	3	2	...	6	1	1	1	...
East	639111	6	7	4	2	24	...	...	...	1
South	967692	21	20	8	1	46	2	7	2	3
Total	3254260	54	41	35	8	112	5	18	4	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·815 in.
Mean temperature	48·7°
Highest point of thermometer	56·8°
Lowest point of thermometer	41·1°
Mean dew-point temperature	43·0°
General direction of wind	S.W.
Whole amount of rain in the week	0·34 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 2, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Mar. 2.	Deaths Registered during the week ending Mar. 2.	Temperature of Air (Fahr.) Highest during the Week.	Temperature of Air (Fahr.) Lowest during the Week.	Temperature of Air (Fahr.) Weekly Mean of Mean Daily Values.	Temp. of Air Cent. Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Centimetres.
London	3577304	47·5	2441	1637	56·8	41·1	48·7	9·28	0·84	0·86
Brighton	103923	44·1	74	66	52·0	41·2	46·7	8·17	1·01	2·57
Portsmouth ...	129461	28·8	93	40	...	...	...	...	...	...
Norwich	84620	11·3	58	48	58·8	41·0	48·4	9·11	0·55	1·40
Plymouth	73599	52·8	45	42	54·0	42·0	48·6	9·23	0·99	2·51
Bristol	206419	46·4	151	71	56·6	41·8	48·9	9·39	2·23	5·66
Wolverhampton ...	74240	21·9	67	39	56·5	39·7	45·5	7·50	0·47	1·19
Birmingham ...	383117	45·6	286	187	...	...	...	...	...	...
Leicester	121473	38·0	90	49	57·8	42·0	47·9	8·83	0·44	1·12
Nottingham ...	165267	16·6	126	70	58·4	40·7	47·6	8·67	0·50	1·27
Liverpool	532681	102·2	423	310	...	...	...	...	...	...
Manchester ...	360514	84·0	235	190	...	...	...	...	...	...
Salford	170251	32·9	134	8	56·7	39·1	46·5	8·06	1·06	2·69
Oldham	107366	23·0	107	49	...	...	...	...	...	...
Bradford	185088	25·6	108	70	55·3	40·8	46·6	8·12	0·72	1·83
Leeds	304948	14·1	221	109	59·0	40·0	48·0	8·89	0·43	1·09
Sheffield	289537	14·7	211	140	59·0	42·0	48·2	9·00	0·56	1·42
Hull	143139	39·4	112	53	59·0	37·0	46·8	8·23	0·56	1·42
Sunderland ...	112459	34·0	94	61	...	...	...	...	...	...
Newcastle-on-Tyne	144570	26·9	101	74	...	...	...	...	...	...
Edinburgh	222371	63·1	132	117	54·7	38·0	45·5	7·50	0·30	0·76
Glasgow	666940	94·0	417	259	52·2	39·0	45·2	7·89	0·99	2·51
Dublin	314666	31·3	188	198	58·8	40·6	50·0	10 00	0·41	1·04
Total of 23 Towns in United Kingdom	8373953	37·9	5924	3955	59·0	36·0	47·6	8·61	0·72	1·83

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·82 in. The highest reading was 30·13 in. at the beginning of the week, and the lowest 29·48 in. on Friday night.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

CLINICAL LECTURE ON A CASE OF SUNSTROKE.

By C. HANDFIELD JONES, M.B. Cantab., F.R.S.,
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GENTLEMEN,—Sunstroke has always appeared to me a malady of very great interest, not only in itself, but on account of its relation to other morbid conditions, especially of the nervous system. It is hardly too much to say that there is scarcely a symptom of nerve-disorder which is not capable of being produced by the morbific influence of excessive heat. In studying cases of heat-stroke we have the great advantage of knowing a good deal about the cause of the disorder, which is much more than can be said of most other nervous pathemata. If then we can gain some tolerably clear comprehension of the phenomena of heat-stroke, it may materially assist us to a better knowledge of the pathogeny of like phenomena in cases where the cause is more obscure. Some instances of heat-stroke are, I really think, quite as instructive, or more so, than many a laboratory experiment.

I will now relate to you the history of a case which has recently been under my care in the wards.

Sunstroke—Brief Delirium at first, then Unconsciousness—Stupor—Prostration—Impaired Mental Actions—Motor and Sensory Paralysis of Left Arm—Roseolous Eruption—Frontal Neuralgia—Use of Stimulants—Recovery.

G. P., aged fourteen, labourer, admitted July 30, 1877; weather very hot. His mother states that he has generally good health, except some chronic eczematous eruption, which dates from infancy; seven other children and the mother are healthy. He was well in the morning; went to work; ate his dinner exposed to the heat of the sun; soon after became ill suddenly, felt very giddy, and nearly fell; felt great pain at his occipital and epigastric regions. His mother reports, from the statements of his mates, "that he was first took with screaming and fighting lasting half an hour; after that he was sick, had some brandy, and was sick again, and then became dozy until he was admitted." On admission he had a mustard emetic, and a dose of mist. alba; was in a state of partial collapse and insensibility. He was very delirious on the night of the 30th, but slept well the following night. Temperature on admission 102·8°; on 31st, a.m., 100·6°; p.m., 100·4°. He passed urine under him all the 31st; simple diet; beef-tea and milk were given. I saw him first on August 1; he was then stuporous and prostrate, but able to speak and give some account of himself on being questioned. Expression of face frowning; a considerable flush on the left cheek, some on the right; some red papulose eruption is seen on left forearm, evidently recent. Old eczematoid eruption on anterior and upper part of both thighs. He was very drowsy yesterday; is still so to-day, but less. Takes his food better to-day than yesterday; could not be induced then to take it. Forehead cool; pupils normal, but sluggish. Left arm is quite paralysed, and left hand anæsthetic; the anæsthesia does not extend above the middle of the forearm. Left leg can be moved well, but he cannot exert so much force with it as with the right. He can move the right arm and leg well. Sensation good in both legs. The left arm is quite flaccid; falls inert when raised. Heart's sounds normal, except marked reduplication of second; this is most evident at the apex, but exists also at mid-sternum. Pulse 75, weak and small. Stool yesterday green and offensive. ℞. Tinct. nucis vomicæ ℥x., ammon. carb. gr. ij., tinct. cinchonæ ʒss., M.C. ʒj, quater die. One egg and three ounces of port.

August 2.—Seems improving; but left arm remains quite paralysed—he cannot move the fingers at all. Pulse 68, very small and weak.

3rd.—Feels better. Has to-day a rash of roseolous character, a good deal resembling measles, on the forearms, hands, and face, and (to a less extent) on the legs about the knees. Says he has had measles. He cannot move the left arm now (3 p.m.), but could this morning. The second sound is not distinctly reduplicated at the apex to-day; the first is murmurish.

4th.—Can use his arm very fairly now, and has regained sensation in the hand. Memory bad; says he does not know who brought him here. Appetite not good yet, but he likes his wine. Roseolous eruption less marked.

6th.—Just after I had left him on the 4th he was taken with severe pain across the forehead, which lasted one hour, then remitted; it recurred again the following night for the same time. Pulse 66, weak. Fish. Ferri et quinæ citrat. gr. v., tinct. nucis vomicæ ℥v., aq. ʒj., ter die.

9th.—Is much better; pain in head yesterday very slight. Appetite better; chop.

13th.—Doing well; memory more lively.

16th.—Is running about, cheerful and laughing. No pain in head last two or three days.

The above may be regarded as a very good illustrative instance of the effects of sunstroke. More severe cases are common enough in the tropics, but you are not likely to see at home a more complete picture of the malady. To understand the phenomena well we must bear in mind these points, which I must ask you to let me postulate for the nonce:—(1) That our nervous system is an aggregate of separate organs, having different functions; (2) that the action of excessive heat on all these is paralysing or enfeebling; (3) that the phenomena produced by heat vary in accordance with the nerve-centres which specially suffer, some remaining intact in one person, some in another, according to idiosyncrasy; (4) that a nerve-centre may be paralysed or rendered hyper-excitable, though it is free from any apparent or coarse lesion; (5) that hyper-excitability is closely allied to paralysis; and (6) that pain is a mode of paralysis. Now, the first effect of the excessive heat in our patient was to produce hyper-excitability of the mental centres, so that he was for the time in a state of mania or acute delirium. Such effects have frequently been observed among French soldiers when exposed to tropical heat, often associated with a great tendency to suicide. M. Bassier (quoted by Dr. Maclean) says of the crew of a French man-of-war at Rio de Janeiro:—"Ils devenaient incohérents dans leur discours, poussaient des cris, menaçaient de geste et de regard, entraient en fureur, et semblaient mettre tous leur soins a découvrir une issue qui leur permit de s'élancer à la mer." The delirium ceased after the first night, and was replaced by stupor and drowsiness. These we must regard as depending on a paretic state of the intellectual nerve-centres, the more so as they were associated with a similar condition of the motor and sensory centres of the left arm. Paralysis of the centres subserving mental actions is almost a necessary event in heat-stroke, to a greater or less degree; paralysis of the motor and sensory centres is by no means so frequent. In most of the cases I have found recorded, where paralysis existed independent of unconsciousness, it has appeared to be of the paraplegic form. Dr. Thin states that in an epidemic occurring at Shanghai in 1866, paraplegia lasting for some months was a common event. Dr. Peacock records a case treated at St. Thomas's Hospital in 1868, where a young woman was found paralysed on the right side, partially comatose, and incapable of speaking. The paralysis seems to have continued for some weeks to a slight extent. Drs. Andrew and Duckworth have recently recorded a case of all but universal paralysis, both of motion and sensation, in a girl aged two years and a half, even the sphincters being involved, which after four months' duration recovered completely. The child had always been healthy until it was exposed during a journey to great solar heat. While thus exposed it suddenly lost power in the legs, and fell, still retaining consciousness. Subsequently the arms and sphincters became paralysed, and the muscles lost electric (faradic) contractility. The authors, after careful consideration, adopt the conclusion that the symptoms were due to a form of heat or sunstroke affecting more particularly the spinal system, and falling with especial severity upon a somewhat frail and ill-nurtured child. Now, it does seem to me very improbable that in this case, where the palsy was so severe and extensive, yet where complete recovery ensued under the use of cod-liver oil and steel with faradisation, there existed any demonstrable lesion, any coarse disease. We know too well how slowly and difficultly recovery is obtained in myelitis, or softening, or hæmorrhage, or in the essential paralysis of children. You will, I think, agree with me that the paralysis was of a functional kind, depending on exhaustion of the nerve-cells of the cord, and analogous to that which ensues in adults after excessive sexual intercourse, or

in females after unduly prolonged lactation. In my case I suppose either the corpus striatum was affected, or those portions of the convoluted surface which govern the movements of the upper extremity.

The roseolous rash is to be ascribed, I believe, to a paretic state of the vasal nerves of the affected district. In a case at page 219 of my work on Functional Nervous Disorders, the face and neck and chest were scarlet, and the right eye bloodshot. You should be prepared to meet with such eruptions in heat-stroke, and not allow them to make you vacillate in your diagnosis, when it is warranted by the other phenomena.

The temperature never rose to any serious height, and was only at all high during the first few hours after admission. The case was certainly not one of thermic fever, though not exactly one either of collapse. I may tell you that Dr. Wood (United States) uses these terms to distinguish two principal classes of sunstroke *quoad* treatment. For the first he employs the iced bath, and subsequently quinine. For the second the hot bath, with whisky and ammonia; and, in case of need, the subcutaneous injection of tincture of digitalis, to restore the action of the heart.

Indian physicians recognise three forms of sunstroke—the cardiac, the cerebro-spinal, and the mixed. To these may be added Dr. Wood's "thermic fever," where the danger is mainly from the high temperature. In our patient the phenomena were mainly those of the cerebro-spinal form. There was no indication of peril from syncope, and, save the reduplication of the second sound, there was no special sign of deranged cardiac action. I administered wine and tonics much more with reference to his defective "vis nervosa," than for the sake of aiding his heart. But in many cases of sunstroke you will have to do all you know to sustain the heart's action, and sometimes you will fail, and oftener, perhaps, you will be too late, the patient dying outright of syncope before you can reach him. Heat is notoriously a depressor of cardiac activity, as novices in Turkish baths, and others similarly circumstanced, have often experienced. The same day that this boy was attacked I was myself quite faint while going round the wards, though I was not otherwise affected. Remember, therefore, that heart-failure is one of the principal perils in sunstroke, and be careful in every case to conserve its energy. Yet, that I may not be one-sided, I must tell you that instances do occur, though very exceptionally, in which you must act very differently. Dr. B. W. Richardson and Mr. Salter, as well as others, have met with cases where a free venesection has been of the greatest advantage; and in far more frequent instances purgation will be beneficial, and yet more frequently cold to the head and cold affusion over the body, with or without cardiac stimulants.

Lastly, we have to notice in our case the occurrence of periodic frontal neuralgia, the attacks of brief duration, and disappearing altogether under iron and quinine in a few days. Such pain is sometimes the sole result of sunstroke, as in a case you will find recorded at page 220 of my work. More frequently you will encounter it associated with other head symptoms. In the great majority of instances I strongly advise you to regard it as of non-inflammatory origin, and to dismiss from your minds the apprehension of meningitis. Cold to the head, or heat (I ordered a hot sponge), bromides or morphia, and sooner or later quinine, are surely the best remedies. If you bear in mind my apophthegm above stated, that "pain is a mode of paralysis" (sensory), you will not be surprised at its occurrence in such cases as the one before us. With regard to my fundamental assumption that the action of heat in excess is enfeebling and depressing to nerve-force, or rather to the organs which generate it, I need hardly say much to convince you of its general correctness. Your own personal experience probably convinces you that such is the case. I will, however, cite a passage from a paper in the *Practitioner*, vol. ii. 1876, page 110, to put the experience of others before you:—"When the damp, oppressive heat of the tropics makes itself felt, a good many people, particularly those who enter the tropics for the first time, begin to suffer from general prostration; they are unable to exert themselves in the least, either physically or mentally; their head feels heavy, there is great sleepiness, so that people may sleep through sixteen hours out of the twenty-four, and at all times of the day. Often there is headache, the appetite is always more or less diminished—there may be even vomiting. In little children the general impression may be a rather alarming one." A report from New York in 1876, during very hot weather, the thermometer ranging from 93° to 100° in the shade, says:—"Even those who guard their health most carefully experience a debility which renders sustained attention and effort almost impossible." In the too celebrated march of the 43rd Regiment in India, the general complaint was extreme debility, weariness, and prostration on any exertion, and vertigo, but no headache or pain was experienced as a rule. If these are the more moderate effects of excessive heat, what may not be the severer and more acute? An eminent physician told me that while studying in Paris, after exposure to excessive heat, he slept continuously for forty-eight hours. Might not this moderate coma, in a weaker system, have become truly formidable?

My fourth postulate is so important that I propose to devote a special lecture shortly to the establishment and illustration of it. At present I will restrict myself to producing some post-mortem evidence that it holds true in cases of sunstroke. Dr. Thompson (see *British Medical Journal*, vol. ii. 1870, page 35) relates the case of a man, aged fifty-nine, of an eminently apoplectic family, who was taken ill on a very hot day; was giddy and sick with pain in the head; was restless and delirious in the night, but next day was well enough to go to work, which he kept at till he fell down unconscious a little before noon. An hour later he was in complete coma; respiration stertorous; pulse 80, weak; numerous purplish spots over trunk and limbs. Temperature at 12.45, 105°; pulse 130. Died at 4 p.m.; temperature rose twenty minutes later to 107·2°. At the autopsy the brain was found small and anæmic, but healthy; lungs intensely engorged; heart large, pale, fatty; vessels atheromatous; kidneys large, but not diseased; blood everywhere fluid, tissues stained. In *St. George's Hospital Reports*, 1869, the case is recorded of a boy aged fifteen, who, after exposure to the sun on a very hot day, was found insensible under the shade of a tree. When admitted he was quite unconscious, with limp body and limbs; eyes partly open and perfectly insensible to touch, pupils contracted and not acting to light; breathing laboured; pulse hardly perceptible. Soon after, the right arm and right side of face constantly twitched with sharp, short, convulsive movements. These in a short time extended to the left side; the tongue was moved backwards and forwards in the mouth, giving much sound to the respiration; temperature 107·8°; bowels acted freely; much liquid motion passed in bed. Death took place about two hours later; temperature just before, 109°. At the autopsy numerous small ecchymoses were observed along both clavicles. The veins of the dura mater and other meninges were gorged with thin fluid blood, and the vessels on the surface of the brain were in a similar condition, so that the grey matter was of a decided pink colour. The arteries at the base of the brain were empty. The heart was quite uncontracted, blood everywhere fluid. The dependent parts of lungs were greatly congested. The back part of the trunk and extremities was of a very dark purple. No other important change is mentioned.

In my work, page 216, I cite the case of a boy aged eight, who, after being out all day in the heat and without food, when he came home in the evening was convulsed and fell down insensible. These convulsions recurred during the night, and when admitted he was quite insensible, with deep stertorous breathing; pulse 62. Unconsciousness persisted, convulsions recurred, and he died; temperature 100°. At the autopsy the brain was found anæmic and dry, its sinuses very empty; not many puncta vasculosa to be seen. Bronchi filled with purulent mucus, their lining membrane highly vascular; blood fluid. No other remarkable change.

In the second of these cases the congestion of the meninges was in all probability due to the mode of death by coma, and had no more to do with the causation of the symptoms than the similar congestion of the surface of the body. In the other two cases the brain was anæmic, and presented no lesion. It seems therefore pretty certain that the head symptoms are not (at least) necessarily produced by hyperæmia or capillary hæmorrhage, or any grade of inflammatory action. Neither can I think it likely that anæmia is the cause. The nervous system is primarily and directly affected, and the circulatory in a subordinate and secondary manner. This is at any rate the case in the cerebro-spinal form, though in the cardiac the heart or its nerve-centres seem to suffer directly. The disorder of these latter is, however, anything but inflammatory in character, wherefore

from analogy we must conclude that neither is the cerebral —at least in the great majority of cases.

I have dwelt the more on this point—perhaps unnecessarily—because I fear that the notions of "congestion and effusion" hold much too wide a sway among many in the pathology of head symptoms, and that the conception of a primary paralytic exhaustion is all too unfamiliar

For evidence of my fifth point—that pain generally is a mode of paralysis (sensory)—I must refer you to my work on Functional Nervous Disorders, pages 44-49.

With regard to hyper-excitability and its relation to paresis, which has long been noted, I have to ask you to think of every nerve-cell as fulfilling two functions—one that of generating force, the other that of restraining that force from being liberated except under appropriate conditions, or suitable excitement. Loss of the first power conditionates paralysis; loss of the second, hyper-excitability. In the first case the cell cannot work at all; in the second it works hurriedly and uselessly; in both there is loss of a vital power. For further observations on this subject I refer you to a paper in the *British Medical Journal*, vol. i. 1873, page 249.

ORIGINAL COMMUNICATIONS.

COLOURED EXUDATES IN ECZEMA.

By W. LAUDER LINDSAY, M.D., F.R.S.E.,
Physician to the Murray Royal Institution, Perth.

(*Concluded from page* 249.)

In hunting up the literature connected with these pigmentary exudates, though I came upon no case of eczema comparable with my own, I met with not a few interesting instances of the occurrence of similar blue or green (or other) colouring matters in various parts of the body, and its secretions or excretions, including—(1) the urine; (2) pus and purulent discharges, with the liquor puris; (3) the sweat; (4) other cutaneous exudations; (5) the serum of cutaneous bullæ or blisters; (6) various albuminous fluids in process of decomposition; (7) scalded surfaces; (8) the skin (epidermic cells); (9) the dura mater; (10) the eyelids; (11) the blood; (12) the bones.

The late Dr. Bird Herapath, of Bristol, described in 1864(a) a case in which "purulent secretions from the surface of an inflamed leg stained the cloths of a blue colour." The late Dr. Duncan Gibb, in the *British Medical Journal*, December 13, 1873, page 684, says:—"The cloths employed to keep his limb wet with spirit lotion, together with all the bedclothes where the fluid had soaked through them, were found constantly tinged of a greenish-blue colour, having very much the appearance of mouldy cheese; whilst the spirit-and-water used, after a little time, became equally greenish-blue, from having the cloths frequently wrung out in the vessel containing the dilute spirit." Dr. Herapath evidently at first attributed these stains to the growth of microscopical fungi. But the colour was found to disappear in a corked bottle, reappearing on the admission of air; it was also discharged by bleaching liquor. Now, though these are among the reactions of indigo, they are still more characteristically those of litmus or archill—in short, of the red, purple, or blue colouring matters of lichens, as I long ago pointed out.(b)

Dr. Hassall, too, describes blue and green pus, and blue colouring matters in the blood itself.(c) Dr. Parsons gives a case of "blue pus";(d) and other instances of "blue suppuration" are now and then recorded.(e) In a case of the late Dr. Duncan Gibbs', the pus of an abscess was blue prior to evacuation.(f) Blue otorrhœa, with the artificial production of a similar discharge in the ears of other persons, as well as blue pus in wounds, the dressings being deeply blue-stained, have also been mentioned.(g)

"Indigo in the Urine" is the title of a paper by Dr. Gilchrist, of Torquay.(h) He therein says "a greenish or blue colouring matter is formed on the surface of pus and other albuminous substances when they have been allowed to stand for some time exposed to the air. Probably there is a similar transmutation of indican by the action of a ferment in the uro-glaucine; but a few exact chemical observations are required fully to elucidate the subject." He goes on to say that the paper by Dr. Herapath, already quoted, "furnished the exact chemical observations wanted"; and "the nature of this blue pigmentary matter in pus is proved to be such as I indicated." Professor Harley mentions blue and green urine.(i) "On the Frequent Occurrence of Indigo in Human Urine," is the subject of one of Dr. Hassall's many contributions to chemical pathology.(k) The urine he describes was not blue or green at the time of being voided; it only became so after exposure to the air or the application of reagents. I pointed out similar phenomena in the urine of cholera so long ago as 1855.(l) The late Professor Laycock mentions in urine the presence of uro-glaucine, cyanurine, indican, and indigo blue.(m)

A "Case of Blue Chromidrosis" was published by Dr. Foot in 1874; that is, of an exudation of a blue colour on the forehead and temples, as well as on other parts of the face, and on the hand. Similar cases have been described in Ireland by Dr. Stokes and Dr. Grimshaw. Kollmann also speaks of cyanidrosis or blue sweating. In some at least of these cases the colour of the exudate bears a relation, apparently, to the ingestion of iron as a medicine.(n) Laycock mentions what he calls "stearrhœa cœrulea," a blue discoloration of the eyelids, due to an "indigo-blue pigment, contained, for the most part, in the epidermic cells, but existing also as free grains, lying singly or in masses." The colour-exudate was of a tint brighter than indigo, varying, however, in its intensity or depth. It could be wiped off with a moist cloth.(o) He describes other stearrhœal or free facial pigments, one form only of which is blue. Thus he speaks of an exudation of a "lampblack matter, which came off" readily, in a child.(p) He apparently regarded such a melasma as a neurosis.(q) He also described cutaneous cyanopathia in a girl, varying in shade with changes in the integumentary circulation.(r) He pointed out that the irritation of a blister causes pigment-deposit in the skin, as do also various skin diseases, including eczema. But this pigment is generally dark, or black, constituting his "melasma."(s)

In July, 1874, I had myself on one foot a troublesome corn, on the toe next the little one, and between the two. I was in the habit, every morning, of introducing a pellet of common white cotton wadding between the toes in question, to prevent friction of the corn. Regularly I found the hardish, apparently starched, portion of the wadding coloured blue by the copious sweat from the skin of the toes, this copious sweating being the effect of the hot, sultry weather. I was at the time in ordinary health; including, however, an old-standing dyspepsia having no features of a kind bearing, so far as I am aware, on such a coloration of the sweat. And, as in the case of the eczematous discharge, I noticed such a discoloration of the wadding only at this time, wadding having been repeatedly applied, under apparently precisely similar circumstances, on various other occasions.

Dr. Sutherland, discoursing on arachnoid cysts,(t) describes the dura mater covering them as frequently stained green or blue, the cysts themselves as sometimes internally green, and their contents greenish-brown. The

(a) "On the Occurrence of Indigo in Purulent Discharges," in the *Medical Times and Gazette*, vol. ii., page 339.
(b) *Vide* (1) "History of British Lichens," 1856; page 84. (2) "Dyeing Properties of Lichens": *Edin. New Philosophical Journal*, July, 1855; pages 66 and 76. And especially in *Phytologist*, vol. iv., 1853; pages 904, 1001, and 1003.
(c) In a paper on "The Frequent Occurrence of Indigo in Human Urine," *Philosophical Transactions*, 1864; page 273.
(d) *British Medical Journal*, February 14, 1874; page 205.
(e) *E.g.*, *ibid.*, August 30, 1873; page 254.
(f) "Cyanopuron Laryngis," in *British Medical Journal*, December 13, 1873; page 684.
(g) *British and Foreign Medico-Chirurgical Review*, January, 1874; page 215.
(h) In the *Edinburgh Medical Journal* for December, 1861.
(i) In his "Lectures on the Urine," *Medical Times and Gazette*, vol. ii. for 1864; page 272.
(k) In the *Philosophical Transactions*, as already quoted.
(l) *Vide* paper on a "Blue Colouring Matter in the Urine of Cholera," *Medical Times and Gazette*, May 12, 1855; page 460.
(m) In his "Clinical Researches into Morbid Pigmentary Changes in the Complexion," *British and Foreign Medico-Chirurgical Review*, vol. xxvii., 1861; page 472.
(n) Dr. Foot, in *British Medical Journal*, January 3, 1874; page 29.
(o) *Ibid.*, pages 470-1. (p) *Ibid.*, page 195.
(q) *Ibid.*, page 457. (r) *Ibid.*, page 459. (s) *Ibid.*, page 192.
(t) In the *West Riding Asylum Medical Reports*, vol. i. 1871; pages 219, 226, and 227.

inner lining of one was of a reddish-green hue, and its fluid contents greenish-brown; while he also speaks of "bones of a bluish hue."

It would appear that authors refer the blue or green colouring matters above enumerated either to indigo or hæmatin, or some modifications thereof. I do not profess to be able to throw any light on the subject, seeing that no chemical analysis was possible in the cases that have occurred in my own experience of blue pigments in eczematous discharges or in cholera urine. But I am certainly not prepared to accept the views, whether chemical or pathological, of the various writers whose names I have specified. It seems to me that much remains to be learned concerning both the chemical and pathological origin and nature of such pigments.

Laycock says that "the presence of indigo blue, indican, cyanurine, or uro-glaucine"—in urine—"indicates the source of the blue, red, and green discolorations of the skin"; and he represents Dr. Schunck as of opinion that "the occurrence of the indigo-producing body as an excretion is probably due to a disproportion between the oxygen absorbed by the system and the matter to be acted on by it."(u) The late Edinburgh Professor, discoursing of the chemical composition of such pigments and the mode of their production, points out "a close analogy between the carbonaceous excreta as morbid pigments, and the nitrogenous excreta as morbid deposits of urates." But he admits "all these bio-chemical theories are notoriously unstable."(v) Hassall tells us that indigo is originally white, changing to yellow, green, blue, and sometimes red; that is to say, that shades of colour represent the grades of oxidation of a colourless radical. But the same property belongs to other nitrogenised colouring matters, such as those of lichens. Neubauer and Vogel, in their standard work on the urine,(x) appear to me to confuse the colouring matters, which they describe—quoting from Schunck and Heller—as indican, uro-xanthine, uro-glaucine, uro-rhodine, and cyanurine; or at least, their account of these and allied colorific principles or colouring matters is far from perspicuous. Thus, (1) Schunck's indican would appear to be Heller's uro-xanthine, "the mother-substance of indigo pigment," which includes indigo blue and indigo red. Its own colour is not blue, but the blue and red pigments are yielded under the action of acids. (2.) Uro-glaucine is said to be a product of the oxidation of uro-xanthine (or indican); while (3) cyanurine is described as a mixture of uro-rhodine (indigo red) and uro-glaucine (indigo blue).

As relevant to the general subject of eczema, I have two series of remarks to offer in conclusion.

In the first place, I have been struck with the great diversity of opinion among physicians as to the treatment of the disease, and especially with the assertion that it has been "cured," even when inveterate, by the most opposite kinds of medicaments or medicines. The ridiculous credulity displayed in statements of the most contradictory character is sufficient to produce its opposite mental attitude of nullifidianism—utter scepticism as to the utility of drugs at all, whether applied externally or administered internally. For myself, I have arrived at the conclusion in this, as in many other cases in which the wonderful "cure" of disease is vaunted, that recovery will take place in the majority of instances without drugs or drugging at all, and by such simple common-sense measures as (in eczema) securing rest, allaying itching, keeping the inflamed surface clean, and, above all, preventing scratching. The rise and progress of what is called the science of therapeutics is merely, I believe, a modern development of professional credulity. Not that credulity is a bad thing in itself—for, on the contrary, I believe imagination and faith do quite as much good, and sometimes as much evil, as the formidable array of powerful drugs of which the British materia medica now consists.

I have also been much struck with the mischievously elaborate classification of skin diseases by dermatologists—a classification that becomes more mischievously elaborate year by year. The numerous genera and species that are described, and sometimes beautifully figured, are the mere arbitrary arrangements of the nosologist or systematist.(y) Their number is unnecessarily large; their definitions are imperfect and confusing, because the morbid conditions defined pass into each other; their generic and specific "characters" are too often trivial and temporary. So far as concerns my own experience, what I have met with in practice have not been the genera or species of nosologists, but hybrid disorders to which no name could be given. None was given, and none was necessary. I have never treated the mere disease, or its genus or species, according to the text-books; but the patient, according to the rules of common-sense.

This "species" question is, in short, the curse of many departments of science, and pseudo-science. There is not one man in a thousand who takes the trouble to discover general resemblances; while the majority of "writing" men are incessantly occupied in the hunt for minute—perhaps in all senses microscopic—differences: discovering, inventing, creating *ad infinitum* species based upon these differences. The present President of the Royal Society tells us that the limits of species are too frequently "not real boundaries set by nature," but that they are "limits which are not chosen alike by different minds, nor surely and firmly retained by the same mind at different times."(z) The same eminent botanist well observes(a) that "a wider range of knowledge and a greater depth of study are required to prove. . . . dissimilar forms to be identical, which any superficial observer can separate by words and a name." I have found it impossible myself to come to any other conclusion, as the result of many investigations equally in botany, zoology, and medicine. Our greatest living English naturalist, Charles Darwin, exclaims, "What a host of forms exist, which some experienced naturalists rank as mere varieties, others as geographical races or sub-species, and others as distinct though closely allied species!"(b)

But what is constantly being done by the naturalist, the botanist, and zoologist is being done also in a more serious way, and on more slender grounds, by the physician who has a mania for descriptive writing. He manufactures and multiplies his species with a rapidity and to an extent that is utterly bewildering and repulsive; for the creation of an elaborate classification, associated with a nomenclature made up of hosts of technical terms, of Greek or Latin derivation, tends only disgust and repel the student. And the evil is one of no small magnitude, considering how much there is that the medical student ought to learn, but does not.(c)

An authority of a very different kind from either Darwin or Hooker—one who is neither a general naturalist, botanist, nor zoologist, but a physician, thus writes—"There is, in the human mind, a sufficiently strong propensity, not only to make divisions in knowledge where there are none in nature, and then to impose the divisions upon nature, making the reality thus conformable to the idea; but to go further, and to convert the generalisations made from observation into positive entities, permitting for the future these artificial creations to tyrannise over the understanding."(d) And another physician and physiologist, Dr. Carpenter, says—"It should be borne in mind that everyone who . . . makes a bad species is really doing a serious detriment to science; whilst everyone who proves the identity of species previously counted distinct is contributing towards its simplication, and is therefore one of its truest benefactors."

(n) "Clinical Researches," page 476.
(v) *Ibid.*, pages 472, 473, and 475.
(x) "Guide to the Analysis of the Urine," 1863; pages 44-5.
(y) Darwin describes both genera and species as "artificial combinations made for convenience" ("Origin of Species," page 573).

THE EFFECTS OF FORCED INSPIRATION ON THE PULSE IN SOME FORMS OF HEART DISEASE

(PLEURO-PERICARDIAC ADHESION).

By J. PEARSON IRVINE, B.A., B.Sc., M.D. Lond.,
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In some cases of heart disease there has been observed a distinct depression of the pulse synchronous with inspira-

(z) Sir Joseph Hooker, in his "Introduction to the Flora of Tasmania," page 199; with which may be compared what he says in his paper on "Arctic Plants," in the *Linnæan Society's Transactions*, 1862, page 310.
(a) In his Introductory Essay to the "Flora of New Zealand."
(b) "Origin of Species," page 554.
(c) As a rule, for instance, he knows nothing of insanity or its treatment, whether in man or other animals; nothing of the other diseases of these animals that are comparable with those of man.
(d) Professor Maudsley, in his "Physiology and Pathology of the Mind," first edition, page 323.

tion, and to this the name "pulsus paradoxus" has been applied by Kussmaul, who first described it. This depression can be readily perceived by the finger, but sphygmographic tracings reveal it with greater certainty. Griesinger has also recorded a case in which it occurred; but of late years the subject has received little attention, and the recent publications on heart diseases pass it by in silence. That this pulse has, however, great clinical value, and that it is worthy of full investigation, is proved by the fact that one of the latest contributions of Dr. Traube to clinical medicine was devoted to a detailed description of a case in which the "pulsus paradoxus" was met with. I have ventured to think that the peculiar pulse is, probably, far more frequent than one might suppose, and that it has escaped notice because of its slightness in ordinary breathing; and that deep inspiration, by developing it for reasons I will afterwards give, may prove this comparative frequency. The method of examination by deep inspiration does not need the aid of instruments which require time in their application, and is more valuable on that account. I have by this method detected extreme depression of the pulse with inspiration, and have demonstrated to students its existence in several cases, and in association with a certain set of physical signs which gave it its importance. The physical signs were those generally acknowledged as indicating adhesion of the visceral and parietal pericardia and adhesions between the pericardium and pleura. Dr. Walshe, in the last edition of his "Diseases of the Heart" (pages 244-45), says the signs of pericardiac adhesion "vary with the absence or presence of pleuritic adhesions in front of the heart. So essential is the latter point, though ignored by writers generally on the subject, that it forms the ground of a distinction of the physical signs into two natural classes;" and he then tabulates the signs of these two classes in parallel columns. He does not, however, refer to the pulse, and as the paradoxical form of it was so easily detected in my cases on forced breathing, in association with a set of physical signs which Dr. Walshe has attributed to pleuro-pericardial adhesions, I venture all the more to ask attention to it as a possible aid in the diagnosis of obscure but important cardiac conditions. It has seemed likely that the pulse-depression is a symptom of pleuro-pericardiac adhesions, and that it is due to the traction of the adherent lung on the adherent pericardium, especially on deep inspiration; so that the heart-muscle cannot for the moment contract with its usual force, and, in consequence, a lowering of the arterial tension occurs.

Case 1.—A mechanic belonging to Woolwich came under my care as an out-patient on June 8, 1876. He was a well-built man, to all appearances suffering from no serious disease. He complained of dyspnœa which seized him after trifling exertion, of occasional cough, and a general sense of failing power. Three years previously an attack of rheumatism had invaded all the larger joints, and kept him in bed a few weeks. Blisters were during the attack applied to the left side. He had never felt thoroughly well since, though always able to follow his work. He was neither wasted nor anæmic, showed no sign of lividity or œdema, and was not subject to faintings. His great complaint was of dyspnœa with every slight demand for exertion. The chest was well formed, and the lungs healthy, so far as could be discovered by signs. But the cardiac dulness reached superficially to the third cartilage on the left side, the right edge of the sternum, and on this side ascended into the second space. There was therefore a decided increase in the transverse dulness at the base. Its shape was more or less obovate, terminating towards the left just below and outside the nipple, where the lowest impulse was felt. The general cardiac beat was very visible—to the look irregular and undulatory, and to the hand between slapping and heaving in character. The phenomenon of undulation in systole was exceedingly well felt. There was scarcely any epigastric pulsation. The apex-beat was not strictly definable. Undulation commenced with systole at the lowest point of impulse, and passed upwards towards the base. There was no violent, sudden depression in the cardiac area during systole, but simply the well-marked undulatory movement mentioned. Inspiration did not diminish the area of cardiac dulness; on the contrary, it seemed rather to increase it. There were no pericardiac murmurs, but a bruit with the usual characteristics of those due to mitral regurgitation could be heard. The heart acted apparently rhythmically, and the pulse at each wrist did not vary in force in ordinary respiration. The veins of the neck were not affected. When a deep breath was drawn, the radial tension (previously moderate) was diminished, and the pulse became slower, and so striking were the changes that the least experienced could detect them. When the patient drew an extraordinarily deep breath—not an easy thing for him—the radial pulse was lost beneath the finger, and did not return until shortly after the commencement of expiration. These phenomena were constantly found in both radials on the several occasions digital examination was made. A tracing of the left radial pulse was taken by Mr. Biden (one of the House-Physicians), and though the novelty of his position, as the patient explained, prevented him from taking a steady deep breath, such deep inspiration as he attempted made the pulse-curve irregular. It diminished the height, though it increased the length of the percussion-stroke, and so affected the secondary waves that the tracing during prolonged deep inspiration became undulatory. As but a single tracing was taken, such tracing cannot be depended upon to prove more than the change in the pulse which the finger alone had readily detected during forced inspiration. The patient was put on free doses of digitalis, and rested. He at once began to improve, and in fourteen days deemed himself cured. After another fourteen days he sent for his medicines with the statement that he was "quite well and at work again." He was then lost sight of, and no opportunity was given of examining his circulation after a full use of the remedies. In this man's case the history, symptoms, and signs, which I need not recapitulate, indicated the probable existence of pleuro-pericardial adhesions. The majority of the signs and symptoms are, however, met with in cardiac disease, sometimes when adhesions of no form exist. Into such cases I need not enter here; but the additional sign of pulse-depression deserves, because of the uncertainty which has always attended the diagnosis of such, all the more attention. In the case recorded perhaps the following diagnosis may seem justifiable:—During the rheumatic attack pericarditis had set in; this pericarditis had never completely cleared up, and unabsorbed products had become thickened about the origins of the large vessels. Adhesions had occurred between the two layers of the pericardium, and between these and the pleura of the left lung. Endocarditis had also occurred, and had resulted in mitral disease; and from a double cause, therefore, the heart-muscle had become so weakened that the adherent left lung was enabled so far to draw upon the pericardium as to prevent free contraction of the ventricles when deep inspiration was made. Rest and digitalis immediately gave relief by diminishing the work of the heart and by increasing the power of the heart-muscle.

Case 2.—A boy, aged thirteen, was for a short time in Charing-cross Hospital (July, 1877). He had signs of mitral regurgitation beyond question, and it was probable that he had also mitral obstruction, with dilatation of the ventricles. The cardiac impulse was remarkably undulatory—so much so that it was described as double—systolic and diastolic. The undulation flowed from the apex upwards, and as the heart's action was laboured it was plain that the depression towards the base was later than the depression at the apex, both being decided, and the latter commencing with systole. The apex-beat was diffuse, and in about the normal position. When the boy was made to take a deep breath, which he could readily do, the pulse almost completely disappeared from the wrist, and did not return until expiration had fairly commenced. At the same time the sounds of the heart were lowered, and there was no diminution in the area of cardiac dulness with deep inspiration. In this case there were the signs of mitral mischief, but additional signs which favoured the view that pericardial adhesions had occurred.

Case 3.—A boy, aged fifteen, in previous good health, had an attack of rheumatism in November, 1876, which kept him in bed three weeks. About the middle of December he came as an out-patient, complaining of great debility left by his recent illness. He was extremely low, had an anxious look, breathed pantingly, and complained of dyspnœa. He was not wholly free from fever, but his joint affection had gone. The general cardiac impulse was too diffuse and more or less undulatory. The apex could be felt just below and outside the nipple; its beat was diffuse, and scarcely separable from the general impulse, which was feeble. There was neither thrill nor friction fremitus. Cardiac dulness (superficial) was increased towards the base; it reached the second right cartilage and right border of the sternum, and on the

left the second space. A systolic murmur, loud and superficial, could be heard over the whole area of dulness, and especially over the third and fourth left cartilages near the sternum. It could not be heard in the back nor in the axilla. The pulse was 90, tense and fairly full. There was no change in it with ordinary inspiration, and forced inspiration did not exercise, as far as the finger could determine, the slightest effect upon it. The father declined to have the boy admitted, though it was evident that his pericarditis had not cleared up, and that there was probably some "inspissation" about the origins of the large vessels. The patient improved, however, under counter-irritants, iron and digitalis, and refused to keep quiet. The result was that in the middle of January, 1877, he had a relapse of rheumatism. This attack was slight, keeping him in bed two or three days only, but he did not attend at the hospital until three weeks after his apparent recovery from this attack. He then complained of great dyspnœa on the least exertion, and was again much pulled down. The apex-beat was not appreciably changed, but the general cardiac impulse was more undulatory, and the interspaces receded distinctly with systole at the base. There was no epigastric pulsation, and the loud murmur heard on his first visit had wholly disappeared. A mitral regurgitant murmur of quite a different character was audible. The cardiac dulness was still increased, especially towards the base. The pulse became depressed with every ordinary inspiration, and on forced inspiration it seemed to disappear from beneath the finger, nor did it return until expiration began. The heart's tones were far more distinct than previously, but on deep inspiration became lowered just as the pulse became depressed. Deep inspiration did not diminish the area of cardiac dulness. Rest was more than ever enjoined, and the advice was in part listened to. The boy took iron and digitalis with vegetable tonics, and improved rapidly. No pulse-tracing was taken. When he was last seen (March, 1877), dyspnœa on exertion was his chief trouble; the pulse-depression persisted, but the patient looked remarkably well. This case is interesting, because, as far as was possible in out-patient practice, we had the chance of watching the progress of pericarditis, and of observing the development of pulse-depression in association with it. And here again it is not unlikely that pleuro-pericardiac adhesions developed, and that the pulse-depression may have been mainly due to the same.

Case 4 (reported by Dr. Traube).—The patient, a shoemaker, aged forty-two, was admitted to hospital on January 19, 1874. Up to his ninth year he had been healthy; he then suffered from scrofulous sores on the breast, which laid him by for a winter. He had, afterwards, attacks of tertian ague, and was in hospital for gonorrhœa with phimosis. In August, 1873, he suffered from cough, with free expectoration, dyspnœa, and attacks of "cholerine," for which he was in hospital three weeks. In October of the same year his cough and dyspnœa were renewed, and were increased on right decubitus; diarrhœa and other intestinal troubles disturbed him; and he was readmitted in January, 1874. Several members of his family had been the subjects of lung disease. On admission, the abdomen was large, and there was marked asymmetry of the thorax. The face and ears were cyanotic, and the feet swollen. The left chest was diminished in all diameters, the intercostal spaces narrowed, the infra-clavicular regions depressed. The other physical signs indicated compression of the left lung, and imperfect recovery from a left pleurisy. Neither general cardiac impulse nor apex-beat could be made out. The heart's dulness reached the clavicles; its sounds were weak, though free from murmurs. The liver was enlarged, and its edge could be felt. The urine was scanty, and not albuminous; the temperature only a little raised, and pulse and respirations in accordance. In the radials was perceived the "pulsus paradoxus": an undoubted depression of the pulse occurred, periodic with inspiration. Arterial tension and volume were at the same time diminished. The external jugulars were swollen, especially the right, but there was no rhythmical variation in their size. The patient died in April of the same year, dropsy increasing gradually, and becoming at last general. Right hydrothorax, increased size of the liver, and diarrhœa were marked symptoms towards the end. The man lay mostly on the left side; his cough got worse, and expectoration more copious. About ten days before death the cardiac dulness was found increased, and no apex or cardiac impulse could be felt. Dulness did not vary with deep inspiration. The heart's sounds, though less audible than in health, were clear, and during inspiration were considerably weakened. This sign had been noticed from the first during the man's stay in hospital, and on February 21 a tracing of the pulse was taken. It was found that the lowering occurred with each third or fourth beat, the pulse being as frequent as 126. On April 6 rigors seized the patient, the temperature became high, and during the following days these things increased, and his pulse ran up rapidly to the time of his death. These symptoms were associated, as post-mortem showed, with hæmorrhage and exudations into the pericardium.

On post-mortem examination the anterior mediastinum was found generally enlarged. The pericardial cavity was distended and fluctuating. The anterior border of the left lung was in the left mamillary line, and adherent to the pericardium. The right lung was free. The pericardium contained 1000 grammes of fluid blood and fibrinous coagula; its parietal wall was rough and thickened, and had on its inner surface numerous rough elevations. On the visceral membrane were found irregular "cartilaginous" thickenings, and along the course of the great vessels short slender fibroid growths. The heart was very small; its right cavities contained much fluid blood; its muscle was reddish-brown, and the walls of the ventricles were thin, while the valves were healthy. The aortic orifice was natural, but above, numerous sclerotic thickenings were found in the vessel. The right pleura contained two litres of fluid; there were some adhesions at the back, which broke down readily. On the left side adhesions were firm and thick throughout, and especially marked between the third and sixth ribs. The left lung was small and denser than normal, but contained air. The other post-mortem appearances have no bearing on the questions under consideration, and are therefore passed by. In this case there were diminution in the size of the heart, thinning of the ventricular walls, extensive effusion into the pericardium, and adhesion between the parietal pericardial layer and the left lung. Traube believed that these conditions explained the occurrence of the "pulsus paradoxus," the lung being able to draw upon the heart sufficiently to lower its action because it was already debilitated by the state of its muscle and the extensive pericarditis.

(To be continued.)

Extraordinary Precocity.—M. Lefebvre read a report to the Belgian Academy of Medicine on a case of extraordinary precocity met with in a girl eight years of age, born at Oberpallen, Luxemburg. The child was born very fully developed, having hairs on the pubes. Menstruating at four years of age, she became pregnant at eight by a cousin thirty-seven years of age, who was sentenced to five years' imprisonment for her seduction. The pregnancy terminated by the expulsion of a mole containing a well-characterised human embryo.—*Gaz. Hebd.*, March 8.

Rectal Alimentation.—With respect to the discussion on this subject at the New York Academy of Medicine, noticed in our present number, Dr. Armor writes to the *New York Med. Times* (February 2), stating that his experience in this way of nourishing patients in extreme cases has been both varied and extensive, and that he has long been satisfied that in cases of necessity it is a most valuable resource. One practical instruction he wishes to lay great stress on—viz., that whatever substance be selected it must be injected as *tepid fluid* and *very slowly*. The rectum, like the bladder and other hollow viscera, will not tolerate sudden distension; but with caution on this point it is astonishing how the rectum can be made to tolerate nutritive liquid substances. He has often used the beef-juice mentioned by Dr. Peaslee, but more frequently milk mixed with beef-blood expressed from raw meats and strained. When using stimulants he adds cream to the milk. Small quantities of alcohol are readily tolerated in such a vehicle; and muriate of iron may be administered for a long time in liberal doses, if the bowel be shielded by cream. Rectal medication, as well as alimentation, has not received the attention it deserves. In a large number of chronic diseases, especially when associated with anæmia, in which the stomach for any reason does not tolerate iron, it may be employed by the rectum for a long time with great advantage.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

CASES OF ABDOMINAL DISEASE.

GUY'S HOSPITAL.

Case 1.—Carcinoma of Rectum—Colotomy—Death on the Twelfth Day after Operation—Intra-peritoneal Hæmorrhage from Rupture of the Spleen.

(Under the care of Mr. BRYANT.)
[Reported by Mr. H. CLOWES.]

W. T., aged fifty-four, a labourer, was admitted into Job ward on August 16, 1877, under Mr. Bryant's care. He is an unhealthy-looking man, who never knew his father or mother, and, having no relations, his family history is unknown. He is married, and has six children, all healthy; but one daughter, who is married and in New Zealand, says that she has lately undergone an operation for the excision of a tumour (kind unknown—not in the breast), which the medical men said was congenital. About eight years ago patient noticed that he passed a little blood on defæcation, and afterwards blood frequently came away in considerable quantities without patient knowing it. Sometimes a dark-coloured discharge was passed with the blood, and this discharge would often come away alone; and this has been more usual lately. The discharge is sometimes of a light colour. Occasionally the patient has had a sensation as of wind in rectum, but on trying to expel it blood came away. About two years ago he first felt pain in the rectum, but it was not severe. During the last three months the pain has been very severe, especially on defæcation, keeping him awake at nights, so that for the last six months he has been taking morphia at bedtime to procure sleep. Pain is chiefly confined to region of rectum, but is felt also at the lower part of the abdomen. Patient has taken a few pills, etc., to get rid of the piles, which have caused him slight inconvenience. About nine weeks ago he went as an out-patient to St. Mark's Hospital. An examination was made on two different occasions, and he was told his complaint was incurable. No local treatment was attempted, but they tried to improve his general health with cod-liver oil, tonics, etc.

Patient has never been troubled with constipation, and his health has been moderately good. He has not noticed blood or discharge for last six weeks.

On admission there are several small external hæmorrhoids, not painful. On examination with finger per rectum a rough ulcerated surface can be felt, and about two inches above the anus the growth projects into the rectum, forming a hard nodulated mass connected with the walls of the bowel and considerably diminishing its calibre. A very little bleeding was caused by the examination. ℞. Morph. mur. gr. ss. subcut., omni nocte.

August 17.—Ordered enema saponis statim, which caused the bowels to be freely opened.

20th.—Ordered tinct. ferri mur. ℥xv., quin. sulph gr. ij., acid. sulph. dil. ℥iij., tinct. aurant. ʒss., aquæ ad ʒj., t.d.s.

21st.—Patient's general health has improved considerably since his admission, so—he being under the influence of chloroform—the operation of colotomy was performed on left side, an incision being made about four inches in length and one inch and a half to left of spine, extending downwards and forwards in front of the anterior-superior spine of ilium, obliquely across border of quadratus lumborum about its centre, dividing skin and superficial fascia. The abdominal muscles were then divided over a director exposing the sub-peritoneal fat, and the transversalis fascia opened. The bowel was found with a little difficulty, although not distended. Two double silk ligatures were then passed through the integument, the bowel, and integument again, securing the bowel to the edges of the wound. The bowel was then opened transversely by an incision about half an inch long, and securely attached to integument at margins of wound by silk sutures. Very little fæcal matter escaped. The sutures were left with long ends, in order that the margin of the wound might be separated if necessary. A morphia suppository was inserted into bowel, and a pad of dry lint placed over the wound. There was but slight hæmorrhage during operation.

22nd.—Patient has much pain in region of wound. Was dressed this morning; but little fæcal matter escaped. Ordered tinct. opii ℥xv.

23rd.—Still in great pain. Opium given every six hours, and four ounces of brandy.

24th.—Temperature 99°, pulse 120. Patient is easier. Slept well last night; abdomen a little swollen. Was to-day able to pass his water for first time since operation.

25th.—In great pain this morning round wound. No more sickness. To take opium bis die.

27th.—A large quantity of discharge mixed with fæcal matter came away this morning. Abdomen less tense. Patient had some beef-tea at dinner yesterday, and has suffered from pain in lower part of abdomen since. Ordered to take nothing but milk and ice.

28th.—Pain over abdomen only occasional now; but when it occurs it is severe. A large quantity of fæcal matter has passed through wound.

29th.—There is a good deal of inflammation about edges of wound. Abdomen less tense. Troubled greatly with hiccough; slept fairly well last night.

31st.—The patient passed a small quantity of fluid matter through anus yesterday, and last night a large quantity of fæcal matter came through wound. Very comfortable.

September 2 (Sunday).—He was quite comfortable this morning, and everything seemed to be doing well, when he was suddenly seized with abdominal pain, followed by collapse. At 9 p.m. he was in a cold clammy sweat, with a small wiry pulse of 132, and had been very sick. 10.15: Much worse; pulseless; pupils widely dilated. Death occurred at 10.40.

Post-mortem by Dr. Goodhart.—On opening the abdomen a quantity of blood was seen in the abdominal cavity; some of this was fluid, and some clotted. The clot lay mostly in the left hypochondriac region, and below the stomach. It amounted to eight or ten ounces. The fluid blood was in considerable quantity—a pint or more. Some of the clot lay round the spleen, and on examining the part the anterior edge was seen to be lacerated by a clean-looking tear. The laceration was quite free from extravasation or staining, so that it was thought to be of post-mortem occurrence. Neither was the peritoneum stained at all, so that the hæmorrhage might be post-mortem also. The parts in the neighbourhood of the operation were all normal. There was no aperture from the gut into the peritoneum, and no evidence of peritonitis. The mesenteric vessels were normal, and no source of hæmorrhage was found; so that the only thing that seemed possible, to coincide with the history given of the fatal attack, was that some source of hæmorrhage existed which had escaped notice, or that in some way or other his spleen tore during life in turning in bed. With reference to the laceration in the spleen, it looked much like a post-mortem affair, but on the other hand the spleen lay far back in the hypochondrium. The blood attracted attention at once when the opening into the abdomen was made, and all the parts were consequently handled carefully. The bowel above the opening into the colon was somewhat contracted throughout, but its mucous surface was quite healthy. The colon below the opening was considerably dilated, and full of hard scybala. The disease in the rectum occupied the lower two or three inches, excepting the last half inch, which was healthy. It consisted of soft fungous vegetations from the surface of the mucous membrane, without any induration of the deeper parts, but the contact of these flattened masses with other parts of the mucous membrane adjoining had led to ulceration, and one of these ulcers at the upper limit of the growth, and in the right side, had perforated the whole thickness of the gut. Then suppuration had occurred in the cellular tissue outside, leading to an abscess there. This had run up a little under the peritoneum, but had been shut off quite securely by the consequent adhesions in the neighbourhood. The lower lobes of the lungs on both sides were collapsed at their hinder parts, and generally the lungs contained but little blood. Their texture was healthy, but a little friable.

Upon the whole the case is somewhat inexplicable, and on that account is worthy of record.

Case 2.—Malignant Stricture of Rectum—Colotomy—Death on the Twenty-fourth Day from Bronchitis—Much Repair in the Rectum—Double Stricture.

(Under the care of Mr. BRYANT.)
[Reported by Mr. F. HITCH.]

Harriet K., a delicate-looking machinist, aged thirty-seven,

was admitted into Lydia ward on November 9, 1877, under Mr. Bryant's care. The patient was a widow, the mother of four healthy children. Her own health had been good until six months before admission, when she first felt pain in her left hip and side; this gradually increased and spread to the groin and across the loins until ten weeks ago, when her bowels became confined. She was obliged to go to her medical man, who prescribed purgative medicines; then the constipation increased, and continued to do so. Occasionally she had been sick, the stomach rejecting food immediately after swallowing. When admitted, the patient, a healthy-looking woman, complained of pain in her left side, hip, groin, and loins.

November 8.—She had an attack of diarrhœa.

9th.—An exploration of rectum was made. The cavity was extremely small after the first two inches from cancerous disease. She was ordered mist. olei. This operated twice.

24th.—The patient had been sick, bringing up stuff coloured with bile. She had been taking mist. salina, her temperature having been up for some days.

28th.—Chloroform was administered, and colotomy was performed in the left loin. The oblique incision was made, and the operation performed in the usual way. There was very little hæmorrhage.

29th.—Pil. opii gr. j. 6tis horis.

December 4.—The edges of wound were healing; there was free discharge of fæcal matter.

7th.—The patient was not so well.

8th.—Some cough appeared, for which a mixture was prescribed of liq. morphiæ gtt. v., tinct. scillæ gtt. x., m. senegæ ℥j., t.d. She also had a water-cushion, which gave her much comfort.

11th.—She had a good deal of retching without vomiting; temperature 98·4°.

13th.—She was better and more cheerful; temperature, 100·2°. There was a quantity of green fluid still expectorated.

17th.—The quantity of fæces discharged from artificial anus was still large; no passage of fæces per rectum; temperature 99·5°.

21st.—She felt better. Expectoration from bronchial tubes was less; temperature 100·8°. There was still discharge from rectum, but less.

22nd.—Bronchitis was much worse; temperature 99·4°; the artificial anus looked well. The breathing got much more laboured, and she died at 4.45.

Post-mortem.—The wound was found to be perfectly healed, and the gut adherent to the abdominal wall and prolapsed. There was cancerous disease of the kidneys, which weighed ten ounces. The spleen and heart were healthy. There were two constrictions in rectum, one close to anus and one some inches further up. There was pus in the bronchial tubes of the right lung, and a large cavity near the apex of the left lung, which, opposite the cavity, had become adherent to the thoracic parietes. There was fatty disease of the liver.

The repair which had taken place in the rectum since the operation was very great, and the comfort the patient had experienced from it equally satisfactory.

NORTH STAFFORDSHIRE INFIRMARY.

Case 3.—*Carcinoma of the Cæcum in a Girl aged Twelve Years.*

(Under the care of Mr. SPANTON.)

[Reported by Mr. W. A. Frost, House-Surgeon.]

Margaret T., aged twelve, admitted July 21, 1877.

History.—Three weeks before admission fell from a height of six feet on to her back; she immediately complained of pain and difficulty in walking, and the following day a swelling was, for the first time, noticed in the right inguinal region. Said to have always had good health; no history of any intestinal disorder.

State on Admission.—A healthy-looking, fairly nourished girl, with a very stupid aspect and manner. Walked with a limping gait, carrying the right side of the pelvis lower than the left. Denied feeling any pain. Deeply situated in the right iliac fossa, a smooth swelling, somewhat oval in shape, could be felt; it was covered by resonant intestine, and was thought to be slightly movable. There was only slight pain caused by deep pressure. The spine and the hip and sacro-iliac joints were carefully examined without finding any evidence of disease.

In the hope that the swelling might be due to a fæcal accumulation in the cæcum, purgatives were administered for a few days, without, however, in any way affecting it. Ten days after admission she was attacked with vomiting, accompanied with great abdominal pain and tenderness; the temperature rose to 101·2°, and the pulse to 144. On the following day the temperature was 102·2°; but the pain was much less, and there was no vomiting. The temperature now gradually fell, reaching the normal on the sixth day. The pain disappeared, and she appeared to be in perfect health; the tumour, however, remained unaltered. In this condition she remained until August 22, when she was removed by her friends. During the time she was in the hospital the bowels acted regularly, and nothing abnormal was noticed about the motions.

Eight days after leaving the hospital she was again seized with abdominal pain and tenderness, which were much greater than before; and on September 4 she was readmitted. On admission there were all the symptoms of general peritonitis. She lay with her knees drawn up; the abdomen was tympanitic and very tender; tongue coated and dry. Temperature 101°; pulse 130, small and weak. There was marked emaciation as compared with her condition on August 22. These symptoms continued for five days. On the fifth day vomiting of a dark grumous fluid set in, and she died in the evening.

Autopsy, twenty-six hours after Death.—Peritoneum was covered with puriform lymph, matting the coils of intestine together, surrounding the cæcum. The termination of the ileum was a mass of encephaloid cancer; its external surface was smooth, its shape oval, and size that of a small cocoa-nut. The mucous membrane of the cæcum presented a deep ragged ulcer leading into the mass. In the cortical substance of both kidneys were several circular white patches, the size of peas; these were thought to be also encephaloid, but by an oversight were not examined microscopically. Other organs healthy.

The Vomiting of Pregnancy.—Dr. Labelski, a physician attached to the Warsaw hospitals, at the Brussels Academy of Medicine referred to a simple and certain means for arresting the incoercible vomiting of pregnancy. As soon as this appears, or even the nausea which usually precedes it, a douche of pulverised ether should be directed by Richardson's spray-producer against the epigastric region and the corresponding part of the vertebral column. The douche should be prolonged for from three to five minutes, or even longer, and repeated every three hours. In obstinate cases it should be alternated with douches of chloroform.—*Presse Méd. Belge*, March 3.

Post-mortems in Hospitals.—Difficulties having arisen at Lyons in reference to the execution of autopsies, and especially through the interference of societies for their prevention, the Hospital Administration has issued some new regulations, of which the following are the principal:—1. The bodies of persons reclaimed by their families shall not be opened, when these latter formally prohibit it within twenty-four hours after death. 2. But in spite of any such opposition, the Administration shall possess the right of allowing such autopsy when the interests of public justice require it, when the sanitary authorities deem it necessary, and when important scientific interest renders it desirable. 3. Autopsies can only be made twenty-four hours after death, and after written authorisation by the Administration. 4. As far as possible, only the organs the investigation of which is regarded as indispensable should be examined; and every care must be taken that the examination be conducted with the greatest decency. 5. When completed the organs must be returned to their place, and that not only with regard to bodies that have been claimed, but to those that have not—that is, so far as these organs may not be required for the purposes of criminal justice. 6. After the autopsy the parts divided are to be sewn and united by means of diachylon or collodion, so as to give them as much as possible the appearances they had before the examination. 7. Reclamation and opposition to post-mortems may be made by societies to which the deceased belonged. 8. They may also be made by "friends" (used, we suppose, in distinction from the families in Art. 1), on condition of their defraying the expenses caused by the residence of the deceased in the hospital.—*Lyon Méd.*, March 3.

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Medical Times and Gazette.

SATURDAY, MARCH 16, 1878.

A NEW MEDICAL ACT.

There can no longer be any doubt that the President of her Majesty's Privy Council will introduce a Bill in the course of the present session for the amendment of the Medical Act. We understand that the subject has been for some time engaging the attention of the Duke of Richmond, and that he has on several occasions invited and received the assistance of the individual members of the Executive Committee of the General Medical Council, as men thoroughly conversant with the present state of the profession, and with the direction in which reform is necessary. Any remarks that we may offer upon this subject must as yet be in some respects speculative; but we have good authority for indicating the following as the principal points that will be embraced by the new measure.

First, the new Medical Act may be expected to confirm the Conjoint Board of Examining Bodies in England; and to recommend—previous to compulsion, if necessary—similar conjunction in Scotland and Ireland. Beyond question this ought to be the chief, as it is the most important, provision of the new Act. At last, in 1878, we may hope to secure the second great principle which was recognised as essential twenty years ago, viz., uniformity of qualification, in association with reciprocity of practice. An incalculable advantage will be conferred upon the public, and upon the profession as well, by the establishment of what is equivalent to a State examination for a uniform minimum qualification throughout the land. We do not consider it necessary to repeat what we have so often urged in these columns against the present system of competition among licensing bodies, and the sacrifice of professional efficiency to the private interests of nineteen several corporations. What the Government have to consider is the public good; and the corporations will find that if they do not voluntarily conjoin, their interests will not be allowed to obstruct reform. Another advantage of the new Act, and one that is hardly less than the former, is that it will preserve intact reciprocity of practice, which appeared to be endangered by the establishment of a single Conjoint Board for England only. While the principle of reciprocity of practice was insured by the Medical Act of 1858, it was again threatened by the refusal of the Scotch and Irish bodies to take part in the Conjoint Scheme. This refusal would have obliged the English Conjoint Board to take one of two courses—either to press on the Government the necessity of compelling the formation of similar Boards for Scotland and Ireland; or to urge that Scotch and Irish qualifications give a right to practise in England. We may now expect to hear no more of the unbecoming competition among the nineteen licensing bodies in the kingdom, with the innumerable varieties of qualifications and degrees which they offered. The universities will return to their proper functions of education, and granting degrees as honourable distinctions of merit; and the licensing bodies will rival each other only in confirming and increasing the high reputation of their several corporations.

Secondly, no new Medical Act will be considered complete that does not provide for the registration in some way of certain foreign and colonial diplomas, and thus establish the right of reciprocity of practice with other countries, which would fairly secure that those who are fully and legally qualified to practise medicine in their own country should be entitled to practise it in England. It may be safely assumed that this provision will form part of the forthcoming Government measure.

Thirdly, the 40th (or penal) Clause of the Medical Act of 1858 will be modified from its present ambiguous language, and rendered more efficient for practical application.

Fourthly, the Dental Practitioners Bill having been abandoned, it is anticipated that some provision will be made in the Government Act for the attainment of certain of the more pressing requirements contained in Sir John Lubbock's measure. We do not expect, however, that the Government will do more than provide for the registration of those who can show by the testimony of two or more qualified medical men that they have been regularly practising dentistry before the passing of the Act. Surgeons practising dental surgery will, of course, require no registration beyond that of their surgical diploma. We trust that the Government will not ask the Medical Council to depart so far from its clearly defined duties as to take upon itself the regulation of the education and registration of dentists. A board, appointed by the Medical Council, and consisting of some of its own members and of dentists, would be far more fit to undertake these labours than the General Medical Council itself, which has duties of its own already not too efficiently performed.

Fifthly, the question of the admission of women to the conjoint examinations for licence to practise will, we understand, be settled by the Act in the affirmative. It will be impossible for the Government to resist the cry that has been raised for the admission of women to the medical profession. Women will be admitted to examinations precisely similar to those open to men; and it will, we understand, be arranged that the certificates obtained by successful female candidates will be registrable for purposes of practice without the women being admitted to association with any of the licensing bodies.

Sixthly, it may be expected that regulations will be made in the new Act for the registration of nurses and midwives in the United Kingdom. No one can question the necessity of ascertaining and insuring the competency of nurses and midwives. But it would be well-nigh hopeless to attempt to classify the members of either of these professions; and we do not believe that the Medical Council will be charged

with this task, or, indeed, with any part of the duty of educating or registering this third body. The local Government Board will probably be entrusted with this duty—perhaps with the assistance of the Medical Council. We do not expect that the new Medical Act will alter in any very important respect the constitution of the General Medical Council; and we understand that it will not provide for the direct representation on the Council of the profession in general. We are glad to learn this. The General Medical Council is an executive body only, and fairly represents the interests concerned. The danger of inferior representation would be too great were the choice to be made by popular canvass and election. Besides, we have failed to find that the mass of medical men take such a constant and close interest in education and medical legislation generally as would enable them, or indeed induce them, to exercise such a privilege with intelligence and fairness.

THE THROAT HOSPITAL.

For some time now the affairs of this institution have been in what we may call a misty state. Vague rumours have been flying about especially as to its management, and a mysterious committee met somewhere, and made a report which has never been published. Indeed, we are in darkness as to who appointed this committee, or to whom it reported. At last a little light has been thrown on the scene, and we have now something to go on: a special meeting of subscribers has been held, and their proceedings have been fully reported. Two separate reports of these proceedings have come under our notice. Looking at the whole affair as it appears in these reports, the proceedings seem to constitute a new version of *Much Ado about Nothing*. What may lie under the surface we cannot tell.

However, let us try to give some idea of what took place at this special meeting. The first motion was certainly peculiar. It was moved by the Rev. H. R. Haweis, and consisted in substance of a refusal to receive the report of the "so-called" Committee of Inquiry, on the ground that it had never been forwarded to the Committee of Management. If the motion was peculiar, assuredly the grounds alleged for bringing it forward were still more so. For, first of all, such a thing as making an inquiry into, reporting on, and sending no copy to the management of a hospital, is, we hope, a thing not often heard of. But again, Mr. Haweis point-blank asserts that this report has been in hand for months, and that, on account of its libellous nature, no publisher could be found for it. It certainly is strange, as we have indicated over and over again, that this report should never have been published; there must surely have been something peculiar about it to merit such treatment. But, on the other hand, it is difficult to see what harm could have been done, even supposing it had been read and published as part of the *res gestæ* of the meeting in question. However, the meeting decided otherwise, and the report is not even now before us.

As far as we can make out, there had for some time been trouble in the domesticity of the Hospital, when the Chairman and the Vice-Chairman, Mr. Pugin Thornton, surgeon, and Mr. Evans, secretary, ceased to be connected with the Hospital. The Matron also left; and last, but not least, the hall porter was dismissed. When these various individuals had left—consequently or inconsequently of their resignation or dismissal, we do not know; in point of fact it may have been before they ceased to be connected with the Hospital—certain charges were made. These charges were read by Dr. Morell Mackenzie at the meeting the story of which we are now relating, and he replied to them *seriatim*. It was not alleged that there were any more serious charges behind; but we do not know, for in this way mystery brings its own reward. We shall reprint the charges as made, though we shall not take the trouble to reprint Dr. Mackenzie's replies to them, for anything more trivial about which to make so much ado it has seldom been our lot to encounter.

"*Subjects of Complaint against the Management of the Hospital for Diseases of the Throat.*

"(1.) That a resolution passed by the Committee of Management in 1871, conferring almost absolute power on Dr. Mackenzie, was allowed to remain in force after Dr. Mackenzie showed by acts and orders issued by him to the Matron, and which were detrimental to the interests of the Hospital, that he could ignore the Committee of Management altogether.

"(2.) That the Committee passed an unmerited vote of censure on the Secretary on December 20, 1876.

"(3.) That when the circumstances connected with the operation on Fanny Brooks proved how right the Secretary had been in making the suggestion for which he was censured, the Committee did not think fit to cancel the vote of censure.

"(4.) That Dr. Mackenzie instructed the Matron to summon a clinical assistant by messenger in cases of emergency, and forbade her summoning the Surgeon by telegraph.

"(5.) That the Committee showed their approval of such instructions by allowing them to remain in force even after the occurrence of the case, when more than half an hour elapsed before a clinical assistant could be procured, and the patient died before his arrival.

"(6.) That in the case of Fanny Brooks, the clinical assistant sent for was a gentleman not on the staff of the Hospital, and, therefore, not a proper person to be summoned, as his position as a clinical assistant had not been recognised by the Committee, in accordance with the by-laws then in existence.

"(7.) That he had never before attempted to perform tracheotomy, unassisted, in the dead of night, and had only once performed the operation at all, and had then not completed it.

"(8.) That to entrust such a dangerous operation to such inexperienced hands, when the Surgeon (who had performed similar operations nearly fifty times) could have been summoned by telegraph, showed a want of regard for the interests of the Hospital, if not an absolute disregard of human life.

"(9.) That the statements of the number of patients treated at the Hospital, published for the information of the subscribers and the public, have been wilfully falsified."

We put it to our readers if, with three exceptions, more trumpery charges were ever advanced against anyone occupying a respectable position, to say nothing of the responsible management of a hospital. There are two facts alleged, about which a word may be said. First, as regards the delay of half an hour in seeing a moribund patient. To medical men, at all events, it will be enough to say that the patient had been given over and had been moribund for some hours, if not days, and that no visit could have done any good. With regard to the operation of tracheotomy, which was performed by Dr. Felix Semon with perfect success, we shall leave the "charges" to speak for themselves. We believe—and we stand open to correction—that the charge of incompetency to perform the operation originated with the Matron. Surely a curious authority! But we are sorry to say that we cannot exonerate Mr. Pugin Thornton, the Surgeon referred to, from something more than a want of delicacy in being instrumental as regards bringing forward such charges. As for Dr. Semon, he requires no apologist. There is a pettiness or littleness about the whole group of charges which is, to our mind, mean to a degree—all except the last. A direct charge of falsifying returns is a serious

matter. Anyone who knows what returns, of out-patient practice more especially, mean will well know their value. Is it worth while to falsify them? At all events, we can well understand that a report on such a grievous charge as this would find few publishers ready to lay it before the world.

All this we have said without being in the slightest degree enamoured of the Throat Hospital. Nay, more, we do not in the least regret the retirement of the Prince of Wales from the position he held with regard to the institution. The Throat Hospital has most of the virtues and a good many of the defects of the usual special hospital—it is not better than the best; it is not nearly so bad as the worst. The Prince of Wales is President of St. Bartholomew's Hospital; that may well suffice as a connexion between the Heir to the Throne and our medical charities. But there are, unfortunately, other institutions far greater sinners than the Throat Hospital with which his name is associated. Without, therefore, for one moment backing up the Throat Hospital, we feel ourselves justified—nay, in the interests of truth, compelled to give as fair an account as we can of what has been going on there, and to lay before the medical public the uncontradicted report of proceedings which we must characterise as improper in the extreme.

THE WEEK.

TOPICS OF THE DAY.

A VERY influential deputation recently waited upon the President of the Local Government Board, to urge that the payment in respect of lunatics in lunatic asylums should be extended to the imbeciles or harmless lunatics in the workhouses, on the ground that the cost of these classes of poor is greater than the cost of the ordinary pauper. Many provincial Poor-law unions were represented, and the deputation was introduced by Mr. Ripley, M.P., who explained that it was generally considered an injustice that while some unions which placed the imbeciles as well as the lunatics in lunatic asylums received a grant of four shillings a week for each, those unions which made provision in the workhouses for the harmless lunatic class received no aid at all. This system, he urged, was not a politic one, since it threw before the guardians the temptation to send their imbeciles as well as their lunatics to the asylums. The President assured the deputation that he was quite familiar with the subject, and explained the reasons which had originally induced the Government to make the grant for lunatics in asylums. It was not, he said, in the power of the guardians to send a person to a lunatic asylum unless that person was fit to be an inmate. The humanity of the age required that the lunatic should be kept in an expensive manner, and the Government considered that the subvention should be restricted to this class thus kept. As to the statement that persons were removed to the asylums who should be kept in the workhouses, all he could say was that he had seen no official facts in confirmation of such a charge. The financial difficulty in the way of meeting the wishes of the deputation was a very great one. The metropolis had large asylums wholly devoted to the harmless class of lunatics, and 5000 such persons were in those places. To give the subvention to each of these would involve a charge for London alone of £40,000. The Government, he added, proposed to deal with the question of providing for the chronic cases of insanity, and this subject would be found in the County Administration Bill.

At a recent meeting of the Southwark District Board of Works, Dr. Vinen, the Medical Officer of Health, called attention to the fact that an outbreak of typhus fever in the district had been found to have been caused by the transit of infected clothing. He had ascertained that a woman who formerly lived at Palmer's-buildings, Bermondsey, had lost two children from typhus fever, and she gave their clothes to her cousin to wash. This woman took them home with her to Unicorn-yard, Tooley-street, and the next morning went with them to the Bermondsey Wash-houses, where they were washed. This woman, her brother, a friend and child, and a neighbour, were all attacked with the disease, and three of them died, and further mischief is believed to have arisen from the same cause. The inspector of nuisances had traced the woman to whose recklessness the deaths are attributed, but the legal adviser of the Board did not consider it expedient at present to proceed against her. The case has elicited a most important fact—viz., that the state of the law relating to the registration of deaths is very defective. A certificate as to the cause of death was in this instance given by an unqualified practitioner, in consequence of which the circumstances did not come to the knowledge of the sanitary officers of Bermondsey. Mr. F. G. Beresford moved that the attention of the Home Secretary be called to the matter, and the motion was unanimously carried.

At the meeting of the City Commission of Sewers, held last week, it was determined to petition Parliament against the second reading of the Metropolitan Waterworks Purchase Bill. The reasons stated were that an additional supply of water was not required in the City, and that the laying down of new mains would cause very great and unnecessary inconvenience; further, that the Corporation, while having to bear a very large share of the cost, would have absolutely no control over the supply. One deputy strongly condemned the proposal of the Metropolitan Board to buy up the present water companies, and urged that what was wanted was to have more control over the companies, so as to increase the purity of the water and lessen the cost. Another gentleman, however, contended that it was not right that the water-supply should be in the hands of private individuals. The petition was eventually signed, and the Sheriffs undertook to present it.

Several parochial Bodies also have formally protested against the Water-Supply Bills of the Metropolitan Board of Works, but the increasing opposition to the scheme need not now be noticed more in detail. The Chairman of the Board of Works moved the second reading of the Metropolitan Waterworks (Purchase) Bill, in the House of Commons on Tuesday last, with the view of having it referred to a committee, to be considered in conjunction with the New Water-Supply Bill, which had already passed the second reading. The House, however, decided on the adjournment of the debate; and as the Chancellor of the Exchequer said that the time at the disposal of the Government is so limited that he could hold out no hope of their finding a day for the resumption of the debate, it may be held as certain that no more will be heard of the Bill in Parliament during the present session. The other Bill will no doubt die with it, and the Board of Works must find some other, and much more practicable, way of providing a larger and better controlled supply of pure water for the metropolis. The object of the two Bills was excellent, and must be in some way attained, but the measures adopted by the Board were enormously expensive, and the practicability, the expediency, and the wisdom of their new-supply scheme were, to say the least, extremely questionable.

We are not in possession of the full details of an inquest recently held at Hanley, but the verdict, as it stands, appears to be anything but satisfactory. The inquiry was held to ascertain the cause of death in the cases of John Arthur and Mary Bagnall, who died almost immediately after partaking of some broth given to them. Is was stated that on

examination no trace of poison of any kind had been found; the jury therefore returned a verdict "that there was no evidence to show by what means the deceased had died."

The report of the Hospital Saturday Fund for the past year has just been issued; it states the receipts to have been £5786, of which 18 per cent. was absorbed by necessary expenditure. The Distribution Committee make some not very practical suggestions to the hospital authorities: they point out that a large amount of valuable time is wasted by the working classes in the waiting-rooms for out-patients, and in their having to go to some particular part of London during the most important hours of the day. This applies more to special than to general hospitals, inasmuch as there are general hospitals now existing in most parts of London, although they are only open (except for accidents and very urgent cases), as a rule, in the middle of the day. In some few instances, the Committee state, the objection has been met by special hospitals opening for the relief of patients on one or two evenings each week. This, however, they observe, is only a partial remedy, and they ask if it would not be possible for hospitals that are much frequented to open branches in various parts of London. The additional expense, according to the Committee's views, would be very slight, no increase in the cost of management would be incurred, and by opening at different hours no further staff would be necessary; and for the small rent of a couple of rooms an infinite boon would be conferred on the working classes. The Hospital Saturday Fund Committee, in their report, have apparently exhausted all their consideration on the working classes, and neither the medical staffs of the London hospitals, nor the medical profession generally, are worthy of being considered in the matter.

The authorities have given orders for two regiments to be at once equipped with the Oliver magazine accoutrements, which the inventor, Surgeon-Major Oliver, of the Army Medical Department, has been for some months past employed at Woolwich in perfecting, as a first step towards its adoption in the service. The new equipment has been approved by several distinguished officers, and also by those regiments who have tried it: it consists of two compact waterproof bags or knapsacks braced upon the shoulders and loins, leaving the chest free, and distributing the weight in a manner best suited to the convenience of the wearer. It is proposed to allow the soldier to leave in the barracks or baggage-waggon one of these bags containing the least indispensable articles of his kit, instead of carrying the whole of his equipment on the march or into action. The other bag contains the soldier's greatcoat and waterproof sheet, which can be removed and strapped on to the shoulders. Surgeon-Major Oliver has combined his knowledge of the wants of the service with sound hygienic principles, and the result is likely to be increased efficiency in the equipment of our infantry.

The recent report of the Metropolitan Asylums District Board shows that in their hospitals at Homerton, Stockwell, Hampstead, and Fulham, for the fortnight ended March 8, the number of small-pox patients was as follows:—Admitted, 316; died, 51; discharged, 317; remaining under treatment, 710. This, compared with the results of the previous fortnight, gives an increase of 85. During the same period the number of patients in the hospitals at Stockwell and Homerton were—admitted, 64; died, 16; discharged, 79; remaining, 218—there being a decrease of 31 on the fortnight preceding.

At the meeting of the Board formed to carry out the scheme of the Lower Thames Valley Main Drainage, which was held, as usual, at Kingston-on-Thames last week, the chief business transacted was the reception of applications from various local authorities to fix the payment of the expenses severally incurred by them in promoting or opposing the provisional order upon the general fund to be raised by the existing Board. All the authorities thus interested did not send in their claims, but amongst the bills already presented are the three following:—Kingston Corporation, £421 11s. 6d.; East Molesey Local Board, £53 9s.; Surbiton Improvement Commissioners, £259 1s. 4d. The body first named opposed, the second watched, and the third supported the scheme. There are several other bodies who have looked to repay themselves from the general fund of the joint Board, and it was incidentally mentioned that the claims of the Hampton Wick Local Board, and of the Richmond Select Vestry, who promoted the scheme, would probably amount to £1200. By a large majority the Board declined to entertain the applications made to them.

It will be remembered that some time since much comment was excited by a case of sudden death which occurred at Woolwich. A child of a soldier married without leave was taken ill, and died without medical attendance, the army medical officer who was summoned stating at the coroner's inquiry that by regulation he was not permitted to attend the wives and families of soldiers not on the married roll. We are happy to be able to state that an army circular recently issued provides "that army medical officers will be at liberty in urgent cases to attend the wives and children of soldiers married without leave, and to supply medicines for them from the public stock to a limited extent, at the discretion of the principal medical officer." Another circular published at the same time explains that the wives and children of the militia staff occupying quarters in barracks will not be entitled to medical comforts unless the non-commissioned officers are transfers serving under their army engagements, in which case certain medical comforts detailed may be issued.

An inquiry was held at the Paddington Vestry Hall last week, by Mr. D. Cubitt Nichols, the Commissioner appointed by the Home Secretary to investigate the Metropolitan (Bowman's-buildings, Marylebone) Improvement Scheme, 1878, promoted under the provisions of the Artisans' and Labourers' Dwellings' Improvement Act of 1875. The scheme provides for the compulsory acquisition by the Metropolitan Board, as an unhealthy area, of 200 tenements, containing 383 rooms, with a population of 800 persons, situated in Linton-place, Berry-place, Little Earl-street, Manning-street, and Bell-street, Marylebone, and building on the ground thus acquired other dwellings, affording accommodation for 1330 persons, at a cost of £40,700. Evidence having been given as to the unhealthy character of the buildings to be acquired under the scheme, the inquiry was closed, and the Commissioner will in due course make his report to the Home Office.

MARLBOROUGH HOUSE.

The alterations and improvements at Marlborough House have been completed. The entire basement has been subjected to the fullest examination, and to thoroughly efficient renewal; and the other sanitary and ventilating arrangements have been made as perfect as possible, ventilating-tubes having been carried from the sewers and the closets over the roofs of the house and the offices. We learn from our contemporary the *Times* that Sir William Gull lately met at Marlborough House the officials from the Board of Works, with Sir D. Probyn and Mr. R. Rawlinson (the engineer) as representing the Prince of Wales, to examine the arrangements for keeping the drains clean. The flushing-power upon the drains and sewers was tested from the fire service supply within the house and grounds, especially arranged

for flushing its drains and sewers. The experiment proved that the required work was effectually done, as the scouring velocity of the water-current in these drains and sewers was at least four feet per second, and that the moving force of this water-current carried out all waste and offensive matters, including the silt or inoffensive material insoluble in water, into the main sewers of the adjoining streets. After a few minutes' flow the fouled water was replaced by clean, odourless water, thus indicating that the drains were perfectly cleansed. During this flushing operation the manhole—an aperture through which a man can descend to inspect the sewers—was fully open, and no perceptible smell arose from it. The flushing operation is to be repeated daily at Marlborough House, so as to preserve its drains clean and healthy.

THE SURGICAL AID SOCIETY.

This Society has, during the past week, appeared in no very enviable fashion before the public. A man who had been a soldier during the Indian mutiny, and had lost his leg, applied to Sir Robert Carden under something like the following circumstances:—By dint of perseverance and eighteen months' hard work he had collected enough letters to procure him, from the Surgical Aid Society, an artificial leg. This leg, however, went wrong, so he applied to have it repaired. The leg was taken in, but the unfortunate owner was told he would have to set to work to get more letters to pay for its repair; and in the meantime, finding himself nearly destitute, he applied to the sitting magistrate at Guildhall. He told his story; and a day or two after came the officers of the Surgical Aid Society to tell theirs. The man, they said, was an impostor. "What!" said Sir Robert Carden, "has he not lost his leg?" They explained that the word "impostor" was used in its Pickwickian sense; but the magistrate was not content. Nay, more; one of the officials of the court was so unkind as to say that the Surgical Aid Society used to have its abode above an instrument-maker's shop, and that its special aim, apparently, was to sell the instruments and apparatus there exposed for sale. This gentle insinuation the officials indignantly repudiated. Seriously, however, there is no greater nuisance than this Society. To get an instrument or apparatus from it is almost as great a bother as attempting to get a patient into the Asylum for Incurables, for the whole thing is done by letters. The unfortunate creature who seeks anything from them has to hunt about all over London for letters, spending time, labour, and money, often all the while suffering much pain, till—perhaps after months, we had almost said years—he procures enough letters to pay (we think at the rate of five shillings a letter) for the needful mechanism. It is an abuse of words to call such an institution, so managed, a charity. It may exist for the gratification or whim of a few, possibly for the profit of some, but it is not a body to be encouraged by the profession. It is far better to secure the aid of a few friends in cases where such relief is needed, and to procure direct from the instrument-maker the necessary apparatus. This when the patient has friends. But far better—let those inclined, from various causes, to be pitiful to such sufferers subscribe to the Samaritan funds now connected with most hospitals, and which are specially intended to help the helpless without sending them to beg for letters in every direction, till the time for doing good has long passed away.

LECTURES BEFORE THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

The last of this season's course of scientific lectures was delivered on Monday, March 11, by Dr. Grimshaw, the subject of his discourse being "Contagion, and its Relation to the Prevention and Cure of Zymotic Diseases." The first portion of the lecture was devoted to the consideration of the nature of the contagion of specific diseases. The relation of the theories of spontaneous generation and *contagium vivum* to the development of contagious zymotics was considered. The lecturer adopted the latter theory, defining the term "contagion" as "a seed of disease." The effects of contagion and of septic infection were contrasted, and the views of Dr. Beale as to the part that bioplasm plays in the propagation of contagion were discussed. The various proofs of the *particulate* nature of contagion were referred to and adopted by the lecturer. The grounds for belief in the living and vegetable nature of contagion were stated, and the various organisms which had been met with by different observers in vaccinia, variola, sheep-pox, splenic fever, and relapsing fever were described, diagrams being exhibited in illustration of the lecturer's remarks. The second portion of the discourse dealt with the application of the knowledge we possess to the prevention and cure of disease. The various means of preventing septic infection were described, and tables of antiseptics and their relative powers exhibited. The action of many of these antiseptics might be interfered with by the presence of albuminoid substances or by their own chemical instability. While we did not possess any antidote to the septic poison, yet we had many means of preventing its production by the destruction of bacteria. The question of the prevention and cure of contagious fevers was reviewed as follows:—1. The modification of the nature of contagion (as by vaccination). 2. The destruction of contagion—(*a*) without the body by the application of disinfectants; (*b*) within the body by the use of salicylic acid, quinine, etc. 3. The counteracting the effects of contagion. In considering the last subject, Dr. Grimshaw dwelt upon some points in the treatment of fevers which he regarded as important, and pointed out what he believed to be errors in some forms of antipyretic treatment.

OVERCROWDING IN WHITECHAPEL.

The quarterly report of Mr. John Liddle, the Medical Officer of Health for the Whitechapel District, for the period ended December last, amongst other valuable information contains some curious statistics on the subject of overcrowding. His opportunities for reporting on this subject will be admitted to be very great when it is considered that out of 8313 houses in the district, at least 4500 are let out in separate tenements. It appears, from notes furnished by the inspectors, that one cause of overcrowding in that neighbourhood is the large immigration of foreigners, principally from Poland, who arrive here in a state bordering on destitution, and are received by their fellow-countrymen, who are not in a much better pecuniary condition, but who, nevertheless, allow them to occupy a portion of their only room, in which their own family resides, until the new comers can obtain work. The rents of the houses in many of the poor neighbourhoods, particularly those bordering on the City, are much increased, owing to such houses being in great demand. Many of them are in possession of foreigners, who, in order to pay the advanced rent, are compelled to crowd into each room as many as it will hold. One fact has been brought to light—viz., that the English and Irish who formerly occupied these houses have either been compelled to remove, or have left of their own accord in consequence of the increase of rent, although the accommodation is not improved. The result is, that they go a short distance from London and avail themselves of the workmen's trains, or the tram-cars. It further appears that the people of different nations do not amalgamate, since the English Jews, who are very numerous in this district, live together in certain localities, while the foreigners live together in other parts; the Irish are located by themselves, and so are the English. It might be inferred

that the high rent demanded for lodgings is the cause of overcrowding, and Mr. Liddle allows that it may be so to some extent; but in his opinion the price asked for rooms has not so much to do with overcrowding as many people may imagine, for, if rooms could be obtained for 1s. or even less per week, the practice of sub-letting would not be diminished: the desire of living not only rent-free, but the obtaining of a further profit by sub-letting a portion of the room, would still prevail. Such a state of things, Mr. Liddle observes, concerns the whole community, as is strikingly shown by the spread of many diseases which are, perhaps, in the first place endemic and confined to these overcrowded districts, but which soon become epidemic, and extend over large areas, attacking indiscriminately all classes.

VILLA-HOSPITALS.

Mr. Vacher, Medical Officer of Health for Birkenhead, has published for general information a paper read by him before the British Medical Association, at Manchester, in August last, on villa-hospitals. The object of the paper is to show the expediency and economy of appropriating a detached villa for non-pauper infectious cases, where the funds of local boards do not admit of the erection of a regular hospital for this purpose. Mr. Vacher describes the steps taken at Birkenhead for fitting up a villa-hospital, which seems to have answered all the demands made upon it, and he also supplies particulars of the outlay incurred, which amounted to the sum of a little over £80 per bed for the eighteen beds provided. The details will be interesting to urban authorities, who will certainly in course of time be called upon to provide hospital accommodation of this description.

DITAÏN.

The bark of *Alstonia scholaris*, one of the *Apocynaceæ*, is used in Java (of which it is a native), under the name of dita bark, as an antipyretic, a vermifuge, and a poison. This bark contains two alkaloids, both soluble in ether—ditamin (Jobst and Hesse), and ditaïn (Merck),—which, however, appear to be very nearly identical in their chemical composition. Ditaïn contains nitrogen, and its chloride has the formula $C_{22}H_{30}N_2O_4$, HCl. Harnack (*Arch. für Exp. Path.*, vii.) has examined the physiological action of ditaïn on the frog, and finds that it resembles curare in paralysing the intra-muscular terminations of the motor nerves, while it differs from it in at the same time paralysing the spinal cord. This is proved by the fact that, even though the main artery of a limb be ligatured so that the drug cannot reach the muscles, reflex movements cease after a dose of five milligrammes of ditaïn, and electrical irritation of the spinal cord also fails to excite contraction of the limb. If the frog's heart is stopped by poisoning the animal with muscarin, ditaïn restores its movements, apparently in the same way as atropia. In rabbits as much as fifty milligrammes are necessary to produce symptoms of poisoning, and as much as 0·1 to 0·15 gramme to produce complete motor paralysis. The general symptoms of ditaïn poisoning in rabbits resemble those of curare, with the exception that doses which are only just large enough to paralyse the motor nerves produce a fall in the blood-pressure.

PNEUMATIC TREATMENT OF AORTIC REGURGITATION.

Dr. Fenoglio, assistant in the Turin Medical Clinic, reports (*Centralblatt Med. Wiss.*, No. 46, 1877,) three cases of aortic regurgitation which he treated successfully by the pneumatic method, the patients being made to expire into rarefied air. In each case there was excessive action of the hypertrophied left ventricle, and the treatment was directed to diminish the tension in the arteries, and increase the amount of blood in the lungs, and hence to remove the feeling of palpitation and subjective arterial pulsation, as well as the sensations of anxiety and thoracic oppression which the patients experienced—all these symptoms being in the main the result of the excessive compensatory action of the left ventricle. Sphymographic tracings of the pulse showed that the height of the pulse-wave was lowered by the treatment, that the line of descent became less abrupt, and the previous dicrotism less distinct. This effect and the general improvement in the condition of the patients became more decided and more permanent at each sitting, and in one of the three cases the improvement continued a month after the patient had been discharged. The treatment lasted from fifteen to twenty-five days with one sitting per diem. To sum up, Dr. Fenoglio's experience convinces him that "in cases of aortic insufficiency with excessive action of the hypertrophied left ventricle—that is to say, in the greater number of the cases of this aortic lesion which come under treatment—expiration into rarefied air is an effective therapeutic method." Naturally, the "cure" requires to be repeated from time to time.

SMALL-POX IN DUBLIN.

We regret to say that small-pox, which has never been quite absent from Dublin since July, 1876, when it was introduced into that city from Liverpool and Manchester, has of late shown a very decided epidemic tendency. On the 7th inst. no fewer than eighty-three beds in Cork-street (Fever) Hospital were occupied by small-pox patients and convalescents from the disease; twenty-four cases were under treatment at the Hardwicke Hospital, and one at the Meath Hospital. Upwards of forty deaths have occurred within the past three months. At the meeting of the Executive Committee of the Dublin Sanitary Association on Thursday, the 7th inst., the following analysis of admissions of small-pox patients to Cork-street Hospital during the first seven months of the present epidemic and the corresponding period of the epidemic of 1871-2 was submitted:—August, 1871, 4; September, 8; October, 41; November, 59; December, 78; January, 1872, 81; February, 90. August, 1877, 4; September, 2; October, 3; November, 8; December, 23; January, 1878, 19; February, 76.

MR. HARDY AND THE ARMY MEDICAL DEPARTMENT.

We have every reason to believe that the information already published as to the composition of the committee appointed to inquire into the present condition and defects of the Army Medical Department is substantially correct. The gentlemen selected for the purpose by the Secretary of State for War are Sir William Muir, K.C.B., the Director-General of the Department; Mr. Ralph Thompson, C.B., Assistant Under-Secretary of State at the War Office; and Mr. Denham Robinson, Actuary to the War Office.

COUNTER-PRESCRIBING.

We commend to the consideration of our readers the letter, printed in another column of our present issue, from Mr. Stanger, of Nottingham. They will not have forgotten the case of the Apothecaries' Society *v.* Shepperley, which was argued in the Exchequer Court in November last. The case was an appeal from a judgment in the Nottingham County Court, by which a chemist and druggist in Nottingham was fined in the full penalty of £20 for counter-prescribing. The Court of Exchequer, after hearing at great length the counsel for the appellant, decided, without hearing counsel on the other side, to send back the case for a new trial, on the ground that the Court had not before it sufficient material on which to fully decide all the questions in dispute; and the case was ordered to be moved from the County Court to the High Court of Justice. The case has thus

become one of great import, being made a test-case, the objects of which are to try in the most decisive manner the legality of counter-prescribing, and to get the relative functions and rights of chemists and of medical men precisely defined. It will necessarily, however, be very expensive, and the society of medical men in Nottingham who have hitherto carried it on, and who are represented by Mr. Stanger, appeal for help to meet the large expenditure now required. The profession at large, and the public, are concerned in it; and we hope the appeal will be generously responded to. We observe that in the *Pharmaceutical Journal* for February 23 it is stated that the Act of Parliament Committee of the Apothecaries' Company disclaims having given authority for any attack upon counter practice. The solicitor of the Company writes to the Pharmaceutical Society that he "is unable to discover any case wherein the sanction of the Society has been given to a prosecution on a pure and simple case of counter practice," and that he has "not authorised any prosecution in a case of pure and simple counter practice," and does not intend doing so. What the Society or their solicitor may mean by "pure and simple counter practice" we cannot pretend to say, but there are probably but few medical men who do not know of one or more cases of illness treated by "counter practice" till they have become dangerous, and medical aid has been sought only when too late. We have no wish to see too strict and impracticable a line drawn, or attempted to be drawn, between cases in which a chemist may and may not attempt to give temporary help; but chemists' counter practice results in infinite mischief to the public; and at any rate the Apothecaries' Society gave their sanction to the Shepperley case, and promised a donation of £50—a sum already much exceeded—towards the expenses.

THE PATHOLOGICAL SOCIETY.

We would draw the attention of members of the Pathological Society to the announcement made by the Council, that the next meeting, on Tuesday, the 19th inst., has been specially set apart for the exhibition of specimens of disease of the lymphatic system, including leukæmia and lymphadenoma.

MEDICAL PARLIAMENTARY AFFAIRS.

Importation of Cattle.—In the House of Lords, on Thursday, March 7, the Duke of Richmond gave further explanations with reference to the proposed restrictions on the importation of cattle from abroad, with a view to protect the farmers of this country, and to confine disease within the district where it is first discovered, in order to effectually stamp it out, and he also gave reasons for enforcing stricter measures for the transit of cattle from Ireland to this country. He was glad to see that, at a meeting of the Council of the Irish Cattle Trade Association, after some discussion it was agreed to accept the Bill subject to certain proposed alterations being adopted. The Bill then passed through Committee of the House to be referred to a Select Committee.

Death-rate of Dublin.—In the House of Commons, Mr. Meldon asked the Chief Secretary for Ireland for information respecting a memorial from the Dublin Sanitary Association, and assented to by the Public Health Committee of the Corporation, asking for an inquiry into the long-continued excessive death-rate of the city. Mr. Lowther replied that he did not think it was necessary to hold an inquiry.

Factories and Workshops.—The House went into Committee on the Factories and Workshops Bill, and, after one or two verbal amendments on sanitary grounds, the Bill was ordered to be reported.

County Government.—Mr. Rylands moved the rejection of the County Government Bill on the ground that it would degrade quarter-sessions by superseding the now paramount power of the magistrates, and give too much power to the ratepayers. Mr. Rodwell explained that the object of the Bill was to fuse the duties of the guardians and the magistrates, and thus to form a strong Board, so as to insure the satisfactory discharge of the duties devolving upon them. He thought the County Board would be a strong barrier to the encroachments of the Local Government Board. The debate was adjourned.

Vaccination and Small-pox.—On Friday, March 8, Mr. Sclater-Booth, replying to Mr. Hopwood, said that the Secretary of the Anti-Vaccination Society had lost two children, not from vaccination, but from cholera, as the coroner's inquest and medical certificates have unmistakably shown. He did not think any alteration in the law was needed. Earl Percy quoted some statistics of deaths from small-pox since 1847, showing that the disease was fatal to the extent of 26,988 from 1872-76. Mr. Sclater-Booth explained that the increase from 1867-76 was entirely due to the epidemic which occurred in 1871. The remaining eight years of this decennial period the mortality was below the average. The epidemic prevailed in other countries, but in none was the mortality so low as in England. From 1873-77 the average mortality was 2400 a year, which is below all previous experience. In the last quarter of 1877 it was only 405, including 316 deaths in London, leaving 89 only for the rest of the country. The inquiries in Belgium with reference to heifer vaccination were interrupted by the illness of the medical officer. He had arranged for a portion of the grant for scientific investigations to be employed in reference to this subject.

Cattle Plague.—Sir Stafford Northcote, replying to Mr. Chaplin with reference to a reported outbreak of "cattle plague" in Lincolnshire, said that the disease alluded to is believed to be splenic apoplexy, from which forty-eight cattle died on one farm in the course of a few days. A letter was read from Dr. Burdon-Sanderson, stating that investigations were in progress as to the nature of the disease, which is "not a new disease, although outbreaks of so alarming a character as the present have seldom occurred." He did not think it was likely to spread.

Vivisection.—On Monday, March 11, Mr. Cross, replying to Mr. Pease, said that twenty additional licences had been granted for vivisection beyond what appeared in the half-year's return. He was assured by the inspector that there was not the slightest ground for believing that there had been any abuse of the regulations.

Ventilation of Police-Courts.—Mr. Gerard Noel said that he had given instructions for the preparation of a report upon the ventilation of the law and police courts in the metropolis.

Contagious Diseases (Animals).—The motion for the recommitment of this Bill in the House of Lords being objected to, it was withdrawn, and the Bill was referred to a Select Committee.

Vaccination.—On Tuesday, March 12, Mr. Sclater-Booth, replying to Mr. James's inquiry respecting the refusal for twenty-six times of a father to have his child vaccinated, and the employment by the Board of Guardians of a solicitor, said that he had no reason to doubt the legality of such prosecutions by the guardians.

Metropolitan Waterworks Purchase Bill.—Sir J. McGarel Hogg moved the second reading of this Bill, to be considered in conjunction with a Bill which had already passed a second reading, for the securing of a better supply of pure water for the metropolis. The existing supply, although filtered carefully, was proved by analysis to contain matters injurious to health. The eight different water companies had different rules and regulations with regard to pressure and supply, and it was very desirable that they should be under one municipal head in the interests of economy and convenience. Mr. Fawcett trusted the Government would afford facilities for the Bill being discussed on a future day. The Chancellor of the Exchequer said the time at the disposal of the Government is so limited that he could hold out no hope of fixing a day for the further consideration of the Bill. The motion for the adjournment was agreed to.

On the 5th inst., Dr. Slater, of Ripon, was the recipient of a handsome testimonial, presented to him by some of the friendly societies of the town, in recognition of his services as their medical officer. The testimonial took the form of a handsome time-piece, bearing a suitable inscription, and the presentation was made at the annual dinner of the societies in question.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

On Friday, February 1, Dr. Peacock read a paper before this Society, the subject being four cases of Pleural Effusion. In two the fluid was removed by paracentesis; in the remaining two by the formation of external abscess connecting with pleural cavity.

Case 1. *Large Serous Effusion, the Result of Subacute Pleurisy, in a Boy; Aspiration; Rapid and Complete Recovery.*——H. S., aged ten, admitted into Victoria-park Hospital, November 28, 1877, with following history:—Had been ill two weeks; ascribed it to going out into the yard without his coat. Attack commenced with pain in left side, extending across the epigastrium, increased by drawing a full breath. These symptoms continued till his admission. He had not lain in bed, but had not left the house. On admission, left side much expanded and movement abolished; marked dulness over whole side, and respiration inaudible everywhere, except above and below the clavicle and at the lower cervical region. The heart was felt beating over a large space between the right nipple and lower portion of sternum. Respiration on right side loud and compensating. Voice feeble and infantile; impossible to test vocal fremitus. It was decided at once to remove the fluid, which was done the following morning by the aspirator by Mr. Bark (Resident Medical Officer). The needle was inserted between the sixth and seventh ribs in the line of the posterior axillary border, and forty-seven ounces of greenish-coloured serum removed. Soon after operating the heart could be felt beating on the left side, rather below and to the left of the nipple. He passed a good night, and next morning had a temperature of 99·5°. The left side of the chest was less expanded than before, and the resonance on percussion improved, especially at the upper part; posteriorly there was more movement, and the respiratory sounds were more distinctly audible anteriorly and posteriorly, and in the axillary region. The heart could be felt to beat in the fifth interspace, about midway between the nipple-line and sternum. December 19: Had steadily improved; there was still dulness on percussion in the lower anterior and posterior regions, and in the middle and lower lateral regions, but respiratory sounds were distinctly audible in other parts of the side, and feebly in the lower dorsal regions. He was bright and cheerful, and took his food well. January 2, 1878: The two sides of the chest were nearly equally expanded, though perhaps the left was a little fuller behind. The movements were equally free on both sides. He could draw a full breath without any pain in the side. The mark of the puncture was scarcely traceable. There was still some impairment of resonance on percussion at the lower parts of the side all round, but the breath-sounds could be heard everywhere, though somewhat feeble. The heart occupied its natural position.

Case 2. *Empyema of Left Side in a Young Man; Suspicion of Lung Disease; Aspiration, followed by Abscess in Seat of Puncture; Pleural Cavity freely Opened; Recovery.*—Richard G., aged seventeen, a warehouseman, was admitted into Victoria-park Hospital, October 8, 1877, having been ill for two months. History: He was first taken with pain at the lower part of the right side, followed by pain in the left side, with cough and expectoration, but had never spat any blood. He stated that his father died of pleurisy at thirty-three, and he had lost several brothers in infancy; but his mother and a brother and sister were living and healthy. On examination, the left side of the chest was everywhere imperfectly resonant, and it was entirely dull in the lower dorsal region; the breath-sounds were only feebly heard over the whole side, and they were entirely inaudible in the lower dorsal and middle and lower lateral regions, where also the vocal fremitus could not be felt. The voice had an ægophonic twang about the lower angle of the left scapula. The apex of the heart beat below and to the right of the right nipple. The right side of the chest was very flat under the clavicle, and the resonance on percussion was impaired, and the respiratory sounds very harsh. He was much prostrated, and looked like a sufferer from serious disease. It was plain there was some effusion in the left pleural cavity, and it was thought probably purulent. It was therefore decided to puncture the chest, which was done by Mr. Bark on the 10th, and twenty-four ounces of pus were removed by the aspirator. October 17: He had been relieved by the operation, and the heart soon after returned to its normal position. There was still marked dulness on percussion, and absence of vocal fremitus in the left dorsal region, and the ægophonic twang was still heard. There was somewhat abnormally clear resonance on percussion in the left mammary region when he lay upon his back, when also there was a metallic echo with the cough; and these signs changed their position with changes in his position. He had a troublesome cough and expectoration, did not sleep well, and perspired much at night; but took his food well, and was, on the whole, better. 22nd: Diarrhœa, which continued till the 29th, when a small abscess formed in the seat of puncture, and on being opened a few drops of pus escaped. November 3: A fluctuating swelling had formed a little above the seat of the first abscess; and on the 4th an unsuccessful attempt was made to pass a probe from the former opening into the abscess. An incision was therefore made from the seat of puncture into the pleural cavity, and forty-four ounces of pus removed; a drainage-tube was inserted, and during the afternoon and morning fourteen ounces of pus flowed through it. After this discharge the fluctuating swelling disappeared. 10th: Though there had been considerable discharge through the tube at intervals, it had entirely ceased; the tube was therefore removed, and the opening immediately closed. 21st: His condition was very much improved; still dulness on percussion in the lower parts of the side, but the breath-sounds were audible over nearly the whole side. 29th: He had continued steadily to improve, had very little cough or expectoration, and there had been no further discharge from the opening, which remained quite healed. January 2, 1878: Scarcely any remains of cough or expectoration; breathing was better; took food well; was gaining strength; and altogether was going on favourably. The cicatrix of the puncture and incision is situated in a line with the posterior border of the axilla at the lower margin of the eighth rib. Chest still very flat on both sides in the infra-clavicular regions, and movement is imperfect, and dulness is still marked in the lower dorsal and lateral regions; but the respiratory sounds are audible over the whole side, though feebly in the lower dorsal, and especially in the lateral regions. The resonance on percussion is impaired at the upper part of the right side, the breathing is somewhat bronchial, and there is some increase of the cough and vocal resonance. The heart beats on the left side between the nipple and lower end of sternum.

Case 3. *Empyema in a Child, opening externally; Recovery.*—This and the following case occurred in two children (brother and sister); the symptoms appeared very much at the same time, and were very similar in character. It seems, therefore, not improbable that the suppuration in the pleural cavity occurred in connexion with some septic poisoning, such as scarlet fever, though no history of such could be obtained. Albert Edward D., aged seven, was admitted into Victoria Ward, St. Thomas's Hospital, July 14, 1875, with pain of the left side of eight weeks' duration. It was reported that he had never had any of the diseases of childhood, and was in good health until he began to suffer from pain in the left side, followed by feverishness, sickness, and delirium, and had got gradually worse until his admission into hospital. On examination, the left side of the chest was much expanded, and dull on percussion. The movement was abolished, and the breath-sounds everywhere very indistinctly audible, while on the right side the movement was very free and the respiratory sounds were loud. There was a fluctuating tumour below and to the left of the left nipple. This was at once punctured, and an ounce and a half of pus evacuated; the puncture was made over the fifth interspace, below and in the nipple-line. On August 3 he was reported to have steadily improved since the abscess had been opened. He was able to lie in different positions, though for the first fortnight he could only lie on the left side. There had been some discharge from the opening each day, but it had gradually diminished. The side continued dull on percussion posteriorly, but the breath-sounds were distinctly audible everywhere except in the lower anterior lateral and posterior regions, where the dulness was still very marked. August 6: The discharge from the opening had entirely ceased; the side was somewhat contracted; resonance on percussion still impaired; respiratory

sounds were feebly heard at the lower parts. When he lay upon his back there was a distinctly tympanitic sound in the upper mammary region, with feeble respiratory sound, no doubt indicating the presence of some air in the pleural cavity. He was discharged cured on the 17th.

Case 4. Empyema opening externally in a Child; Disease of Lung; Death.—Marian D., aged five years and a half, sister of the subject of the last case, was admitted into St. Thomas's Hospital, July 19, 1875. History: She had been taken ill with feverishness and sickness two weeks before admission, or three days after her brother was attacked. A few days after, she was troubled with a very severe cough, her breath was very offensive, and she brought up much expectoration. On admission it was evident there was considerable effusion in the right pleural cavity. Three days before admission a swelling appeared at the lower part of the right side; it was evidently an abscess, and was at once opened. About three drachms of offensive pus were let out, and a probe being introduced, passed entirely across the pleural cavity; its point could be felt under the skin at the back. The day after, the child had a violent fit of coughing, and brought up with a gulp some fetid purulent matter. The opening into the abscess was over the seventh intercostal space, in the line of the anterior fold of the axilla. She did not improve after the operation; she had a troublesome cough, but not generally any expectoration, and her breathing was very much embarrassed; she had diarrhœa, and in one of the stools passed some pus; she had marked hectic symptoms, and died exhausted on August 4. Post-mortem Examination: The right lung was found entirely collapsed. The middle and lower lobe adhered firmly to the parietes and diaphragm. In the upper lobe there were several foci of softened lung-tissue, like breaking-down masses of broncho-pulmonary consolidation. Openings in the sixth and seventh intercostal spaces led obliquely from the external abscess into the cavity of the pleura. There was also an abscess behind the sternum, opposite the fifth costal cartilage, which, however, had no communication with the pleura. No connexion could be found between the right pleural cavity and the bronchi, but the bronchial mucous membrane everywhere in the right lung was much inflamed. The left lung was free from disease, except that it was slightly emphysematous in front, and there were some recent pleural adhesions at the base. The heart and other organs were healthy, but there was recent peritonitis, and turbid serum in the peritoneal cavity.

WAR EXPERIENCES FROM THE ROUMANIAN SIDE.

Having lately returned from the seat of war, where I was engaged in the service of the British National Aid Society, a short account from me of the Roumanian ambulances, and the transport of wounded, may not be uninteresting to your readers.

On the morning of December 14, I started from Grivitza, in company with General D'Avila and Surgeon-Major Fraser, to visit the town and hospitals of Plevna. A half-hours drive on a well-made road brought us to our destination, where we found saddle-horses awaiting us, for to take a carriage through the bye-streets of Plevna is almost an impossibility. Plevna as a town needs little description from me; suffice it to say that its streets are narrow, crooked, ill-paved, and filthy in the extreme, and a sickly smell seemed to pervade everything. As we rode along I noticed that most of the houses had a large white cross chalked or painted on the doors and windows, denoting the abode of the "Christian" Bulgarian. We met but few people; here and there an idle Russian soldier, or a Bulgarian with his ox-cart loaded with army stores. As we turned into less frequented streets we saw bodies of Turks who had succumbed to the hardships of the siege, lying dead on the pavement. The disgusting spectacle seemed to affect people very little, the inhabitants apparently being used to that sort of thing. We at length drew rein before Hospital No. 1—a miserable two-storeyed building with a small yard in front, which was disgustingly filthy, and smelt most offensively; a dead body lay in the doorway. The wards, if such they could be called, were full of Turks, some of whom had been wounded in the sortie of the 10th. There were many amputation cases; the wounds of some were not dressed, and had not been so for some days previously. I noticed one case of amputation at the upper third of the arm, in which the discharge from the wound was so great that the mattress on which the poor fellow lay was thoroughly saturated. He told us that he thought the surgeons had done their duty towards him, and that his only wish now was "to be with Allah"—no doubt it was soon gratified. As we were leaving the hospital the Turkish surgeon who accompanied us showed us a soldier whom he evidently considered a curiosity. The man had undergone amputation of the forearm, had miraculously escaped pyæmia and gangrene, and was now perfectly well. This hospital contained about 100 men. The next place we visited had formerly been used as a school, and maps and diagrams still hung on the walls; it nevertheless formed a very tolerable hospital, the rooms being large and lofty, and not nearly so dirty as those previously described. There was no furniture whatever in the building, the men lying on the floor with not even a mattress under them; and the cases here seemed to be of a less serious nature than those in the other hospitals. Every ward presented much the same appearance; in the centre of the room was a small earthenware pot, full of burning wood, round which the miserable patients crowded for warmth. I was given to understand that these pots were not, as a rule, allowed by the Turkish surgeons; this, I think, was a mistake on their part, as the smoke acted as a very good disinfectant. We next visited one of the numerous mosques which were then being used as hospitals. The steps and porch were crowded with wounded. Two Russian surgeons, assisted by their orderlies, were busily engaged attending to the latest arrivals. Inside the building were about 400 sick and wounded men lying on the cold stone floor; it was very dark, and the atmosphere close and fetid. From the little light admitted by the half-open door I could see that the men were very much crowded together. The great want here was water, and, as the mosque was some distance from a fountain, I am afraid this was not too well attended to. We inspected several other buildings in the afternoon, but any description of them would be superfluous. In our tour of the hospitals we were introduced to several Turkish surgeons; they were nearly all foreigners—as a rule, Hungarian Jews or Greeks. Some talked French well, and I gathered from their remarks that the hospitals at first were well supplied with medical and surgical necessaries, but these did not hold out longer than November 25, from which date till December 10 they were entirely without disinfectants, quinine, or dressing materials. The sufferings of the wounded were extreme, and the mortality from gangrene and pyæmia alone enormous. During this time Osman Pasha frequently visited his unfortunate soldiers, but, of course, was perfectly powerless to ameliorate their distressing condition. I was unable to obtain any reliable information as to the number of wounded treated in Plevna, or as to the mortality during the siege.

About three miles from the town of Plevna is the village of Grivitza, from which the celebrated redoubt takes its name. It is on the outskirts of this village that General D'Avila, the Medical Inspector of the Roumanian Army, has established Ambulance No. 1. This ambulance consists of about thirty tents, capable of containing ten men each, but in case of pressure many more patients can be accommodated in "bordée" huts, specially constructed for this purpose. At the time of our visit to Gravitza all the tents were full of wounded, principally Turks, who had lately arrived from Plevna; and they all received the kindest possible treatment at the hands of the General and his staff. Immediately on arrival each man received a glass of "rachu," a packet of tobacco, and some cigarette-papers, and as soon as possible a good basin of soup and some biscuit. We were informed by General D'Avila that on the night of the 10th a great number of Turkish wounded were fed on the field by means of the stores furnished by the English Red Cross Society. No Turkish wounded remained more than twenty-four hours in Grivitza, during which time every man received two dressings at the hands of the surgeons. At nine o'clock in the morning the wounded who had arrived the previous day started for Metchka, the second Roumanian ambulance. All those who could walk went on foot, whilst the more severe cases were conveyed in country "arabas" drawn by oxen, all the proper ambulance waggons being engaged in the transport of wounded from Plevna to Grivitza. These "arabas"

are very roughly constructed, and from the fact that their wheels are anything but round, and the roads, as a rule, very bad, the occupants get considerably jolted, and a six hours' ride in one of them is not by any means to be desired. About half-past three in the afternoon each convoy arrives at Metchka, where it is received by Colonel Fortuno. The men are comfortably lodged in tents, and the dressing of their wounds commences immediately; as soon as this is finished a substantial meal of soup or meat is served. The ambulance at Metchka seemed to be exceedingly well organised; everything was scrupulously clean, and in thorough order. In the centre of each tent a small hole was dug in the ground, in which a little straw was kept constantly smouldering; the smoke from this acted as a very thorough and not at all disagreeable disinfectant. We were told that the mortality at this station was surprisingly low, pyæmia being almost unknown, notwithstanding the great number of wounded received. The next station beyond Metchka is Moslem Silo, prettily situated in the valley of the Osma; it is under the entire charge of the surgeons of the Roumanian Red Cross Society. The arrangements here were by no means so good as at Metchka or Grivitza; the supply of tents was insufficient, and the management far from what it should have been. The road from here to Nicopolis is extremely difficult, and very trying to man and beast; after passing Nicopolis the Danube is crossed by means of the bridge of boats, and in an hour's time Turnu Magurelle is reached. Turnu Magurelle may be described as a town of hospitals. After the news of the fall of Plevna every empty house and a great many large granaries were prepared for the reception of wounded, and in three days' time every place was full. Snow by this time lay a foot deep, and the cold was intense, which added greatly to the sufferings fo both wounded and prisoners. The arrangements, both sanitary and otherwise, in nearly all the hospitals here were bad. The wards were very crowded, which, under the circumstances, was excusable; but in many cases not even ordinary precautions were taken to guard against pyæmia and contagion. I found those wounded made best progress who were lodged in the barns and granaries on the outskirts of the village. These buildings, being spacious and lofty, answered their purpose admirably, and "through" ventilation could nearly always be obtained. About half a mile on the Giurgevo road, is situated the second ambulance of the Roumanian Red Cross Society; it consists of three large "barraques" each twenty-four metres long by eight broad, and constructed of "wattle" work; two of these buildings are used as hospitals, and contain fifty beds apiece, whilst the third is fitted up with sleeping apartments and a dining-room for the use of the staff. To this ambulance were attached Surgeons Fulford and Davies, who were most assiduous in their attentions to the wounded, whether Turks, Russians, or Roumanians, and by their skill and practical knowledge fully upheld the high prestige of English surgery. I should trespass on your space too much were I to write more, so for the present we will leave the convoy at Turnu Magurelle. "Croix Rouge."

The Prevention of Abscess of the Breast.—Dr. Sawyer, of Chicago, writes:—"Dr. Jones, of this city, told me that in a case in which the breast threatened suppuration he thought the affected glands had not been entirely emptied. He then sought for an orifice in the nipple which corresponded to the affected side, and passing a small probe into the duct, overcame the obstacle. Subsequent nursing caused the disappearance of the threatened abscess. Perhaps, with the aid of a lens to find the orifice, this original procedure of Dr. Jones might often be made useful."—*Boston Med. and Surg. Journal*, January 24.

Steevens's Hospital and Medical School, Dublin.—A number of changes have just been made in the staff, owing to the resignation of Dr. Henry Freke, Senior Physician to the Hospital, and Lecturer on Practice of Medicine in the School. Dr. Freke has been appointed a Consulting Physician, and Dr. T. W. Grimshaw becomes Senior Physician to the Hospital; Dr. Richard Bookey succeeds Dr. Grimshaw as Junior Physician. In the School, Dr. Grimshaw vacates the chair of Materia Medica, and becomes Professor of the Theory and Practice of Physic; Dr. R. Johnston becomes Lecturer on Materia Medica; while Dr. Matthew Fox has been appointed Lecturer on Botany.

FROM ABROAD.

The Paris Hospitals.

The *Progrès Médical* for March 2 publishes two interesting tables, giving a view of the estimated comparative expenses of the whole of the Paris hospitals for 1878, as well as of the number of the permanent *personnel* attached to them. The establishments are twenty-six in number, viz.:—Hôtel Dieu, Pitié, Charité, St. Antoine, Necker, Cochin, Beaujon, Lariboisière, Ménilmontant, St. Louis, Midi, Lourcine, Accouchement, Cliniques, Enfants Malades, Sainte Eugénie, Berck-sur-Mer, La Roche-Guyon, Maison de Santé, Enfants Assistés, Viellesse hommes, Viellesse femmes, Incurables, Ménages, La Rochefoucauld, and Sainte Périne. The sum total assigned amounts to 14,818,708 fr. for 17,066 beds, or an annual cost of 868 fr. 32c. per bed. The charge per bed varies in the different hospitals, that for the Hôtel Dieu amounting to 1249 fr., the Charité to 937 fr., the Cochin to 1740 fr., the Midi to 848 fr., and the Incurables to only 519 fr. The various items of expense which go to make up the totals are all specified, such as administration, medical services, nursing, drugs, washing, food, religious service, warming and lighting, etc. In the second table, giving an account of the *personnel*, it is stated that there are employed for the twenty-six establishments 160 administrateurs, 118 physicians and surgeons, 17 pharmaciens, 260 internes, 8 midwives, 37 aumoniers, 18 sacristains, 8 schoolmasters, 560 réligieuses surveillantes, and 2224 male nurses (*infirmiers*), to whom have to be added cooks, mechanics, stokers, gardeners, and various other workpeople, making up a total of 3797 permanent *employés*.

Rectal Alimentation.

Dr. Austin Flint read an interesting paper on this subject before the New York Academy of Medicine (*New York Med. Record*, January 19), in which he referred to several cases illustrative of the value of the procedure. One of these was an example of hæmatemesis, in which exhaustion was extreme, the patient being entirely sustained for three weeks by animal broth, which was tolerated in considerable quantities, occasional doses of laudanum being added to promote sleep. There was no evacuation from the bowels during this period, but a small spontaneous evacuation took place soon after returning to nutrition by the mouth—showing that the nutriment introduced by the bowel had been assimilated. In another case life was sustained one year and three months by rectal alimentation, and during five years the patient had almost entirely depended upon it. In another case life was maintained for nearly a year by this means. There are, indeed, sufficient clinical facts to prove that life may be indefinitely maintained in cases in which recovery is possible; that improvement may be secured in cases in which recovery cannot be reasonably expected; and that increase in the weight of the body can in this way be attained.

Rectal alimentation is indicated in obstruction of the œsophagus or of the orifices of the stomach, in gastric ulcer, hæmatemesis, acute gastritis, persistent irritability of the stomach, and in certain cases of typhoid fever, coma, etc. It may be supposed that the secreting glands, which exist in considerable numbers in the large intestines, may take on a vicarious action when the glands of the stomach and small intestine are not excited by the presence of ingesta. And it is possible that food placed in the rectum may excite secretion in the gastric and intestinal glands, that may pass into the large intestine. However this may be, the fact is established that digestion will take place in the rectum without the aid of agents which effect digestion out of the body. A variety of diet will probably suit best, and among the articles now used are meat solution, pancreatic emulsion, Liebig's extract, milk, eggs, and mutton and chicken broths. A pancreatic emulsion may be formed with from five to ten ounces of finely-chopped meat, fully a third of this weight of fresh pancreas of an ox, freed of fat, and about five ounces of water, the whole being reduced to the consistence of a thick soup. In the cases which had fallen under Dr. Flint's observation, the injections had not been carried above the rectum; but in cases where this becomes

irritable, a pint or a pint and a half of milk may be carried up into the colon and retained without difficulty. The average quantity of material to be employed is from three to six ounces, at intervals varying from three to six hours. If the injections are not tolerated, small quantities of some preparation of opium may be added. Preparatory to beginning the treatment, the bowels should be emptied by enemata, or by a laxative given by the mouth. As a substitute for drink, when required, simple water may be thrown into the bowel, and the surface of the body freely sponged. Alcohol and medicinal substances may be added to the nutritive injections, or they may be given separately, or injected hypodermically. At first the injections may not be retained, but if persisted in they are soon well tolerated. On the other hand, after having been well tolerated at first, after a time they cease to be retained. In this case it is as well to stop them for a short time. They should be used tepid, and firm pressure should be made over the anus with a sponge or towel until the desire to expel the injection has passed away. When these injections meet the requirements of the case, there should follow a sense of comfort and satisfaction, as after taking a meal in the ordinary way.

In the discussion which ensued, Dr. Fordyce Barker stated that his own personal experience furnished him with proof that rectal alimentation may be resorted to with the greatest possible propriety and advantage. Thus, in cases of paralysis of the muscles of deglutition from diphtheria, it may be the means of sustaining life until this paralysis disappeared. He referred to cases in which, during ten or twelve days, life had been wholly sustained by these injections, it soon becoming impossible to use the stomach-tube. He also adverted to a disease, of which he had seen five examples, which resembled, but still differed from, degeneration of the gastric tubules, there being in both affections loss of appetite, vomiting, emaciation, and rapid development of debility. But in all the cases in which degeneration of the gastric tubules had been found, the patients were advanced in life, while in this affection their ages have varied from thirty to forty-five. The vomiting is excessive, the quantity of fluid ejected being from two to five times greater then that swallowed; or even from three to six quarts may be vomited without anything having been taken into the stomach. The fluid ejected is pungent and acid to the taste, and exceedingly offensive. Rapid emaciation and depression of spirits ensue. There is no evidence of organic disease, no pain or tenderness, but simply this excessive regurgitation of fluid. Dr. Barker regards the affection as essentially and primarily a neurosis; and he has treated three cases successfully by rectal alimentation, with the addition of anodynes necessary for allaying irritation. When there has been irritability of the rectum, preventing the retention of the injection even when opium has been added, he has overcome it by passing the tube high up into the colon, so that the fluid might be thrown in above the rectum.

Dr. Peaslee (we regret that we must now say the late Dr. Peaslee) regarded the value of rectal alimentation as inestimable. He could not agree with those who thought that in some active inflammations the patient should abstain for a time from all alimentation—that he should starve awhile; for if, when he was in health, with a pulse of 65 or 70 and a temperature of 98° or 98·5°, he required food to repair waste of tissue, he required nourishment quite as much when his pulse was 110 or 120, and his temperature from 102° to 105°, the waste of tissue going on then much more rapidly than in health. He had acted on this principle during the past twenty-five years, and if the patient did not retain nourishment when taken by the mouth, no matter whether he had peritonitis or pneumonia or other inflammation, delay was not made beyond twenty-four hours in way of trial before attention was paid to sustaining him by the rectum. This rectal alimentation may also be used with propriety in persistent vomiting about the time of the menopause, in the treatment of the exhausting vomiting of pregnancy, as also in vomiting after ovariotomy and in connexion with fevers, etc. In any of these cases, if the patient had been twenty-four or forty-eight hours without the retention of nourishment taken by the mouth, alimentation by the rectum should be commenced. Dr. Peaslee had extensively employed the following preparation for this purpose:—Crush or grind a pound of beef-muscle fine, and add a pint of *cold* water. It should macerate for three-quarters of an hour, and then be raised gradually to the boiling-point, allowed to boil for *two minutes*, but no longer, and then strained. By this beef-tea alone he had sustained a woman for ten days. Since the introduction of Leube's pancreatic emulsion he had employed that preparation. He had thrown the injections high up into the intestine, but, as a rule, he had not found that they remained so well as when thrown into the rectum. The quantity used had been usually three or four ounces every four hours. He preferred using four ounces, repeated not quite so often. As to the *modus operandi*, Dr. Peaslee did not think that there was any digestion of the aliment so used. It is important to distinguish between digestion and absorption, the object here being to use nutriment that was already digested, already prepared for assimilation, which could at once be taken up by the absorbents. A reason for allowing the injections to remain in the rectum is because of its greater vascularity than other parts of the intestine. If opium is combined with these injections, absorption is not at all interfered with, while the process of digestion is almost at once arrested by opium.

Dr. A. H. Smith referred to cases of gastric ulcer in which nutrition had been successfully maintained by rectal alimentation for eleven, sixteen, and twenty-one days. It occurred to him that defibrinated blood might be employed with success. He did not regard Liebig's extract as a reliable article for maintaining nutrition; and was of opinion that the disrepute which beef-tea had fallen into had been greatly engendered by the unsuccessful use of the so-called highly concentrated extracts of meat.

Dr. Peaslee considered Liebig's extract as entirely worthless, and that the only reliable compound is Leube's emulsion, made after Hoffman's formula.

GENERAL CORRESPONDENCE.

AN IMPORTANT APPEAL TO THE PROFESSION.

LETTER FROM MR. G. E. STANGER.

[To the Editor of the Medical Times and Gazette.]

SIR,—I venture to make an appeal to the readers of the *Medical Times and Gazette* on a matter in which I feel sure of obtaining their hearty sympathy, as it is one which seriously affects the interests of the whole medical profession. You have probably, sir, not forgotten the case of the Apothecaries' Society *v.* Shepperley, which was argued in the Exchequer Court during part of two days last November. It was an appeal from a judgment in the Nottingham County Court, by which a leading chemist and druggist in this town was fined in the full penalty of £20 for counter-prescribing. Several counsel were engaged in the case—Sir Henry James leading for the appellant, and Mr. Day, Q.C., for the respondents; but no judgment was given in the matter, for after Sir Henry James had spoken for some hours, and before Mr. Day was heard, the Lord Chief Baron and Mr. Baron Cleasby, who were hearing the case, refused to give judgment, and ordered that a new trial should be had, on the ground of the great importance of the case, and because, in their opinion, the Court had not sufficient material before it fully to decide all the questions in dispute, especially the construction of Section 28 of the Apothecaries' Act—the Act under which the proceedings had been taken—a section which is somewhat ambiguously worded, and appears at first sight to exempt chemists and druggists from the penalties of the Act; and they directed that the case should be removed from the County Court to the High Court of Justice, in order, no doubt, that an opportunity of appealing in the last resort to the House of Lords might be afforded to either party. Now, at the present time the pleadings preparatory to such new trial are being delivered between the parties, but it is doubtful whether the plaintiffs will have sufficient funds at their disposal to justify them in going to trial, and it is quite possible that at the last moment the whole case will have to be abandoned. It is to prevent, if possible, so impotent a conclusion that I now venture to appeal to your readers. The nominal plaintiffs in the action are the Apothecaries' Society: that, as is well known, is rendered necessary by the Apothecaries' Act; and the Apothecaries' Society, when this case was commenced, gave it their sanction, and promised £50 towards the costs—a sum which, I need hardly say, has already been considerably exceeded. The real

plaintiffs are a society of medical men in this neighbourhood, of which I am president; and as our funds are not large, many of our members feel much reluctance to embark in a course of litigation which may very possibly not come to an end before the House of Lords has given its decision in the matter. If this were, as we at first thought it would be, merely a case in our own county court, or which would at most go no farther than the court for hearing appeals from inferior courts, we should consider it unworthy not to depend on our own resources; but now that it has become a matter of so much larger dimensions, and since we feel that it affects the interests of the profession and the public no less than those of our own society, we think we are justified in laying the circumstances before your readers, in order that they may have the opportunity of enabling a most important issue to be decided. The object of the trial, in short—or, at any rate, one of its objects—is to test in the most decisive and final manner the legality of counter-prescribing, and to define precisely the relative functions of chemists and druggists and medical men. That this object should be attained is to be desired both by medical men and by chemists and druggists; and as the case on the other side has been taken up by the Chemists' and Druggists' Association, so we hope that our side will receive the support of the general body of the medical profession. I shall be happy to supply any of your readers who may wish it with any further details.

Contributions or promises of support will be gladly received by myself, or by Dr. Hatherly, honorary secretary, Wellington-street, Nottingham. I am, &c.,

GEO. EATON STANGER.

North Circus-street, Nottingham, March 6.

HARVEY TERCENTENARY MEMORIAL FUND.

LETTER FROM MR. G. EASTES.

[To the Editor of the Medical Times and Gazette.]

SIR,—I am commissioned by the Executive Committee of the above fund to ask that you will be so good as to advocate in the columns of your influential journal the object for which this memorial fund has been established. About half the money (£1600) required for the erection of a statue of Harvey has been already subscribed; it is most desirable that the remainder should be forthcoming at once, as the three-hundredth anniversary of Harvey's birth will occur on April 1 in this present year. I enclose a statement of the object of the fund, and a list of subscribers up to the present date.

I am, &c., GEORGE EASTES, Hon. Sec.

69, Connaught-street, Hyde-park-square, W., March 13.

EXCISION OF PRIMARY CHANCRE.

LETTER FROM DR. R. NEALE.

[To the Editor of the Medical Times and Gazette.]

SIR,—In your paper of the 16th inst., reviewing the practice of Professor Auspitz of Vienna, it is stated that he followed Hueter's plan, recommended in 1867—viz., excision of the induration surrounding the primary chancre. If you refer to the "Medical Digest" you will see that Dr. McCraith, of Smyrna, in the *Medical Times and Gazette* for 1859, asserts that he met only one case of secondaries in ten years through adopting the plan of excising the primary sore. Whether this be Dr. McCraith's original idea I know not.

I am, &c., R. NEALE, M.D. Lond.

60, Boundary-road, St. John's-wood, N.W.

WOMEN'S BRAINS AND MEN'S BRAINS.

[To the Editor of the Medical Times and Gazette.]

SIR,—In Dr. Moxon's amusing paper, entitled "Men's Brains and Women's Brains, and the Convocation of the London University," I see he has revived the old fallacy that the difference in the mental calibre of men and women depends upon the male being heavier than the female brain. The paper is written so evidently under the impression that the recent action of the University of London is a good or a bad joke, that I am not sure whether it is intended to be taken seriously; but, under any circumstances, it seems strange that Dr. Moxon should have taken such a one-sided view of the subject. If weight of brain were the only factor, the intellect of the elephant should surpass that of man, inasmuch as the brain of an elephant is heavier than the brain of a man; but we must also take into consideration the relation of the weight of the brain to the weight of the body, and then we arrive at a true conclusion. Professor Marshall, in his "Outlines of Physiology," vol. i., page 296, says:—"The brain bears a general proportion to the weight of the body, and this probably explains the greater weight of the male brain; for in eighty-one males the proportion of the brain to the body was found to be as 1 to 36·5, and in eighty-two females very nearly the same, viz., as 1 to 36·46." Such being the case, Dr. Moxon's argument as to the effect of the extra quantity of the male brain must, I think, fall to the ground—more particularly as he seems to consider that the members of Convocation are, as a body, afflicted with a feminine spirit, spite of their masculine brains!

I am, &c., A LOVER OF FAIR PLAY.

THE STATUS OF FEMALE PRACTITIONERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—I think we ought all to lay down certain principles and lines of conduct with regard to the position of female practitioners of medicine.

As a first principle it seems to me clear that a man who is ill and maintains himself has a right to get relief from any person that he thinks can afford it, whether man or woman. Neither can I perceive that there is any abstract principle by which a woman should be hindered from practising if people choose to consult her. For my own part, I would, if sick, much rather be attended by some women than by some men that I wot of. It is the business of the State to protect society from incompetent and ignorant practitioners, and to lay down the rules and conditions on which women shall be allowed to practise openly for gain, and hold public appointments. At present the right to practise is conceded only to such persons as are licensed by certain existing colleges or other institutions. But the State has a right, if it chooses, to withdraw this privilege, and to set up an examination of its own which shall qualify for practice. There is no abstract reason why a man may not be qualified to practise surgery by a State examination as well as by attaining the membership of the Royal College of Surgeons. But if it seems better that the licence to practise should follow on attaining the membership of a college, let the women have a college of their own, with their own library, officers, dignitaries, and privileges. It surely would be more agreeable to an ambitious woman to be able to attain to the office of councillor or president of a woman's college than to be a mere tolerated member of a college originally designed for men.

I contend, therefore, that women, if they desire to practise medicine, ought to have schools, hospitals, societies, and colleges of their own, and not to intrude themselves into the colleges for men. If this is once permitted it will be flagrantly unjust to debar them from any office in the college which their ambition and acquirements may qualify them to attain. Dr. Walter Moxon has shown this so unanswerably that I need only refer to what he has said. There are one or two other consequences of such intrusion. For instance, there must be retiring rooms, cloak rooms, etc., and a female attendant for the service of lady members. Moreover, we shall find that these dear creatures will soon be claiming all sorts of public appointments which involve attendance on the female inmates of schools, asylums, workhouses, and every other conceivable institution. They will claim everything that is easy and agreeable in practice on the plea that women are the equals of men, and will shirk all the rough and dirty work because they are the weaker sex. In towns which afford a wealthy *elientèle* we shall have female poor-law officers to attend on the sick women and children; but I suspect they would leave desolate country districts and agricultural labourers of either sex to men. I am, &c., EMERITUS.

STUDENTS' REGISTRATION AT THE ROYAL COLLEGE OF SURGEONS.—Students, both metropolitan and provincial, will be glad to know that at a meeting of the Council of the Royal College of Surgeons, yesterday, the annual registration was abolished. Attendance at the College for this purpose will, therefore, no longer be necessary as in the case of the former, and provincial teachers will be spared the trouble of making "returns."

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

TUESDAY, MARCH 5.

CHARLES MURCHISON, M.D., LL.D., F.R.S., President, in the Chair.

DILATATION OF THE HEART AND AORTA IN SPINAL DISEASE.

DR. GOODHART showed this specimen from the body of a girl of seven, who had been admitted into hospital with a spinal abscess, and died suddenly under chloroform. The left ventricle of the heart was found half-full of an ante-mortem coagulum, and much dilated. The spinal column was angularly bent at the lower part of the dorsal region; and there the aorta was caught up and involved, so that it presented three or four folds, not being truly dilated. The organs generally were amyloid. Dr. Goodhart said that old cases of spinal disease often died of disease of the heart, and that generally of the right side. A few years ago Dr. Fagge had, however, published a case where there was ulcerative endocarditis of the valves in the same connexion; and had suggested strain of the valves, due to the interference with the aorta, as the cause of this. The same events had probably occurred in the present case, but this was unfortunately complicated with renal disease. Still it was evident that this possible termination should be considered in old standing cases of spinal disease.

Dr. POWELL asked whether there was any atheroma high up in the aorta; there seemed to be none at the part affected.

The PRESIDENT asked whether the child was known to have heart disease during life.

Dr. GOODHART replied—There was no atheroma of the aorta; but the child was only seven years old. She was not known to be the subject of heart disease until after death.

"LYMPH-SCROTUM."

Mr. COLES showed a specimen of "lymph-scrotum" from a patient in China, and gave an account of the pathology of the disease from the stage of discharge to that of growth. The condition was associated with the presence of filariæ in the blood; and Mr. Coles also described these organisms.

Mr. MOREANT BAKER asked what was the colour of the lymph that escaped from the cut vessels of the affected organ; whether it was milky, and if so, why?

Mr. COLES replied that the fluid was not milky, and that he could not account for its colour.

Sir JOSEPH FAYRER said that the pathology of "lymph-scrotum" was first correctly described by Dr. Vandyke Carter, in the year 1861. In 1865 he had himself described the same disease under the name of "nævoid elephantiasis," and suggested that it might be due to the presence of a nematode worm. Very soon after, filariæ were discovered in the fluids. The filariæ were of interest pathologically as well as surgically, for it was probable that cachectic malarial diseases would be found to be related to them. As to the characters of the "lymph," he had seen it of a specific gravity of 1020; of a variety of colours, but generally faintly pink; and coagulating rapidly. The abstraction of this fluid caused as much depression as if it had been blood. Lewis had suggested that the worms caused mechanical obstruction in the ducts. Whether this disease was identical with true elephantiasis or not (for the dilatation of the lymphatics might be insignificant) was doubtful. He had seen as much as sixteen ounces of fluid come from punctures in the scrotum in a few minutes. Removal of the growth was attended with relief of the symptoms.

The PRESIDENT asked whether filariæ had been found in non-nævoid elephantiasis.

Sir JOSEPH FAYRER replied that they had not, so far as he was aware, but their discovery might be expected. He had himself seen specimens of the blood-worms discovered by Dr. Sonsino, of Cairo, in some cases of hæmaturia.

Dr. COBBOLD said that Wucherer, of Bahia, first discovered the filaria in chyluria. Two years later, Lewis found it in the urine in chyluria; and two years afterwards, Dr. Cobbold himself found it in a case from Natal. Still later, Lewis made the discovery of the worm in the blood. But it was Bancroft, of Australia, that first saw the sexually-mature form. Dr. Bancroft, he understood, was now able to diagnose filarial disease in patients from the presence of small tumours in the armpits, face, etc. In one of his letters he had remarked that he should not be surprised if it were found that mosquitoes sucked up the filariæ. He had failed, however, to prove this; but Manson, of Amoy, had really and truly observed this, and had traced the various stages throughout. In one mosquito Manson had counted as many as 120 filariæ in the stomach. Within its host the filaria threw off the outer tunic and became transformed into a sausage-like body; and thence it passed into a third form. Having fed upon blood, the mosquitoes betook themselves to water, on the surface of which they deposited their eggs, living for five days only. By the end of this time the filariæ within them had reached the length of one-thirtieth of an inch. From the water they found their way into man. Dr. Cobbold urged the necessity of more precision in the description and nomenclature of worms in man; otherwise much confusion arose, and ungracious remarks were sometimes made.

Dr. CROCKER said that he had lately examined the blood for filariæ in a case of elephantiasis with dilated lymphatics, secondary to erysipelas, where the subject had never been abroad. No filariæ could be found.

Mr. COLES said that a very low microscopic power must be used in searching for the worm, which was one-thirtieth of an inch in length. (Mr. Coles' specimen was referred to the Morbid Growths Committee.—See *Medical Times and Gazette*, November 24, 1877; page 563.)

WORMS IN THE HEART AND ŒSOPHAGUS OF A DOG.

Mr. COLES also showed these specimens, brought by him from China. He stated that 15 per cent. of the natives of Amoy were believed to be infested with hæmatozoa, while many existed in the lower animals. The mature worms (*Filaria immitis*) resided in the right ventricle, and extended thence through the valves, surrounded by a grumous clot. The female worm was about eight to thirteen inches long; the male worm five to seven inches. Death occasionally occurred by tuberculosis. The other filaria was the *Filaria sanguinolenta*, and resided in the œsophagus and aorta, whence it made its way into the neighbouring structures, setting up pleurisy, spinal disease, etc.

Dr. COBBOLD said that the filaria immitis, which thus resided in the right ventricle, was not so harmless as it was represented to be. The hæmatozoon had really been observed as early as 1815. Here, again, precision was necessary. Dogs, for example, had swarms of filariæ in their blood, *e.g.*, filaria immitis and filaria sanguinolenta. Though it had been observed two centuries ago, the filaria sanguinolenta was first correctly described by Lewis.

Sir JOSEPH FAYRER confirmed Dr. Cobbold's last statement as to the valuable researches on the pathology of filaria sanguinolenta by Dr. Lewis. (See *Medical Times and Gazette*, November 10, 1877, page 514; and November 17, page 538.)

A RARE FORM OF PSORIASIS.

Mr. BALMANNO SQUIRE showed a drawing of a rare form of psoriasis. The disease involved, amongst other parts, the forehead, the eyebrows, and the eyelashes. The man had had ophthalmia tarsi before, and this had probably determined the appearance of the psoriasis in the same situation. The patient had had psoriasis at intervals from the age of fourteen.

NÆVUS COMPLICATED WITH MOLLUSCUM.

Mr. BALMANNO SQUIRE also showed a drawing of a congenital nævus on which molluscum had developed.

SPINAL CORD IN DIABETES.

Dr. SILVER showed a specimen of the vertebral column and spinal cord of a patient the subject of diabetes. The lad was aged nineteen, and badly developed. Very likely his illness dated back to 1876, but its nature was first determined by Dr. Bruce at the Brompton Hospital in November, 1877. When admitted into Charing-cross Hospital he was passing on an average from 140 to 160 ounces of urine daily, with a specific gravity of 1035 to 1040. He was much emaciated, weighing only 6 st. 4 lbs. His skin was dry and harsh, and his mouth clammy and sticky. After ascertaining the quantity of urine and sugar ordinarily passed, he was put on restricted diet. When admitted his temperature was low, but after a time it sank to the very unusual level of 95° Fahr., and remained nearly at this level for some days, when it suddenly rose, and ultimately reached 104° Fahr. He had no cough or expectoration, and up to the last there

were few well-marked physical signs in connexion with the lungs. He died somewhat suddenly, having been able to walk about almost to the last.

Dr. Irvine described the post-mortem appearances. The brain was fairly normal, save that the membranes were slightly opaque, and fluid lay beneath them. The island of Reil and left frontal convolutions were somewhat soft; the medulla oblongata healthy. In the spinal cord were two softened portions, one in the neck extending from the level of the third to the fifth cervical vertebræ, and again from the level of the seventh cervical to the second dorsal. In the latter portion the softening was farther advanced than in the higher portion. Outside the sheath of the cord, and just below this last point, was a well-marked blood-clot extending for some distance. There was also inside the spinal canal, but outside the membranes, towards its lower part, a quantity of a peculiar red-currant-jelly-looking substance. The spinal cord opposite the clot was congested. The lungs were much diseased. The right lung in its upper lobe was converted into one large cavity containing solid and fluid grumous material, having, however, no peculiar odour. The apex of the left lung contained many patches of caseous pneumonia. The remaining portions of both lungs were in various stages of pneumonic consolidation. On the pericardium and round the base of the heart were quantities of the gelatinous material already noticed. The pericardium contained a good deal of fluid. The liver was large, firm, hard, and dark in colour. The stomach and bowels were normal. The kidneys were slightly congested. The pancreas was hard and atrophied.

Dr. Silver pointed out that the main interest of the case lay in the blood-clot in the spinal canal and the softening of the cord. This softening occurred first at the spots where, on theoretical grounds, it might have been expected, inasmuch as by repeated experiments it had been shown that the special controlling nerve-fibres of the liver followed a course which would be intercepted by the softened tracts. The course followed by these fibres was from the medulla oblongata on the floor of the fourth ventricle by the spinal cord to the level of the vertebral artery. Along this vessel they passed to join the second and third cervical ganglia. After forming a ring round the subclavian artery (the annulus of Vieussens), they joined the first dorsal ganglion and thence passed downwards by the dorsal gangliated cord and splanchnics to the cœliac plexus and the liver. In some cases the fibres left the spinal cord lower down, about the level of the first and second dorsal vertebræ. The existence of such extensive lung disease with so little indication during life was also important. Nor was the peculiar temperature-chart shown less worthy of note.

Mr. Adams asked what the condition of the retina was in this case.

Dr. Silver replied that no examination had been made.

Dr. Frederick Taylor inquired whether the spinal cord had been examined microscopically.

Dr. Irvine replied that an examination would be made when the specimen was hardened.

Hypertrophic Lupus.

Mr. Alfred Sangster showed this specimen, illustrated with microscopical sections, casts, and drawings. A man of twenty-four, an engine-fitter, had had a sore on his buttock for fourteen years, which had crusted and bled in places; at the age of ten it was as large as a florin, and it had steadily grown since, in spite of treatment. For the last few years only it had been painful. A maternal aunt died of consumption. When first seen by Mr. Sangster in June last, the man presented a raised, somewhat circular, patch of diseased skin over the right tuberosity of the ischium, measuring four inches across, and rather less from above downwards. The growth stopped short of the anus. The entire centre of the area was hard to the touch, feeling something like bacon-rind; the surface was polished, of a livid-white, and marked with a superficial veal-like scarring. The margin was festooned, about an inch in width, and composed of deep livid-red tubercles; and these tubercles were either covered with scales of exfoliating epidermis, or crusted with dried secretion, or presenting a semi-fluctuating character to the touch. The tuberculated margin was very much higher and more steep on the left side than on the right, so that the tubercles in the former situation presented the appearance of condylomata. The sound skin around was congested for a short distance from the border. The case was diagnosed to be lupus, but iodide of potassium was given for a few weeks before undertaking an operation. No benefit was obtained, and the growth was at last excised by Mr. Hird. All the tissues of the integument were found to be involved, the growth being adherent to the gluteal fascia. The operation was successful; and the patient was now, three months after, free from signs of recurrence. The microscopical examination of the growth revealed excellent examples of the various stages of the lupoid process. A section from the growing edge showed the changes in the epidermal structures that are peculiar to them when they cover a chronically inflamed papillary body. The cells composing the different layers, in consequence of their rapid gemmation, did not pass through the conditions or attain that grade of development that belong to normal epidermal structures, whether as epidermis proper or modified in hairs, glands, etc. As a result, the boundaries between the different layers became irregular and ill-defined. The characteristic lupus changes were in the shape of clusters of small cells around the vessels. In one specimen a group of such cells close beneath the Malpighian layer was seen blending with the cells proliferated from the Malpighian layer, so that the outline of the latter was lost. The older theory, referring the point of origin of the lupoid growth to the proliferating rete, had given place to the more recent theory of the appearance of cells around bloodvessels; but Mr. Sangster contended that in the present specimens the cell-accumulations were manifestly derived from both sources. In other parts of the specimens the process could be seen greatly advanced. The vacuolated appearance of the rapidly growing cells of the Malpighian layer was referred by Mr. Sangster to the action of reagents. A portion of material from the centre of the lupus-patch presented the involution process of the lupoid growth, with development of connective tissue beneath. Cicatrisation was a clinical sign of the lupoid process; and although there was generally loss of tissue in consequence, yet occasionally a new hypertrophic connective-tissue was produced, and this was the condition in the present case.

Renal Calculus containing Indigo.

Dr. Ord showed a renal calculus containing indigo. He said that indigo was sometimes found in the urine unaltered by chemical agents; and all urine contained a material that yielded indigo-blue. But indigo-blue had never hitherto been found in calculi. The specimen was sent to Dr. Ord by Dr. Bloxam with the kidneys; and was found in the pelvis of the right kidney, the left being sarcomatous, and containing a calculus of carbonate and phosphate of lime. The calculus containing indigo was partly of a dark-dirty-brown colour, and partly crusted with a blackish-blue matter which coloured paper blue. When heated, the calculus gave off a sooty smell, like that of burning indigo, a great part of it disappearing as smoke. Examining the powder, Dr. Ord found that the blue portion gave a blue solution with hydrochloric acid; that when heated in a test-tube to a degree below redness, it gave off a bulky vapour resembling iodine vapour, which deposited crystals on a cool surface; and that the crystals so deposited were characteristic, being elongated six-sided tablets with pointed ends. Powdered and rubbed up with strong sulphuric acid, the substance yielded a blue solution, and this, when diluted and filtered, furnished a beautiful blue fluid. Spectroscopically examined, this fluid stopped the yellow by a defined band, the centre of which corresponded to the sodium-line. On all this evidence Dr. Ord considered the substance to be true indigo. The next question was—How came indigo to appear in a calculus? Was it from the food? Many plants yielded a juice which, on fermentation, gave indigo-blue; but there had been nothing peculiar in this man's food. Carbolic acid, again, had been supposed to form indigo; and this man had taken a considerable quantity of creasote before his death. But Jaffé had shown that indigogen is formed in the urine of animals whose food is altogether non-vegetable, and had connected indigo in urine with indol in the body. Indol could be formed artificially from indigo; and it might be derived from albuminous matters. It occurred, *e.g.*, in fæces. The subcutaneous injection of indol in dogs increased the amount of indican, or indigogen, in the urine. Therefore, the two bodies were normally connected. Schunk had another idea—he had separated indican from indigo-yielding plants, and showed that, when it was subjected to acid, it

was decomposed into indigo-blue and indiglucine. Arguing from this, Schunk supposed that a similar body is formed in animals, and makes its appearance in the urine. Certain affections might be associated with the presence of indigo in the urine, such as colic; it also frequently appeared in cholera, and in suppuration, especially that connected with the urinary passages. Pus itself was greenish, and in the presence of ammoniacal decomposition indigo might be formed from it. In the present case this might have been the mode of origin of the calculus. There was no natural exit for the products of disease in the left kidney, on account of obstruction of the ureter; certain of these products might therefore have been absorbed into the blood, and excreted by the opposite kidney as indigo blue.

The PRESIDENT said that whatever might be the explanation offered of the mode of formation of the calculus, the Society had to congratulate Dr. Ord on the discovery of the first indigo-calculus on record.

Dr. THUDICHUM said that there was no question as to the substance being indigo. He had himself examined it, and confirmed all Dr. Ord's conclusions. Indigo-yielding urine might be perfectly colourless, as in cholera, where indigoferous substances were more abundant than in any other condition. He believed that Dr. Ord's theory of the mode of formation of the calculus in the present case was quite satisfactory until a better should be offered. Dr. Ord's discovery would direct more attention to substances that occurred in the body in very small quantity, but were none the less important on that account. Schunk's theory might be correct, but it was probable that the matter in the urine was not identical with the substance in indigoferous plants.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 8.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

UNILATERAL ATROPHY, WITH MUSCULAR SPASM (ATHETOSIS?)

DR. F. TAYLOR exhibited a woman aged twenty-two, a needlewoman, who had been for some years affected with violent tonic spasms of the muscles of the left arm and leg. The exact date of the commencement of the disease was uncertain; but it was probably in the later period of childhood. She then had some kind of febrile disorder, and during convalescence first noticed twitchings in the left biceps muscles. She suffered no inconvenience for some little time, but it gradually developed to its present condition. The muscles of the arm and shoulder on the left side were greatly hypertrophied, but the limb itself was shorter than its fellow, while the side of the chest was also smaller than the right side. Sitting or standing, she commonly held the left arm firmly to the side, the left fingers often grasping the other hand tightly. Any attempt to move the hand or arm was accompanied by violent contractions of the muscles of the whole arm, but of the extensors chiefly, so that the arm was fixed in a straight position; but the fingers were partly flexed, partly straightened. This extension was not brought about suddenly, but quite slowly and deliberately. The spasm continued as long as the arm remained extended. If, however, she attempted to flex the arm, the extensor muscles shortly relaxed, she brought the elbow to a right angle, and all the contractions subsided. The toes were drawn down towards the sole of the foot by a similar condition of the muscles of the posterior tibial region; and walking was in consequence very painful to her. The contractions themselves caused her much pain, constantly recurred, apparently spontaneously, and frequently woke her during the night. The muscles of the affected side responded to galvanism and faradisation, but required somewhat stronger currents than the healthy muscles. There was no anæsthesia. She had obtained some relief from the spasms under bromide of potassium and the application of the continuous current. Dr. Taylor said there was no doubt unilateral atrophy, which was probably due to a cerebral lesion, in early life, interfering with function, and so retarding growth. The more interesting question was as to the nature and connexions of the spasmodic movements. Comparing them with those noticed by Dr. Hammond in his cases of athetosis, Dr. Taylor observed that the spontaneous irregular movements of the fingers described in Dr. Hammond's first case were not present here; but that between the second case of athetosis and the present one there was a sufficiently close resemblance. If not admissible as a case of athetosis, it would have to be included under the wider head of spastic contracture.

The PRESIDENT asked if the spasm was *bonâ fide*.

Dr. TAYLOR thought so, especially having in mind a reference to a similar condition seen in young children, of which a case was recorded by Dr. Gowers.

Mr. BARWELL questioned whether the left side was atrophied, for if there was hypertrophy this might give rise to shortening. It was rare to see spasm and hypertrophy associated in young persons; generally there was wasting.

Mr. HULKE objected to the use of the word "contracture" as employed by Mr. Barwell. He thought it should be applied to permanent contraction without the possibility of extension. Mr. Barwell explained that it was in this sense he employed it.

LARGE ANEURISM OF THE LEFT SUBCLAVIAN AND AXILLARY ARTERY TREATED BY REST AND A VERY RESTRICTED DIET.

Mr. HULKE read the notes of this case. A French polisher, aged thirty-six, but much older in appearance, addicted to drink, after suffering from pains in the left shoulder and arm, supposed to be rheumatic, during two months, became aware of a swelling at the root of his neck on the left side, for which he went into King's College Hospital. Dissatisfied with what was there done for him, he left this hospital; and five months after the beginning of his illness entered the Middlesex Hospital, March 28, 1877. At this time he had a large aneurismal tumour filling the axilla, and implicating also the third, second, and presumably, to some extent, also the first part of the left subclavian artery; and he suffered great pain down the arm and over the shoulder-blade. He was kept in bed, and enjoined to keep perfectly still—not even to sit up or to move off the bed for any purpose—and he was put on a very limited, non-stimulating diet. This was followed by rapid mitigation of the pain, by decrease of the aneurism and its obstruction by clot. He was discharged for disorderly conduct in June, at which time the axillary portion of the sac had shrunken to the size of an acorn, and was quite impervious; and the cervical part was very small, and it felt very firm. It was thought that a slight pulsation of this part might be communicated. He afterwards entered Charing-cross Hospital, where Mr. Hulke learned doubts were entertained of the nature of the affection. This Mr. Hulke took to be confirmatory of the permanence of the consolidation and occurrence of a cure. The encouragement the case afforded for the trial of a modified Valsalva's method in aneurism, where the ordinary direct surgical methods were not applicable, induced Mr. Hulke to submit the case to the consideration of the Clinical Society.

The PRESIDENT said the great difficulty in these cases was to get the patient to submit to the treatment for a long enough period, and referred to the case of a woman who had been under his care, but who after receiving a certain measure of relief, refused to submit any longer, and left the hospital. Still he thought the plan a very good one. It had been tried in popliteal aneurism, but he had never employed it himself. He had, however, found other methods useful, insomuch that he had only once tied an artery for aneurism.

Mr. BARWELL said the case referred to was under the nominal care of his colleague Mr. Canton, and when in Charing-cross Hospital there was a solid doughy tumour, rising above the clavicle, uneven on the surface, and not pulsating except in transverse lines in the direction of certain superficial vessels. The patient was unsatisfactory, and left the hospital; after a time he returned, the tumour being then decidedly larger; finally, he had to be got rid of, and was lost sight of. He thought the tumour glandular or malignant, though there may have been an aneurism beneath it at one time.

Mr. GANT mentioned a case of subclavian aneurism which had been treated in various ways—by restricted diet, by bandaging, and by distal compression; but nothing did good. Finally, the vessel was tied on the cardiac side; but death resulted from secondary hæmorrhage.

Dr. SILVER said he had seen the case referred to in Mr. Hulke's paper whilst in Charing-cross Hospital. At the

time when he saw it, and without the history subsequently obtained, it could not have been called an aneurism. It was quite solid, and did not pulsate except in a transverse line, as indicated by Mr. Barwell. There was, however, deep-seated dulness in the upper part of the chest, extending downwards to about the level of the third rib in front, and reaching to the back of the chest. He thought that the case referred to by the President had also been at one time under his care. At all events, a woman having an aneurism similar to that described had been treated in the way mentioned by the President. After improving to a certain extent, she refused to submit any longer to the treatment, and subsequently became an inmate of St. Bartholomew's Hospital, stating that she had been dismissed as incurable, whereas she left of her own accord, being of that class of patients who will not submit to treatment after a measure of relief is obtained.

Mr. Warrington Haward mentioned a case of carotid aneurism, where for various reasons operation was undesirable, and which was treated by restricted diet. There was no great difficulty in getting the patient to keep to a limited diet, though some persons could not stand it. There was no solidification, but the tumour did not after a time pulsate so much. As soon, however, as ordinary diet and habits were resumed, there was a tendency for the pulsation to increase. He referred also to the case of a medical man, who carried out the treatment carefully. His greatest difficulty was the want of fluid. The pulsation of the aneurism diminished, but apparently no clot formed. The improvement seemed to depend on the rest alone; it soon disappeared on motion. Ultimately death ensued.

Dr. Powell asked whether any sphygmographic tracings had been obtained; they would have been useful in the diagnosis. He remarked on Mr. Hulke's plan of limiting the food but not the fluid; he thought it much more important to limit the fluid. The food, too, should be nitrogenous, as we must look for a permanent cure, and not to the mere formation of a clot. The deposit should be distinctly stratified. He had now under his care a case of aneurism of the aorta which he was treating with a free animal diet, but restricted fluids.

Mr. Maunder said it was somewhat venturesome for anyone who had not seen the patient whose case had just been related to express an opinion on the nature of the swelling. Personally, he accepted Mr. Hulke's view—that it was aneurismal,—and did not deem it necessary to think, with Mr. Barwell, that while there had been possibly an aneurism the existing tumour was malignant, simply because while growth persisted there was an absence of pulsation and of bruit. He had two cases in his mind's eye, of very large swellings of the popliteal region, in which, the history being unreliable, it was impossible to determine between aneurism and malignant disease. Amputation disclosed ruptured aneurism, the explanation being extravasation and coagulation of blood, which, being no longer circumscribed by the sac, ceased to pulsate.

Dr. Mahomed did not think the sphygmographic tracings would be of much use in such a case. The plan of getting a simultaneous tracing of the heart and of the pulse, as invented by Dr. Burdon-Sanderson, might be useful in indicating any retardation of the pulse-wave.

Dr. Barclay referred to a case of aneurism completely cured. The condition was supposed to be malignant at St. Bartholomew's. Ultimately the man died of phthisis in St. George's Hospital. Almost the whole of the right side of the chest was filled with an old clot. The other lung was riddled with vomicæ. In another case he had tried full diet, but restricted the amount of fluid. The patient did well, but had difficulty in digesting his food.

Dr. Irvine asked what benefits had been seen from the use of iodide of potassium. He had seen much benefit, and referred to the case of a carpenter who was doing fairly well under its use though continuing his trade. He had now been under notice for twelve months, and the iodide never failed to relieve any bad attack. He had seen marked advantage from its use too in other cases.

Mr. Morrant Baker had seen a case where, as in this, there may have been a gradual leakage, and a gradually increasing clot which did not pulsate. The patient in this case died from rupture into the pleura.

Dr. Andrews believed Tufnell's to be the best plan of treating these internal aneurisms. All had seen cases improving or stationary, but, except by this method, we never saw a complete cure. He had seen several. This was not so in all cases; in some there was even some risk in its use. Especially mental strength and vigour were required in the patients. He had seen two die—one from rupture, one (an old man) from an insidious pneumonia. The food should be scanty, but nutritious; the fluid limited. Patients submitted to the limited diet best if put on it at once.

Mr. Hulke was well pleased with the individual experience his paper had elicited, and the subsequent history of the patient was valuable. As to the diagnosis, he was quite certain of it. Sphygmographic tracings had been taken, but they could not be found. He did not limit the water from experience of other cases, but rather adopted Todd's plan. The remarks of both Mr. Maunder and Mr. Baker were apposite. The idea had crossed his own mind, but he was not certain. There was, however, no ecchymosis, and he had seen that in all cases of rupture. Pulsation may continue after rupture. The use of the iodide was not satisfactory.

The President suggested the benefit of freezing a portion of the water allowed.

LIVERPOOL MEDICAL INSTITUTION.

Thursday, Febeuary 14.

Dr. Leet showed a large sequestrum, comprising a great part of the rami and the angle of one side of the inferior maxilla, removed from a child who had suffered from extensive cancrum oris, with destruction of the greater part of the cheek. The patient had made a good recovery, but would require a plastic operation to remedy the resulting deformity of the soft parts.

Dr. Dickinson showed the aorta, radial and ulnar arteries from a man who had died in his ward at the Northern Hospital, from dyspnœa and exhaustion consequent upon the pressure of an aortic aneurism. No hæmorrhage and no gangrene had occurred in the case. The specimens showed a condition of extremely advanced and almost complete atheromatous degeneration of the arterial coats.

Mr. Paul exhibited a recent specimen, showing a cystiform expansion of the Fallopian tubes, from one of Dr. Glynn's patients, who had died in the Royal Infirmary of heart disease. The woman, thirty-two years of age, had never menstruated satisfactorily. She was married, but had no children. The specimen showed extreme anteflexion of the uterus, with resulting closure of the cervical canal. There was also, resulting from the anteflexion, obstruction of the orifices of the Fallopian tubes, leading to a cystiform dilatation of those canals, on squeezing which, fluid poured from them into the uterine cavity.

Dr. Glynn exhibited the lungs and trachea from a patient of his in the Royal Infirmary, in whom there was a clear history of syphilis. There was great contraction of the trachea and bronchi, due to development of cicatricial tissue, the result of extensive ulceration. There was no disease above the vocal cords. A few of the smaller bronchi were dilated in some parts, contracted in others. There was great deformity of the chest, the sternum being much depressed.

Dr. Caton showed a specimen, and read the notes of a "Case of Absence of the Inter-auricular Septum, occurring, without Cyanosis, in an Adult." A man aged forty was admitted into the Northern Hospital in December last, suffering from dyspnœa, œdema of the legs, and ascites. He was a powerfully-built sailor, who had enjoyed good health all his life; but, ten days before admission, had caught a severe cold, which brought on cough with profuse expectoration, and was followed, a week later, by dropsy. The man, on admission, was slightly cyanotic, cough and expectoration free; pulse 50, intermittent and unequal; temperature 100°; arteries rigid; cardiac dulness much enlarged; heart-sounds normal. The veins on the left side of the neck were enlarged and pulsating, filling from below. With rest and appropriate treatment the man improved so much as to be able to leave the hospital, but returned in consequence of a relapse about ten days after. Again he improved so much as to insist on returning to work, and left the hospital for the second time, six weeks after his first admission. Ten days later he was re-admitted, suffering from great dyspnœa and much cyanosed; crepitation and

râles were heard all over the chest. Next day, whilst getting out of bed, he suddenly fell down and died. A post-mortem examination showed the following condition of heart:—The pericardium was largely adherent, all the cavities greatly dilated, the pulmonary artery and its divisions unusually large, all the valves apparently normal. Scarcely any trace existed of a septum between the largely dilated auricles; a disc of cardboard three inches in diameter could be placed between the auricles without stretching the margin of the foramen ovale. The ductus arteriosus was closed. This case, in which the man's heart had practically only one auricle, and in which considerable admixture of arterial and venous blood must have taken place, is a good illustration (Dr. Caton said) of the law enunciated by Stillé, that such admixture does not necessarily give rise to cyanosis. This man, when in ordinary health, was quite free from cyanosis, and only when severe pulmonary complications were superadded did it make its appearance.

Mr. Paul then read a paper upon the subject of "Ether Administration," illustrated by statistics of results at the Liverpool Royal Infirmary. After referring to the discussion which took place before the Society some two years ago, upon Mr. Reginald Harrisou's paper concerning the relative advantages and disadvantages of ether and of chloroform as anæsthetics, he observed that the profession were in a better position now to form an opinion upon the subject from practical observation of the peculiarities and the results of ether-inhalation; and, inasmuch as deaths during the administration of chloroform were still of frequent occurrence, he thought it the duty of surgeons as much as possible to prefer the use of ether to that of chloroform. With regard to the question of deaths from chloroform, he remarked that, whether careless administration or an idiosyncrasy on the part of the unfortunate patient was the cause of death, the result was equally deplorable; and inasmuch as the number of administrators was not confined to a few men like Clover, but comprised a large mass of the profession, of varying experience, it was necessary to consider what might be the safest anæsthetic to be made use of by comparatively inexperienced administrators. He then touched upon the different objections which had been urged against the use of ether—viz., (1) the time necessary for the production of anæsthesia; (2) the large amount required; (3) the greater expense. At the Royal Infirmary a register had been kept (bearing upon these points) of a succession of 150 cases. It appeared that in these cases (1) the average time required for producing anæsthesia was five minutes; (2) the amount required varied, of course, with the duration of the operation, but the average in the cases recorded had been three ounces one drachm for operations taking twenty minutes. An ounce and a half or two ounces was required to produce anæsthesia, and about one ounce every ten minutes to keep it up. This led to point (3)—the cost; as to which, seeing that ether costs about 3d. per ounce, it was easy to see that the administration need not be attended with any great expense. He had observed that children, women, and old people take ether well, but that free drinkers are with difficulty brought under its influence. He pointed out that for some operations, such as on the abdominal viscera, ether is particularly valuable, as the after-vomiting is less than after chloroform. He observed upon the necessity of obtaining a very pure drug, as he was satisfied that the after-effects varied accordingly. He considered that the comparative absence of after-vomiting, and also the very slight amount of shouting which he had noticed during the earlier stages of etherisation, made the administration of ether in private practice much preferable to chloroform. He concluded with a brief reference to the different forms of inhalers, speaking especially in favour of Clover's apparatus for the administration of nitrous oxide gas followed by ether.

From the discussion which ensued it appeared that ether is fairly on its trial throughout Liverpool, although for many operations chloroform is still found preferable.

The coroners for the county of Limerick have held a meeting in that town, to consider their position in respect to the Grand Jury Bill now before Parliament, and to request the Government to place the coroners in Ireland on the same footing as those in England, with a fixed salary and a superannuation allowance. Similar steps are being taken by the coroners in other parts of Ireland.

NEW INVENTIONS AND IMPROVEMENTS.

ALLEN'S BRONCHITIC KETTLES.

Some time ago we drew attention to the admirable hot-air and vapour bath made by Messrs. Allen and Son, of 64, Marylebone-lane; and we now are glad to recommend to the notice of the profession the Bronchitic Kettles of the same manufacturers. The apparatus is simple and efficient; the steam generator being a closed and domed boiler, bearing on its upper part an elbow from which branches out the tube to convey the vapour in the requisite direction; underneath this elbow, within the boiler or generator, is placed a small receiver with a perforated top, and the steam passes through and becomes impregnated with any medicinal substances placed in the receiver; and on one side of the dome of the generator, near the top, is a brass screw, at which the generator is filled with water. The kettles are of two kinds: one is made for use over the fire; and the other with a stand and lamp, so that it can be placed on a table by the patient's bedside or in the middle of the room when the fireplace is so far from the bed that the kettle placed on the fire would be of little service as a bronchitic kettle. The kettles are strongly and extremely well made; and they are cheap. We have no doubt that they will be found very handy and of very good service in cases of severe bronchitis, of croup, of tracheotomy, or of any other cases where a humid atmosphere is desirable.

SEABURY AND JOHNSON'S MEDICINAL PLASTERS.

We have received from Messrs. Seabury and Johnson, of Platt-street, New York, and 28, Red Lion-square, Holborn, some examples of their medicinal plasters, which seem to be well worthy of a trial. The peculiarity of their manufacture consists in the employment of purified indiarubber as the vehicle or base of the plaster; and the special advantages claimed for them are "perfect pliability" in any temperature, "adhesion without heat or moisture," and "the preservative character of an indiarubber combination." Many of them are also "poroused"—*i.e.*, made with small round holes in them; and it is said that the natural moisture from the skin being by this means allowed to escape, the plasters do not move or slide from the part upon which they are first applied, as ordinary plasters are so apt to do, and that consequently an increased and more perfect local action is obtained from the incorporated drug or extract. We are informed that these plasters obtained the highest award for medicinal and surgical plasters at the late Centennial Exhibition, Philadelphia. Every kind of plaster can be obtained made in this special way.

HAY'S GINGER-BEER.

Mr. W. Hay, of Regent's-terrace, Hull, whose soda, potass, lithia, and other aërated waters we have once already noticed as being of unusual excellence, has sent us some ginger-beer of improved manufacture. Mr. Hay has succeeded in obtaining an essence of ginger which is so free from resinous matter that it forms a transparent solution with water in all proportions. The ginger-beer made with it is consequently clear and transparent, while it has the aroma and flavour of the ginger, and is very pleasing to the palate. It is a very good ginger-beer, and we notice it now, as it is by no means only in hot weather that ginger-beer and other aërated waters are pleasant and desirable beverages. The "concentrated, purified essence of ginger" made by Mr. Hay is a pure, elegant preparation, and will be found very useful.

BELLTHAL NATURAL MINERAL WATER.

Yet another, and happily selected, mineral water has been added, by the Bellthal Brunnen Company, of 21, Mark-lane, to our already long list of table-waters. The Bellthal springs are situated in a rich valley of the Moselle, about two miles and a half from Coblenz, at a height of 400 feet above the level of the sea, and 100 feet above the Moselle, in a volcanic district, and the water has always enjoyed great repute for dietetic and medicinal purposes. The water is said to preserve at the springs a remarkably even temperature of about 51° Fahr., even when the temperature of the air is as high as 80°. Analysis of the water shows that it holds

in solution considerable quantities of soda and potash salts, some lime, and magnesia salts, a very small quantity of iron, and salts of some other alkalies; it contains a very large quantity of free carbonic acid gas; and is reported as being remarkably free from organic contamination. It is certainly a beautifully clear, bright, sparkling water, of a very refreshing, pleasant taste, and blends well with light wines. It is likely, we think, to take high rank among table and dietetic waters.

NIGRINE, A JET BLACK MARKING-INK.

Mr. W. Mather, of Farringdon-road, E.C., has favoured us with a sample of a new marking-ink, to which he has given the name "Nigrine." A good, handy, durable marking-ink was much needed, and it appears to us that Mr. Mather has succeeded in supplying the want. No preparation is needed before using, and no heat after writing with it; it is of a deep jet-black colour, and it may be used with a steel or quill pen, with blocks, or with a stencil-plate. Mr. Mather claims for it that it cannot be effaced by a solution of caustic alkalies, of bleaching powder, or of cyanide of potassium; and, so far as we have been able to test it with such solutions, our experience confirms that statement. It is a really good and very convenient marking-ink.

FAMILY VASELINE TOILET SOAP.

Vaseline is rapidly and very deservedly winning its way into popular use as an emollient and protective for chafed, chilled, burnt, or otherwise inflamed skin; and, as a consequence of its repute and real value, various preparations and combinations of it are being produced for the toilet-table. Among these is the Vaseline Soap of Messrs. Colgate and Co., of New York; and it may be recommended as a useful, agreeable, bland soap, pleasant to use, and pleasantly scented and tinted.

MEDICAL NEWS.

Apothecaries' Hall, London.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 7:—

Hope, William More, Piccadilly.
Nickolds, William Stephen, Shepherd's-bush.
Ross, Richard Alexander, Brighton.
Stuart, Henry Ogilvy, Woolwich.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Fenton, Frederick Enos, St. Mary's Hospital.
Hall, Thomas Lambert, Birmingham.
Oswald, Robert James William, Charing-cross Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Blomfield, Arthur G., M.R.C.S., L.S.A.—House-Surgeon and Secretary to the West Norfolk and Lynn Hospital.

Little, William, M.D., M.R.C.S. Eng.—Honorary Surgeon to the Royal Southern Hospital, Liverpool, *vice* John Nottingham, F.R.C.S., Senior Surgeon, resigned.

Norton, A. Tebenbe, F.R.C.S. (exam.)—Surgeon to St. Mary's Hospital.

Ransford, T. D., F.R.C.S.—Honorary Surgeon to the Royal Southern Hospital, Liverpool, *vice* T. G. Wollaston, M.D., resigned.

Walton, Haynes, F.R.C.S. (exam.)—Senior Surgeon to St. Mary's Hospital, *vice* Mr. Spencer Smith, retired.

NAVAL, MILITARY, &c., APPOINTMENTS.

Admiralty.—In accordance with the provisions of her Majesty's order in Council of February 24, 1875, Inspector-General of Hospitals and Fleets Robert Pottinger has been placed on the retired list.

War Office, Pall-mall.—Medical Department.—To be Surgeons under the Royal Warrant of April 28, 1876:—William Keays, gent., Percy Gordon Radstock Young, gent., Freeman Wills Crofts, M.B., Robert Talbot Beamish, M.D., Walter Augustus Parker, gent., Alfred Pierce Green, gent., Arthur Charles James Rudd Lundy, M.B., James Anderson, M.B., James Pedlow, M.D., Jules Isham Routh, gent., John Mulrenan, M.D., Henry Grier, gent., Henry James M'Laughlin, M.B., Edward Richard Power, M.B., Hugh Latimer Donovan, M.D., Nicholas Leader, gent., James Tidbury, M.D., Allan Andrew Lyle, gent., James Vincent Clinch, gent., John Vincent Joseph Conolly, M.B., Henry Arthur Herbert Charlton, gent., Henry Ernest Walter Barrington, M.B., Stucley Lucas O'Neill, gent., Charles Quarry, gent.

Militia Medical Department.—Surgeon-Major Thomas A. Vesey, M.D. (Royal South Down), resigns his commission.

BIRTHS.

Body.—On March 1, at Crediton, Devon, the wife of H. Martin Body, M.R.C.S., of a son.

Faseally.—On March 3, at Daventry, Northamptonshire, the wife of G. Bleeck Faskally, F.R.C.S. Edin., of a son.

Robertson.—On March 6, at 6, Arvan-place, Ardrossan, Ayrshire, the wife of R. Beedie Robertson, F.R.C.S.E., of a son.

Watson.—On March 10, at 7, Henrietta-street, Cavendish-square, the wife of W. Spencer Watson, F.R.C.S., prematurely of a son, who lived only a few hours.

MARRIAGES.

Barron—Smith.—On March 11, at All Saints', Knightsbridge, Thomas Walter Barron, B.A., M.B. Cantab., to Olive Mary, third daughter of T. Eustace Smith, Esq., M.P.

Fisher—Briscoe.—On January 31, at Dhubri, Assam, India, William Rogers Fisher, B.A., Assistant-Conservator of Forests, to Mary, eldest daughter of T. J. Briscoe, M.R.C.S. Eng., Civil Surgeon, of Kuch Behar.

Keed—Tracy.—On March 12, at St. John's, Notting-hill, William James Keed, of 10, Lansdowne-crescent, to Julia Haynes, third daughter of Samuel John Tracy, L.R.C.P., M.R.C.S., of 69, Ladbroke-grove, Notting-hill.

Moriarty—Irving.—On February 14, at St. Luke's Church, Dinapore, M. D. Moriarty, B.A., M.B., T.C.D., of the 3rd Regt. Bengal N.I., to Janet Elizabeth, daughter of James Irving, M.D., Officiating Surgeon-General to the Government of Bengal.

Watson—Hobson.—On March 5, at St. Paul's Episcopal Church, Edinburgh, Thomas Boswall Watson, M.B., C.M., of Liscard, Cheshire, to Mary Elizabeth, third daughter of P. Hobson, Esq., of Castle Lodge, Knaresbro'.

DEATHS.

Adam, Marion, wife of A. Mercer Adam, M.D., at Boston, Lincolnshire, on March 11, aged 48.

Lewis, William, M.D., M.R.C.S., at 21, Paddington-street, St. Marylebone, W., on March 10, aged 41.

Macenzie, William, F.R.C.S., formerly Demonstrator of Anatomy in the University of Edinburgh, at Ethelbert House, St. Peter's, Isle of Thanet, on March 9, in his 81st year.

Pasoal, William Laskins, L.S.A., at 32, Torrington-square, aged 61.

Stokoe, Mary Ann, wife of Richard Stokoe, M.D., at the Chesnuts, Beddington, on March 9, aged 46.

Watson, Georgine Mary Jane, the beloved wife of W. Spencer Watson, F.R.C.S., at 7, Henrietta-street, Cavendish-square, after a few days' illness, aged 36.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

Kent and Canterbury Hospital.—House-Surgeon. Candidates must be registered under the Medical Acts as legally qualified to practise medicine and surgery, unmarried, and not more than forty years of age. Applications, with testimonials, to the Secretary, on or before March 29. A copy of the laws regulating the duties of the House Surgeon may be had on application to the Secretary at the Hospital.

Manchester Royal Infirmary.—Resident Surgical Officer. Applicants must not be less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

Manchester Royal Infirmary.—Resident Medical Officer. Applicants must be not less than twenty-five years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

Manchester Royal Infirmary.—Resident Medical Officer for the Fever Hospital at Monsall. Applicants must be not less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

Manchester Royal Infirmary.—Resident Medical Officer of the Convalescent Hospital at Cheadle. Applicants must be not less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Caistor Union.—Mr. William Fawssett has resigned the Swinhope District; area 12,966; population 1101; salary £20 per annum.

Preston Union.—Mr. J. B. Hodgson has resigned the First District; area 5068; population 12,175; salary £110 per annum.

Southwell Union.—Mr. P. Whitington has resigned the Laxton District; area 6056; population 828; salary £9 per annum.

West Derby Union.—Mr. George Andrews has resigned the office of Medical Officer for the Workhouse.

APPOINTMENTS.

Bramley Union.—Charles Slesser, M.D. Aber., L.R.C.S. Edin., to the Bramley District.

Bridgwater.—Mr. Wm. W. Stoddart as Analyst for the Borough.

Westbury and Whorwellsdown Union.—Henry Edwards, M.R.C.S. Eng., L.S.A., to the Third District.

Wincanton Union.—Ernest O. Scallon, M.R.C.S. Eng., L.S.A., to the Milborne Port District.

PRESENTATION TO DR. MUTER.—On Wednesday, March 6, the present major and minor students of the South London School of Pharmacy met their director, Dr. Muter, at the conclusion of the chemical lecture, and presented him with an address expressing their respect for him as a teacher, and their warm feeling towards him personally. The address was accompanied with the gift of a magnificent silver and crystal épergne, most tastefully decorated with fruit and flowers. The presentation was to have been made on Dr. Muter's birthday (February 27), but owing to a delay in the production of the inscription, etc., it had to be deferred. Dr. Muter replied in a few feeling words, and the proceedings terminated with hearty cheers from the students, again and again repeated.

STRAPPING IN ACUTE PLEURITIS.—Dr. Gleason calls attention to a mode of treatment in lung affections advocated two or three years ago by Dr. F. T. Roberts, of University College Hospital—viz., the utility derivable in acute pleuritis from the practice of strapping the affected side in pleurisy, pleuro-pneumonia, etc., in order to limit motion and secure the greatest possible rest, when severe pain from respiration is a leading symptom. He employs strips of adhesive plaster one inch and a half wide, and stretching from spine to sternum, which are firmly applied as in fracture of the rib. They are kept on for several days, and renewed whenever they become loose. Immediate relief follows, and that in cases in which hypodermic injections and hot applications have failed to produce this effect. The rest secured to the affected side by the combined use of strapping and opium is very effectual; and used early and effectually this means may do much to prevent effusion. —*Boston Med. and Surg. Journal*, January 24.

PARIS FACULTÉ DE MÉDECINE.—The following courses of lectures, each three times a week, are announced for the summer session of the scholastic year 1877-78, commencing March 16:—1. Prof. Baillon—Medical Botany: special studies on plants employed in therapeutics. 2. Prof. Béclard—Physiology: first part, the circulation, the secretions, and the exhalations; second part, general physiology of the nervous system, and physiology of the organs of sense. 3. Prof. Charcot—Pathological Anatomy: tuberculosis in general, and in the particular organs; pathological anatomy of the encephalon. 4. Prof. Guyon—Surgical Pathology: diseases of the articulations in general, and of each of the joints; dislocations. 5. Prof. Rigal, *vice* Prof. Tardieu—Legal Medicine: poisoning and abortion. 6. Prof. Regnauld—Pharmacology and the Art of Prescribing: special study of the principal types of medicinal substances. 7. Prof. Charpentier, *vice* Prof. Pajot—Accouchements and the Diseases of Women and Children: difficult labours and their complications. 8. Prof. Vulpian—Experimental and Comparative Pathology: experimental pathology of the encephalon. 9. Prof. Peter—Medical Pathology: phthisis and diseases of the heart and large vessels. 10. Prof. Bouchardat—Hygiene: the excretions, poisons, morbid ferments, and moral hygiene. 11. Prof. Gubler—Therapeutics and Materia Medica: the channels of introduction and elimination of medicinal substances, etc.; the great therapeutical agents.—*Gaz. Méd.*, March 9.

FILTERS.—At a meeting of the Society of Engineers, held on Monday evening, March 4, in the Society's Hall, Victoria-street, Westminster, Mr. Robert P. Spice, President, in the chair, a paper was read by Mr. J. Walter Pearse, on "Water Purification, Sanitary and Industrial." The first record of a water-filter was in 1790, when Johanna Hempel employed porous vessels; and in the following year the ascending principle was first mentioned. Vegetable charcoal as a filtering medium was first named in 1802, animal charcoal in 1818, and solid blocks in 1834. Turning to the modern practice of filtration, the author observed that Atkin's system embodied the last-named principle, finely divided charcoal being agglomerated into porous blocks. The advantage of employing carbon in that form was that the impurities were arrested on the surface, and were easily removed. Major Crease, R.M.A., compressed loose animal charcoal in a granular state between plates, by means of a screw, the amount of compression being determined by the degree of impurity in the water to be filtered. Major Crease's system is adopted in the Arm. and Royal Navy. The chief characteristic of Mr. F. H, Danchell's filter was that the ascending principle was used so that impurities, instead of lodging on the top, fell back on to the bottom of the tank. The Sanitary Engineering and Ventilation Company use mineral carbon as a filtering medium, and cause their cistern filter to be cleansed by the inrush of the supply, and also by reversing the flow. In the Silicated Carbon Filter, mineral charcoal is used as the filtering medium, the main supply filter having three slabs with layers of coarse and fine granular carbon between. In Professor Bischoff's spongy iron filter, the iron exerts a powerful influence on the water, impregnating it with iron, which is afterwards oxidised and arrested, leaving the water pure. M. Le Tellier's hydrotrimetric purifier was described as removing the hardness from water by throwing down the lime, which was afterwards intercepted by filtration through charcoal.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

L.D.S.—We understand that the protest to which you refer, from the Association of Surgeons Practising Dental Surgery, in reference to the decision of the Council of the Royal College of Surgeons of England relating to the qualification of teachers, was presented to the Council on the 14th inst.

The Welsh Fasting-Girl.—The Welsh fasting-girl, who has for some time been exciting the inhabitants of Borth, in Cardiganshire, was last week, accompanied by her aunt, removed into the Infirmary at Aberystwith, where she is attended by Drs. Roberts, Jones, Gilbersten, and T. Harris. At home she was confined to her bed, and, according to her relatives, has eaten nothing, and has lived entirely without food. Notwithstanding this, she has not only grown out of her clothes she used to wear, but has actually increased in weight! The medical gentlemen, however, determined to stand "no nonsense," and accordingly administered to the fasting-girl a quantity of milk by force a few days since.

"*Groggers.*"—Two citizens of Aberdeen were recently charged before Sheriff Thomson with having carried on business as dealers in spirits on unlicensed premises. It appeared that the Excise authorities had found on the defendants' premises some casks containing a quantity of diluted spirit, together with a large number of empty spirit-casks. The prosecutors urged that the defendants made a practice of purchasing these casks for the purposes of "grogging them." To "grog" a cask is, it seems, to pour in a certain quantity of boiling water, which extracts whatever spirit may remain in the wood. Distillation is then employed until whatever proof spirit it contained has been run off. Fifteen gallons of proof spirit were shown to have been extracted, but there was no evidence as to the number of casks from which this quantity was procured. The defendants admitted they were "groggers" by trade, but submitted that when duty was paid upon the whiskey-casks on leaving the bonded warehouses, they had perfect freedom of action and control over their property. The Bench decided in opposition to this view; but notice of appeal was given, the contention of the defendants being that they had not been proved to be either "spirit dealers" or "spirit manufacturers."

Emulous.—Faraday was appointed assistant in the laboratory of the Royal Institution in 1813. The entry of his appointment stands in the minute-book of the managers under date of March 1, 1813, as follows:—"Sir Humphry Davy has the honour to inform the managers that he has found a person who is desirous to occupy the situation in the Institution lately filled by William Payne. His name is Michael Faraday. He is a youth of twenty-two years of age. As far as Sir H. Davy has been able to observe or ascertain, he appears well fitted for the situation. His habits seem good, his disposition active and cheerful, and his manner intelligent. He is willing to engage himself on the same terms as those given to Mr. Payne at the time of quitting the Institution" (these were 25s. a week with two rooms at the top of the house!).

COMMUNICATIONS have been received from—

Mr. W. E. POOLE, London; Mr. JOHN CHATTO, London; Dr. J. M. BRUCE, London; DR. THOS. BARLOW, London; Mr. T. M. STONE, London; Mr. JONATHAN HUTCHINSON, London; Mr. B. R. WHEATLEY, London; Dr. C. HANDFIELD JONES, London; Mr. G. E. STANGER, Nottingham; Messrs. J. RICHARDSON and Co., Leicester; THE REGISTRAR OF THE APOTHECARIES' HALL, London; THE SECRETARY OF QUEEN ADELAIDE'S INFIRMARY, London; Mr. GEORGE GASKOIN, London; Mr. H. C. FOX, London; THE HON. SECRETARY OF THE WEST KENT MEDICO-CHIRURGICAL SOCIETY; Dr. SPENCER CORBOLD, London; Mr. B. J. VERNON, London; Mr. J. T. W. BACOT, Seaton; "CROIX ROUGE," London; THE HON. SECRETARY OF THE ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY, London; THE SECRETARY OF THE STATISTICAL SOCIETY, London; Dr. TILBURY FOX, London; THE HON. SECRETARY OF THE QUEKETT MICROSCOPICAL SOCIETY, London; Dr. E. SPARKS, Mentone; THE SECRETARY OF THE ROYAL INSTITUTION, London; Mr. E. J. LUCK, London; Dr. JAMES E. POLLOCK, London; MRS. ISABEL THORNE, Sevenoaks; Dr. F. M. PIERCE, Manchester; Mr. SHIRLEY MURPHY, London; Mr. HOWARD MARSH, London; THE SECRETARY OF THE ROYAL HOSPITAL FOR DISEASES OF THE CHEST, City-road, London; THE SECRETARY OF THE HARVEIAN SOCIETY OF LONDON.

BOOKS AND PAMPHLETS RECEIVED—

An Atlas of Illustrations of Pathology, compiled for the New Sydenham Society, Fasciculus I.—The Hospital Saturday Fund Report, 1877—E. M. Dixon, B.Sc., Report on the Air of Glasgow—Charles J. Harris, M.R.C.S., Is our Physiology of the Large Intestine Correct, and is Constipation in certain cases, and in certain persons, as Injurious as is Generally Supposed?—T. R. Lewis, M.B., and D. D. Cunningham, M.B., Cholera in relation to certain Physical Phenomena—Report on the Cholera Epidemic of 1875-76 among the General Population of India—Surgeon-Major G. J. H. Evatt, M.D., Army Medical Organisation—The Natural History and Antiquities of Selborne, by the late Rev. Gilbert White, edited by Thomas Bell, F.R.S., F.L.S., F.G.S., two vols.—L. Duncan Bulkley, A.M., M.D., on the Recognition and Management of the Gouty State in Diseases of the Skin; On the so-called Eczema Marginatum of Hebra, as observed in America; Are Eczema and Psoriasis Local Diseases of the Skin, or are they Manifestations of Constitutional Disorders?

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Pantiles Papers—Guy's Hospital Gazette—Indian Medical Gazette—Dublin Journal of Medical Science—Night and Day.

APPOINTMENTS FOR THE WEEK.

March 16. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.

ROYAL INSTITUTION, 3 p.m. Rev. W. Houghton, "Gleanings from the Natural History of the Ancients."

18. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

MEDICAL SOCIETY OF LONDON, 8½ p.m. Mr. Squire, "Two Cases of Flat Vascular Nævus successfully treated by Repeated Linear Scarification." Dr. Sullivan, "On the Peculiar Function of the Spleen, and the Influence of Malaria upon it."

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Professor W. H. Flower, "On the Comparative Anatomy of Man."

19. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

PATHOLOGICAL SOCIETY, 8½ p.m. Meeting for the Exhibition of Specimens illustrating Diseases of the Lymphatic System, including Lymphadenoma and Leukæmia. Specimens will be shown by Dr. Wilks, Dr. Gowers, Dr. Greenfield, Dr. Goodhart, Mr. Nunn, Dr. R. Jones, Dr. Whipham, and others.

ROYAL INSTITUTION, 3 p.m. Prof. Garred, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

STATISTICAL SOCIETY, 7¾ p.m. Mr. C. Walford, "On the Famines of the World."

20. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Professor W. H. Flower, "On the Comparative Anatomy of Man."

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY, 8½ p.m. Ordinary Meeting.

21. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.

HARVEIAN SOCIETY, 8 p.m. Dr. Edis, "On Cases illustrating the Diagnosis of Abdominal Tumours." Dr. Ashburton Thompson, "Cases of Alleged Maternal Impressions."

ROYAL INSTITUTION, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

22. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

CLINICAL SOCIETY, 8½ p.m. Mr. Hutchinson, "Retinitis Hæmorrhagica: its Connexion with Gout, and probable Dependence upon Thrombosis of the Vein." Dr. Broadbent, (1) "Unusually Rapid Effusion of Bloody Fluid into the Pleural Cavity at the age of seventy-six—Paracentesis—Recovery"; (2) "Pleuritic Effusion—Sudden Death, without Paracentesis." Mr. Nunn, (1) "Electrolytic Treatment of Epulis"; (2) Plantar Bunions."

QUEKETT MICROSCOPICAL CLUB, 8 p.m. Ordinary Meeting.

ROYAL COLLEGE OF SURGEONS OF ENGLAND, 4 p.m. Professor W. H. Flower, "On the Comparative Anatomy of Man."

ROYAL INSTITUTION (Weekly Evening Meeting, 8 p.m.), 9 p.m. Prof. Tyndall, "Recent Experiments on Fog Signals."

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 9, 1878.

BIRTHS.

Births of Boys, 1388; Girls, 1303; Total, 2691.
Average of 10 corresponding years 1868-77, 2421·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	828	752	1580
Average of the ten years 1868-77	807·6	766·4	1574·0
Average corrected to increased population ...	...	...	1684
Deaths of people aged 80 and upwards ...	...	...	48

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	5	2	5	1	10	...	...	1	2
North ...	751729	14	10	13	4	21	...	6	1	2
Central ...	334369	...	3	1	...	1	...	1	1	...
East	639111	4	12	7	...	27	2	2	...	2
South	967692	11	19	9	2	43	4	8	2	1
Total	3254260	34	46	35	7	102	6	17	5	7

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·042 in.
Mean temperature	46·6°
Highest point of thermometer	57·3°
Lowest point of thermometer	34·0°
Mean dew-point temperature	37·9°
General direction of wind	S.W. & N.W.
Whole amount of rain in the week	0·00 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 9, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Mar. 9.	Deaths Registered during the week ending Mar. 9.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2691	1580	57·3	34·0	46·6	8·12	0·00	0·00
Brighton	103923	44·1	52	46	56·4	36·0	45·2	7·33	0·06	0·15
Portsmouth ...	129461	28·9	92	38	...	...	...	...	...	...
Norwich	84620	11·3	72	42	56·8	34·0	45·8	7·67	0·00	0·00
Plymouth	73599	52·8	45	45	60·0	40·0	48·1	8·95	0·02	0·05
Bristol	206419	46·4	157	87	58·1	36·6	46·4	8·00	0·11	0·28
Wolverhampton ...	74240	21·9	49	31	56·0	33·5	44·9	7·17	0·09	0·23
Birmingham ...	383117	45·6	339	218	...	...	...	...	...	...
Leicester	121473	38·0	110	86	57·0	33·5	45·4	7·44	0·08	0·20
Nottingham ...	165267	16·6	127	52	59·4	30·2	45·9	7·72	0·00	0·00
Liverpool	532681	102·2	371	253	52·8	36·0	45·8	7·67	0·24	0·61
Manchester ...	360514	84·0	268	197	...	...	...	...	...	...
Salford	170251	32·9	140	75	54·5	27·8	43·4	6·33	0·57	1·45
Oldham	107366	23·0	68	54	...	...	...	...	...	...
Bradford	185088	25·6	117	8	53·0	30·4	45·3	7·39	0·22	0·56
Leeds	304948	14·1	221	115	55·0	30·0	46·4	8·00	0·06	0·15
Sheffield	289537	14·7	211	127	57·0	30·0	45·5	7·50	0·21	0·53
Hull	143139	39·4	114	61	56·0	28·0	44·2	6·78	0·24	0·61
Sunderland ...	112459	34·0	89	31	58·0	31·0	47·1	8·39	0·08	0·20
Newcastle-on-Tyne	144570	26·8	115	61	...	...	...	...	...	...
Edinburgh	222371	53·1	146	131	53·2	33·5	44·7	7·06	0·41	1·04
Glasgow	566940	94·0	439	283	53·2	30·5	44·9	7·17	1·05	2·67
Dublin	314668	31·8	180	193	58·5	38·2	48·1	8·95	0·30	0·76
Total of 23 Townsin United Kingdom	8373953	37·9	6223	3833	60·0	27·8	45·8	7·67	0·21	0·53

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·16 in. The highest reading was 30·09 in. on Monday morning, and the lowest 29·71 in. on Thursday evening.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

LOCALISATION OF CEREBRAL DISEASE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.

LECTURE I.

MR. PRESIDENT AND GENTLEMEN,—In these lectures I propose to discuss a question which is at present attracting considerable attention in the world of physiology and medicine—viz., whether different regions of the cerebral hemispheres have different functions, and whether, therefore, the symptoms of cerebral disease vary with the locality of the lesion.

Two of the many causes of the obscurity and confusion connected with these questions only I will mention as being specially worthy of note.

1. It may be asserted without fear of contradiction that, as regards the nervous system more particularly, morbid anatomy is far from being co-extensive with pathology. We know, and are every day confronted with the fact, that the most widely abnormal deviations from healthy functional activity of the nerve-centres may be manifested, which leave no trace discoverable by ordinary dissection, or even by any of our most advanced methods of investigation. For the sake of mental satisfaction, we are constrained to speculate on the intimate molecular changes in the nerve-tissues which lie at the root of neuralgia, convulsions, and various other forms of functional nervous disorder; but they are at present matters only of speculation, and lie beyond the sphere of verification.

2. The organisation and conditions of activity of the brain are such that we are naturally inclined to believe that interference at any one point must necessarily tend to general functional disturbance. The loosening of a pin in a chronometer, it has been said, will derange the whole timekeeping mechanism; but we should not on that account ascribe timekeeping functions to this part exclusively. So, in all cases of cerebral disease, there is a continual source of doubt as to whether the effects are the direct consequences of the lesion, or merely the expression of general functional derangement.

And, when we examine the actual facts and records of cerebral disease, we find, in apparently similar conditions, so much diversity, that it seems almost impossible, from a clinical point of view, to separate accidental from essential; to distinguish between direct and indirect consequences; or to determine whether phenomena are related by causation or are mere cases of juxtaposition or coexistence. Nor do the facts of experimental physiology seem so consistent with themselves, or with the undoubted facts of clinical research, as to inspire us with unhesitating confidence as to their accuracy or as to their applicability to human pathology.

It is not to be wondered at, therefore, that many should still doubt and reserve their opinion on this question of the localisation of cerebral function and cerebral disease.

Before proceeding to consider the facts bearing on this question, I think it advisable, in view of certain arguments which have been advanced by Dr. Brown-Séquard and others, to state some of the principles which must guide our researches and determine our conclusions. There can be no doubt that the inductive method of agreement, on which we have mainly to rely in eliminating cause and effect in clinical medicine, is one which does not always succeed in differentiating between causation and coexistence, and is liable to be frustrated by plurality of causes. Though, therefore, we should have much positive evidence in favour of the localisation of a certain function in a certain region of the cerebral hemispheres, one clear case in which destruction of this region had caused no cessation or disorder of that function would be sufficient to overturn our conclusion.

But, on the other hand, we are not called upon, in the present state of pathology, to show organic alteration in the parts in which we localise certain functions, in all cases in which these functions are deranged. When such organic change has been demonstrated in the case of disordered function everywhere else in the body, it may fairly be demanded in the case of the nerve-centres; but we are at present far from having reached that point. We do not always discover organic disease in the heart when the circulation ceases, but we do not on that account doubt that stoppage of the heart was the proximate cause of this effect.

The doctrine of cerebral localisation does not assume, as Brown-Séquard would seem to imply, that the symptoms observed in connexion with a cerebral lesion are necessarily the result of derangement of function in the part immediately affected. Everyone admits direct and indirect results in cerebral disease. We have no right even to assume any causal relation at all, direct or indirect, between the phenomena, unless the lesion in question is constantly, or more frequently than chance would account for, associated with the same symptoms.

We should think it in the highest degree absurd if anyone were to describe a case of sudden death, in which the only discoverable morbid appearance was a boil on the neck, as a case of sudden death "seemingly caused" by a boil on the neck, and for the obvious reason that such a lesion is not usually followed by a fatal result. So, if we have abundant evidence to show that a certain part of the brain may be diseased without causing any motor paralysis whatever, it would be no less absurd to describe a case of facial paralysis in which some lesion of this region was the only discoverable anatomical change, as a case of facial paralysis "seemingly caused" by this lesion. Causation must not be invoked where the facts do not warrant anything beyond co-existence or fortuitous collocation. It is, however, undoubtedly true that if we admit, as we must do, that function may be disordered without discoverable organic change in the organ in which we localise this function, our difficulties as regards diagnosis are greatly multiplied. In medicine, thanks greatly to the aid of experimental physiology, argument from cause to effect is comparatively easy; but from effect to cause, from symptoms to disease, taxes all our skill, and too often baffles all our efforts.

We may have doubts as to our diagnosis of the nature and locality of a cerebral lesion, though we may have none as to the localisation of function. The two things are quite distinct; and we must not make our imperfections in the one a measure of the other, or imagine that the facts are equally confused with our notions respecting them.

In discussing the localisation of brain function, it is essential to bear in mind that the functions and diseases of the brain manifest themselves under two aspects—the psychological and the physiological: phenomena which appeal to two distinct methods of investigation, the subjective and the objective. There is no doubt that the state of our knowledge respecting the conditions affecting the one is vastly in advance of that of the other.

That the brain is the organ of the mind no one doubts; and that, when mental aberrations, of whatever nature, are manifested, the brain is diseased organically or functionally, we take as an axiom. That the brain is also necessary to sensory perception and voluntary motion is also universally admitted; and that the physiological and psychological are but different aspects of the same anatomical substrata, is the conclusion to which all modern research tends. Nevertheless, it appears, as far as our present methods of investigation have gone, that diseases of the brain do not affect these functions equally. Diseases which produce very obvious affections of motility and sensibility, cause no obvious mental disorder; and diseases capable of producing the most profound mental disturbances, do not necessarily affect the powers of motion and sensation. Beyond the great fact that the brain is the organ which is directly or indirectly diseased in insanity, we are yet in the most profound state of ignorance regarding the intimate pathology of this condition. Post-mortem examination reveals morbid conditions of vascularity, or various forms of degeneration, in the vessels, nerve-cells, neuroglia, etc.; but, with the exception, perhaps, of general paralysis of the insane, we have yet to find out whether there are any morbid appearances specially characteristic of special forms of mental derangement, or whether there is a definite relation between the locality of the lesion and the symptoms observed. We cannot even be sure whether many of the changes discovered are the cause or the result of the disease, or whether the two are the conjoint result of a common cause.

It is no disparagement of the many valuable researches which have been made into the pathology of insanity to say that we are only beginning to learn its rudiments until the various morbid appearances discoverable in the brains of the insane are translatable into their subjective signification. The morbid anatomy and pathology of insanity run in parallel lines, which never meet. A concrete or incorporate mental pathology distinct from mere speculation will only be furnished when we can give the subjective equivalents of morbid appearances, or, conversely, the anatomical substrata of subjective states. It will not, I think, be denied that we are yet a long way from having reached this desirable consummation of our researches.

From the fact that large tracts of the brain-cortex may be disorganised without causing any very evident mental disturbance, and from the further fact that any *one* part of the brain may be so destroyed with a like negative result, the conclusion has been drawn by Flourens and others that there is no localisation or differentiation of function, but that each part of the encephalon is a micrencephalon, capable of itself of performing all the functions pertaining to the whole. Supposing the conclusions at all justifiable *quâ* mind, it would be altogether unwarrantable to extend this, as has been done so frequently, to physiological function.

If we look at this matter a little more closely, we shall find that not merely extensive lesions in one hemisphere may be latent as regards mental symptoms, but even a whole hemisphere may be disorganised with a like negative result. If, however, *both* sides of the brain be disorganised, the annihilation of mind is complete. The logical deduction from these facts therefore is, not that there is no special localisation of function, but that, as far as the fundamental powers of mind are concerned—sensation, emotion, relation, and intellect—one hemisphere is sufficient.

To show that there is no localisation of mental function, it is necessary to demonstrate that the *same* parts may be destroyed in *both* hemispheres without producing mental disturbance. But has this ever been shown? I cannot find the faintest approach to evidence which would justify such a conclusion. That mental symptoms or mental deficiencies have not been recorded in cases of bilateral cerebral lesions is a negative statement of very little value. Unless a man becomes so demented as to neglect the ordinary wants of nature, or so furious, maniacal, or irrational as to require restraint, there are few engaged in the practice of medicine who think of inquiring narrowly into a patient's mental state; and, even if more attention were directed towards this subject, are we in possession of any means of accurately gauging the mental condition of an individual, so as to be certain that it has altogether escaped damage notwithstanding the presence of a cerebral lesion? I see little to justify and much to contradict such an assumption. A man may not be incapacitated for the ordinary duties of life; but that his mental powers are altogether unscathed even by a unilateral lesion I venture to question.

And, if it is difficult to test the mental condition in a human being, how much more difficult must it be in the case of the lower animals? And yet, from the way in which some have treated this question, one would be led to believe that nothing was more simple. Flourens' conclusions are, I think, answerable for many erroneous notions which have long dominated cerebral physiology and pathology. One great fallacy has been the assumption that the results of experiments on frogs, pigeons, and other animals low in the scale, are at once capable of application to man without qualification—an assumption which vitiates the conclusions of numerous physiologists of the present day. The very fact that there exist such patent differences between the effects of destruction of the cerebral hemispheres in different orders of animals ought, one would think, to inspire caution in the application to man of results obtained only by experiments on the brains of animals low down in the scale. Physiology should take a more comprehensive view, and in particular not neglect the facts of clinical medicine and human pathology.

These remarks are, I think, specially applicable to a statement made by Schiff, at the International Medical Congress at Geneva, to the effect that, as regards cerebral localisation, there was a great difference of opinion between physiologists and physicians: the former being opposed to it; the latter, with an implied sneer at the *practischer Arzt*, being its only supporters. While it is to be hoped that all physicians are physiologists, it is not the less desirable that physiologists should take the facts of clinical medicine and pathology into consideration. Frog-and-pigeon physiology has too often been the bane of clinical medicine, and tended to bring discredit on a method of investigation which, used properly, we must regard as the sheet-anchor of accurate biological and therapeutical research.

It has been taught since the time of Aëtius, and accepted almost as an axiom by physiologists and physicians, that, when paralysis results from lesion of the cerebral hemispheres, it occurs on the side opposite the lesion. This law has recently(a) been contested by Brown-Séquard, and a few words are necessary on this point.

Brown-Séquard disputes the validity of the law of cross-action of the cerebral hemispheres, on the authority of 200 cases of paralysis occurring with disease on the same side of the brain. Accepting for the time the accuracy of every one of these cases, what conclusion do they justify? The law is shown by them not to be a universal law, but a law admitting of exceptions; an approximate generalisation, instead of an absolute rule; but an approximate generalisation, the validity of which, in any particular instance, would have nine hundred and ninety-nine chances to one in its favour.

The practical depreciation of the rule would, therefore, be almost infinitesimal; and, if the new (Broca's, Lombard's) observations on cerebral thermometry are correct, this may be even further reduced.

That a lesion could be shown to have existed with paralysis on the same side, seems to have been established by Morgagni. In a case which he had carefully observed, and examined post-mortem, he was astonished to find paralysis apparently on the same side as the lesion; but, distrusting his recollection and the accuracy of his records, he asked of his students on which side the paralysis had existed. "All in general and each one in particular answered without hesitation that it was the right side (the side of the disease, which was separation of the corpus striatum from the cortex); and for this reason," said he, "it is clear to me that *sometimes* the paralysis occurs on the same side as the lesion."(b)

I do not here intend to enter on the question whether some apparent cases of direct paralysis may not be capable of explanation in accordance with the usual rule;(c) but, admitting the possibility of direct paralysis, I would offer a few observations on its mode of causation. In this relation, the recent researches of Pierret and of Flechsig have an important bearing. Flechsig, in his elaborate work, "Die Leitungsbahnen im Gehirn und Rückenmark," 1876, has investigated the course and relations of the several tracts of the brain and spinal cord, with special reference to their respective periods of development in the human fœtus, and to the course and limits of the secondary degeneration which occurs in consequence of cerebral and spinal lesions, according to the researches of Waller and Türck. This is a method which must be regarded as infinitely superior to mere anatomical or histological investigation of the healthy and completely developed cord.

Flechsig shows that the pyramids or pyramidal strands are developed always subsequently to the hemispheres, and from them, and are wanting in anencephalous fœtuses. Their connexions can be traced above into the central regions bounding the fissure of Rolando, and below with the postero-lateral, and partly with the internal aspect of the anterior columns of the spinal cord. These pyramidal strands are subject to very considerable variations, in respect to their decussation at the anterior-inferior part of the medulla oblongata, and as to the relative proportion of fibres which proceed down the postero-lateral and antero-internal columns respectively. As a rule, the most of the fibres of the pyramid descend in the postero-lateral column of the cord on the opposite side; the rest on the antero-internal of the same side. But occasionally the rule is reversed; and in one case there was no decussation at all. A similar case has recently been described by Pierret.(d)

The strands which are subject to this variation are those which, as we shall see, degenerate in consequence of lesion

(a) *Lancet*, January, 1876.
(b) Quoted from Bayle, "Maladies du Cerveau," page 321.
(c) This question has been ably discussed by Dr. E. H. Dickinson, "On the Phenomena of so-called Direct Paralysis" (*Liverpool and Manchester Medical and Surgical Reports*, 1878).
(d) Société de Biologie, January, 8, 1876.

of the motor centres, and the evidence is of the most satisfactory kind that they are the paths of *voluntary motor* impulses. This being so, we must regard paralysis on the same side as the cerebral lesion as a possible occurrence. How often it has actually happened is another question, which, however, I shall not here attempt to answer.

Various attempts have been made at different times to establish constant relations between lesions of certain cerebral regions and certain symptoms, bodily or mental. Thus, some have considered that the grey matter of the hemispheres was specially related to mental functions, and that the medullary fibres and basal ganglia were specially concerned in locomotion. They further adduce cases to prove that disease of the corpus striatum and adjoining medullary fibres, and anterior parts of the brain generally, caused paralysis limited to the leg; and that similar lesions of the optic thalamus and posterior parts of the brain caused paralysis limited to the arm; and that when the arm and leg were both affected, the lesion existed in the basal ganglia, more in the corpus striatum if the leg were specially affected, and more in the optic thalamus if the paralysis was greater in the arm. Influenced by the imaginary localisation of the sensory tracts in the posterior columns, and by Bell's demonstrations of the respective functions of the anterior and posterior roots of the spinal nerves, they regarded the cerebellum, to which they traced the posterior columns, as the seat of sensation. Bouillaud, from his experiments on animals, and from the facts of clinical research, arrived at the conclusion that lesions of the anterior lobes more particularly caused loss of speech, and in a certain measure gave his adhesion to the doctrines just mentioned, respecting the centres of movement of the arm and leg, though he admitted that these were not altogether satisfactory. But he arrived at one other important conclusion which is worthy of special mention. "Even," said he, "though we should admit that certain errors had been made as to the localisation of the seats of the lesion causing paralysis, yet it remains an established fact that there exist in the cerebrum several motor centres. The plurality of motor centres is, in fact, proved by the occurrence of limited paralysis, corresponding to a local alteration in the brain; for it is evident that if this organ did not contain different centres or conductors of motor impulses, it would be impossible to conceive how a limited lesion could produce a limited paralysis, leaving all other movements intact.

"I am well aware that the preceding propositions appear at variance with the results of experiments on animals. It is certain that after the ablation of the cerebral hemispheres an animal may walk, run, move its jaws, eyes, eyelids, etc.; and it is not less certain that an alteration of the cerebral hemisphere in man gives rise to a paralysis more or less complete of voluntary motion on the opposite side of the body. Can we refute the one set of facts by the other? No, certainly not; for facts equally positive are not susceptible of refutation. A time will come when new light will dispel the apparent contradiction which exists between them."(e)

Profound and philosophical remarks, which to-day are amply justified!

The investigations of succeeding years provided many cases so absolutely at variance with the localisation of the motor centres of the arm and leg, that Andral, who also admitted that there must be distinct motor centres, "since each limb may be separately convulsed or paralysed," earnestly deprecated premature and hasty generalisations as being highly prejudicial to "la belle doctrine" of the localisation of cerebral functions.(f)

The doctrine of cerebral localisation has in recent years assumed quite a new aspect, and differs so much from older speculations in the kind of evidence on which it rests, as to be essentially a new growth. Hughlings-Jackson made the first decided steps in this direction.

Hughlings-Jackson has repeatedly directed the attention of the profession to the study of convulsions of cerebral origin, and adduced many cases and arguments to show that they are dependent on irritation or discharging lesions of certain convolutions near, or functionally related to, the corpus striatum. As regards the exact localisation of these motor convolutions, he did not, however, underestimate the difficulties and uncertainties necessarily attaching to the rude experiments of disease. "The damage by disease is often coarse, ill-defined, and widespread."(g) But to Hughlings-Jackson belongs the credit of having first indicated the motor functions of certain regions and given a rational explanation of the phenomena of unilateral cerebral convulsions. For though, as Charcot shows, Bravais in 1827(h) described with great accuracy the phenomena of hemiplegic epilepsy, he did not see their true significance or pathology, in which, after all, the discovery lay, and in the light of which the value of his observations mainly consists.

Similar facts have also been noticed and commented on by Bright and Wilks. Indeed, Bright had formed very clear notions as to the pathology of unilateral convulsions, so far at least as their primary causation was concerned, and their relation to lesions of the opposite cerebral hemisphere. "My reason, then, for supposing that the epileptic attacks in this case depended rather on a local affection than on a more general state of cerebral circulation or excitement, was *the degree of consciousness which was observed to be retained during the fits;* for although we meet with great variety in this respect, yet in two cases which have occurred to me, the fact of the patient generally remaining conscious has been a remarkable feature, while in each the injury on which the fits depended was of a local rather than a constitutional or a general character."(i)

Wilks, agreeing with these observations, remarks: "For in these cases, the causes being definite and local, an irritation is set up in the corresponding ganglia beneath, and thus the occurrence of convulsions without loss of consciousness is explained."(k)

Hughlings-Jackson, however, instead of trying to account for the phenomena by transmission of some influence to distant motor regions, regarded certain convolutions as themselves motor, and capable of motor discharge by irritation. But certainly, except in the facts so explained, no other evidence could be adduced in support of the direct excitability of the grey matter of the cortex; for the facts of experimental physiology, taking them at their value, were *opposed* to the doctrine, inasmuch as it had been apparently conclusively demonstrated that none of the usual stimuli of nerves and nerve-centres, electricity included, were capable of exciting movements when applied directly to the surface of the brain.

This dogma was refuted in 1870 by the important experiments of Fritsch and Hitzig, who showed that, though electricity might be applied to *certain* regions of the cortex without producing movements, there were others excitation of which invariably produced movements of the opposite side; and that certain movements could uniformly be caused by excitation of certain definite regions. These facts have now been extended and verified by many experimenters on many animals, and even on man himself.

In discussing the signification of these facts, I wish to restrict my observations to those movements which result from excitation of a certain region of the brain—the region which we term motor—in order to avoid discussion at this stage of certain other movements which I regard as the indications of sensation.

It is not unreasonable to suppose that, on applying irritation to that which is the centre of centres—to which, in fact, all the rest of the body must be considered as peripherical—irritation of the grey matter, even though the irritation might not be confined to it, at least entered as one factor into the causation of the resulting phenomena. Every conceivable hypothesis has, however, been invented to degrade the grey matter of the hemispheres, and to exclude it absolutely from all share in the results; and every attempt has been made to discover somewhere else some organ or organs possessed of all those varied and complex forms of activity which we see excited by our stimulation.

One of the latest of the hypotheses which have been invented to account for the phenomena is that the movements which result from the application of electrical stimulation to the cortex are due to the irritation of delicate vaso-motor

(e) Bouillaud, "Traité de l'Encéphalite," page 279.
(f) Andral, "Clinique Medicale," tome v., page 569.

(g) "Clinical and Physical Researches on the Nervous System," page 6.
(h) "Récherches sur les Symptômes et le Traitement de l'Epilepsie Hémiplégique."
(i) *Guy's Hospital Reports*, series I., vol. i., page 39.
(k) *Guy's Hospital Reports*, 1866, page 79.

nerves which penetrate the brain-substance and descend with the vessels from the pia mater.

The functions ascribed to the brain-cells are—"besides their power of receiving, transforming, and conveying impressions, it is not unphilosophical to imagine that, having been impressed by a certain irritation, in a certain way, for producing a certain effect, their dynamic state, through nutrition, is shaped into a definite channel for the circumstance; hence the ability of a certain group of cells to produce a definite effect, always constant, under definite stimulation of whatever nature."(1)

As my main object, however, is to discuss cerebral localisation from a pathological point of view, I will not enter at length into the purely physiological side of the question, which I have elsewhere discussed ("Functions of the Brain"). I would, however, call your attention to some recent researches which seem to me to have effectually disposed of the main objections to the view that the phenomena are the result of excitation of the functional activity of the grey matter of the hemispheres. One objection is founded on the impossibility of localising the action of the electric current to the parts immediately in relation with the electrodes; and it is argued that the effects are in reality due to mere physical conduction to some underlying region or regions, which, however, those who employ this argument either will not or cannot exactly specify.

Similar objections were made to Duchenne's theory of localised muscular electrisation, and yet we know as a fact that we can by this method throw individual muscles into contraction with the greatest precision and certainty, notwithstanding the extrapolar conduction which pertains to all animal tissues. And it is the great characteristic of the reactions which ensue on the application of the electrodes to the cortex, that the results are uniform, definite, and predictable when the electrodes are on one region, while there is a sudden transition to another movement equally definite, equally constant, and equally predictable when the electrodes are shifted to a region in immediate proximity to the former. This is a remarkable fact, no longer disputed, which no mere physical conduction can account for, unless we admit a localisation of numerous distinct physical paths, which is but another aspect of localisation after all.

On the conduction theory, we should naturally expect that the nearer we go to the underlying ganglia and tracts, the more readily the effects should be called forth if it were a question of mere resistance of currents. But we find that electrisation of the island of Reil, which is nearest the basal ganglia, is absolutely negative; while electrisation of the more distant postero-parietal lobule by the same stimulus produces an immediate and definite movement. Conduction would seem to be put out of count by such facts. And we find, as Carville and Duret have shown, that the intervention of a fluid cyst between the cortex and the basal ganglia is quite sufficient to interpose a fatal obstacle to the propagation of functional stimulation, though not of electrical currents, just as a ligature round a nerve will stop neurility but not electricity.

But the fact on which most reliance is placed as proof of mere physical conduction is that, after removal of the grey matter of the cortex (stimulation of which is the supposed cause of the movements), the application of the electrodes to the cut medullary fasciculi produces exactly the same movement as before.

What, it is triumphantly asked, could more conclusively dispose of the view that the cortex is concerned in the results, seeing it may be removed without prejudice to them? Apparently, those who argue in this manner forget that there is such a thing as a plurality of causes or conditions. By parity of reasoning, we might disprove in succession the motor functions of the corpus striatum, crus cerebri, spinal cord, motor nerves, inasmuch as we can produce all the effects attributed to their activity by direct stimulation of the muscles themselves. But we do not say, when we faradise the distal end of a divided motor nerve, that the resulting muscular contraction is due to electrical conduction to the muscle, and not to neurility or excitation of the functional activity of the nerve. And it is surely not unreasonable to suppose that, after removal of the cortex, the results following application of the electrodes to the medullary fibres are due to the functional excitation of these fibres; and that our electrical stimulation is merely an artificial substitute for that which normally proceeds from the grey matter of the cortex. It is on this point that we have new experiments which, in my opinion, settle the question definitely.

(*To be continued.*)

(1) Dupuy, "Physiology of the Brain," page 13. New York, 1877.

ORIGINAL COMMUNICATIONS.

ON THE MANAGEMENT OF CHOREA.

By OCTAVIUS STURGES, M.D.,

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PART I.

CERTAIN facts in the history of chorea—such, for instance, as its rare fatality, limited duration, and usual mode of amendment—have already suggested to many that this disease, like some others, pursues a constant course which needs no more than rest and watching for its cure. In that belief the so-named "expectant treatment" has been adopted—a combination, that is, of rest and watching with patient waiting for the end. The results of this method have been published,(a) and claim to be at least as good as those which can be shown to follow from more active measures.

There is yet another plan, sanctioned, as I would maintain, by the same mode of reasoning, pushed to its legitimate conclusion, which has suggested the expectant method. It is, that chorea should not be treated at all, but that it should be *managed*; a judicious discipline, to be shortly described in detail, being substituted for bed and formal supervision. I shall try to adduce some short arguments to show why this method ought to succeed upon its merits, and some slight evidence that it does in fact so succeed.

I am speaking of chorea commonly so-called—of that agitation of the face and limbs seen most commonly in children, and especially in girls; which is not rhythmical, nor spasmodic, nor purely involuntary; which is commonly, though not always, free from mental disturbance; which, without affecting the health, is apt to disturb the rate and rhythm of the heart; and which, in the vast majority of instances, whether severe or slight, ultimately recovers. I demur to including in the same category either the rhythmical spasm of adults, or the multifarious spasmodic movements, hysterical and epileptiform, which it is the custom to describe by some compound word—as "hysterico-choreic," "epileptico-choreic," and so forth.(b)

It is quite true that the method I have to advocate is not always applicable in its integrity. Some cases are from the first, or, to speak accurately, from the time of our first seeing them, so severe that confinement to bed and some measures of restraint are essential. For these I believe there is nothing better, and am pretty sure there is nothing *proved* to be better, than this expectant method commended by Drs. Tuckwell and Gray, with certain precautions to be presently mentioned. But, speaking of the general run and rule of chorea, of nineteen cases out of twenty, or probably, if careful observation had been at hand, of a much larger proportion, the unruly movements are not violent at the very outset, although they may soon become so. In regard to these I have now to urge no treatment against *any* treatment; the use of means, carefully contrived and sedulously applied, to divert the child from its complaint, in place of formal medical interference of whatever kind.

To maintain such a contention it is necessary to show, first, that the nature of chorea suggests this method of dealing with it; and, secondly, that the application of the method is in fact successful. I propose to speak now of the former of these propositions, leaving the other for a second paper.

(a) "The Expectant Treatment of Chorea," by Drs. Tuckwell and Gray (*Lancet*, November 18, 1876).

(b) I am glad to find so eminent an authority as Professor Charcot distinguishing between rhythmical movement and ordinary chorea, defining the latter as "consisting in gesticulations which are not rhythmical, truly disorderly, and hardly describable—or which, at least, cannot be expressed in anything like a precise formula." "This," says Professor Charcot, "is chorea of the 'classic type,' or 'Sydenham's chorea.'" He proposes to call it "chorea minor." Yet inasmuch as it is, by his own admission, the "ordinary chorea," a very definite and very prevalent affection, it would seem obviously unjust so to degrade it. (See lecture on "Rhythmical Hysteric Chorea," *British Medical Journal*, February 16, 1878.)

And, first, I would maintain that the *relationship of chorea to hysteria is sufficiently close to warrant the application of similar remedies to both.*

It is unnecessary to repeat here what was urged last year in some lectures on the subject published in this journal. It may suffice to say that these two affections are often conjoined; that they are apt to be alike in cause and in sexual preference; that as the choreic girl approaches puberty her chorea blends more and more with hysteria, till it becomes wholly merged in it; that the child who has suffered attacks of chorea, passing into womanhood, often exchanges her liability for hysteria; that all hysterical girls are, to a certain extent, choreic, and during their fits markedly choreic; that with hysteria as with chorea (I do not say in an equal degree or by precisely the same expedients), the attention may be so withdrawn from self that both will intermit, as they do, for instance, in sleep. Now, no one doubts the efficacy in hysteria of a system of treatment which, by whatever means, diverts the patient from self-contemplation and declines to recognise her condition as one of substantial disease. No one doubts, I suppose, that it is by such means that hysteria is cured, as it is by the opposite of these that it is so commonly provoked and cultivated. It is not unreasonable to suppose, anteecedently at least, that a similar method might apply to chorea.

It may be urged, indeed, that, however intimate the relationship between chorea and hysteria, there is no actual *likeness* between them. The motor affection of children is often without any emotional disturbance. It is seen in great perfection in boys as well as in girls, and in both sexes it is its habit to appear long before the period of puberty. And, in fact, the affection which most nearly resembles our modern chorea (and there is some reason to believe that in its present shape and with its present limitation to children of a certain age it *is* modern) is that form of convulsion whence it derives its popular name of St. Vitus's dance. The convulsive affections of the middle ages—tarantism and other "dancing plagues,"—well known to us from the description of Hecker, were from time to time so prevalent as to disturb and terrify whole communities. The main feature of these epidemics consisted in some sort of gesticulatory muscular disorder—dancing, jumping, or grimacing,—which had at least this likeness to our St. Vitus's dance, that it was excited by mental emotion, had a preference for the female sex, and was to a certain degree within the reach of moral control.

Now, it is remarkable that every epidemic of the kind of which we have any account grew and spread out of material of its own providing. It was never that with the decline of the epidemic the terror subsided; it was always the converse of this. The epidemic disappeared as soon as it ceased to inspire the terror or attract the attention, which was one of its essential factors. In other words, the gesticulations and dancing (although in great measure involuntary) had the strength taken out of them when the popular tribute to their reality was withdrawn. So long as the priest's exorcism or pilgrimage to shrines was held to be necessary, so long, to the great annoyance of their victims, the muscular contortions flourished and spread; but they could not survive neglect. It will be seen from Hecker's account of these popular seizures that they did not decline from want of subjects, but from a change in the public sentiment. The patients who came latest were discredited. They were not impostors any more than the others, except so far as the knowledge that they would be so accounted tended to make them so. The same affection—that is to say, neither more nor less real than at first—had lost the necessary element of public sympathy.

The current of opinion changes, but men and women remain the same. There is ample evidence in all conscious convulsive seizures, in the experience of the present as much as in the dancing and jumping manias of the past, that for their perfect operation external support is necessary. Wanting this, the explosive violence of their discharge (to adopt the language of current pathology) is diminished. Thus, while the epidemic prevalence of such disorders, the example of others suffering, and the knowledge that bystanders are disturbed and impressed, combine to make the circumstances most favourable for their development; on the contrary, the knowledge that these particular symptoms will be recognised only to be discredited, and the observation that those who yield to them are neglected and despised, make the circumstances most favourable for their suppression.

It would be a very inaccurate conclusion from these undoubted facts that the dances of St. Vitus and St. John were voluntary exhibitions. It is as far from true that in hysteria the yielding or resisting is a personal matter within the power of the individual. In all alike it is the circumstances that control, operating far more powerfully indeed than any motive which the individual can bring to bear out of the feeble armoury of his own will.

No one questions, I say, the application of this principle to hysteria. Many may be disposed to doubt whether it extends to children or to chorea. It is quite true that children are not observant of the impression they produce upon others, nor attentive to their own sensations, in quite the same fashion or for quite the same reasons as their elders. Yet, after its own manner, the child is not indifferent either to its own symptoms or to the treatment they receive. The child with chorea finds its whole mode of life injuriously affected owing to the occurrence of limb movements which it is unable to restrain. These movements it observes to be the subject of particular attention. On this account, although in perfect health, and with the strong desire of childhood for free movement, it is subjected to the intolerable quiet and monotony of bed and the periodic visits of a doctor. Penalties like these, children very readily associate with the proper consequences of moral delinquency. In most nurseries bed is the only recognised place of punishment. The cause of such suffering is continually before the child's eyes, and cannot but present itself to his mind as a very real "possession," such as he is not expected to be able to quell by any power of his own. It would be a grave injustice to the sensitive minds of children beyond the period of infancy to assert that, with their strong aversion for bed and not love for doctors, such treatment can be without its moral effect, whether for good or ill.(c)

It will seem the more probable that some such effect should be produced when we come to consider the ages of the children most liable to chorea. What pathology has succeeded in accounting for the limitation of age in this affection?—a limitation strictly defined in saying that the favourite period for chorea begins when the child becomes observant, receptive, and prone to express its sensations by motional restlessness, and that it ends when this observation and intelligence becomes biassed by the progress of sexual development. The body-restlessness of childhood is then replaced by the emotional perturbations of commencing puberty. Why should minute embolism, or subacute inflammation of the cerebral ganglia, or arterial repletion be thus partial?

But, further, the ordinary course and progress of chorea, considered in connexion with the mental characteristics of its subjects, are sufficient to indicate the means by which it commonly recovers. This course and progress may be more fully defined, I think, than by saying simply that chorea gradually gets worse, and then as gradually gets better. It is possible, of course, that theories may here prevail to warp observation; yet, in very many instances, at all events, there is a period during which chorea developes, then a time of standstill (longer or shorter), and next a marked and sudden, although not always continuous, amendment. There is a period—that is to say, a day or an hour—at which we can say the chorea, although far from extinguished, is now got under. It will need further time to regain perfect and continuous steadiness, yet for the time it is clear that the affection is mastered. It is true that, notwithstanding this confidence, the disorder may return in its full force, yet the second recovery will be like the first—a sudden transition, namely, from a condition which gives anxiety, to one which is easily recognised as the prelude to recovery. Now, such a

(c) Many who distrust the hypothetical mode of argument in practical medicine will lose all patience in reading that choreic children *ought not* to get better by being kept in bed. There is nothing better known, they will say, than that these patients almost always do improve to a certain extent after a few days of such confinement in a hospital ward. Is it not for this very reason that careful observers of chorea will postpone their drugs until this first benefit from bed has had its full operation? I admit the fact, but demur to the conclusion. Children, as I believe—often, as I know (for I may leave hypothesis for the moment in favour of observation),—do not get better from being put to bed, but they get worse, for awhile, from being brought to hospital and tended and stared at by strangers. This injurious effect, however, is only temporary. The chorea gets better as the mind gets tranquil, and the children are soon as well as when at home. When this point is reached the supposed good of bed ceases.

course of events is very suggestive of the *help* the child derives from the first signs of returning self-command; very suggestive, as I think, at the same time, of the methods by means of which we may promote or retard a recovery which is in the main spontaneous. The child's endeavour to regain proper muscular order may be compared with the man's endeavour to attain some higher degree of muscular dexterity than he has yet reached, to throw a fly, or spin a plate, or maintain his balance on a tight rope. Such exceptional dexterity or alertness, whether it come early or late, is very suddenly perfected. Everybody must have observed, and most have experienced, this sudden "catching of a knack." And not only do we suddenly hit upon it; we may as suddenly miss it. It is well known that a failure or two is often for the time fatal to this kind of dexterity, and that those that practise it as a profession are never without a lurking misgiving on this account. Are not the relapses of chorea, or some of them, explicable on similar grounds?

But while the natural history of chorea would seem to show that our customary treatment may place the patient at a disadvantage by openly directing attention and medical remedies to his infirmity, it teaches as well that in the first stages of recovery there needs some extra attention on the patient's own part in order to maintain that muscular order which as yet is only partially regained. It is very common to find chorea lingering on for a considerable time because children are not willing to devote this attention. When so far recovered as to be steady under inspection, they will often still tumble about at their play, and be awkward in dressing and carrying. There is nothing whatever of incoordination or weakness about the limbs of these children—they will run and jump with the best; only in the excitement of play their legs and arms, which still require some little attention, are too completely forgotten.

In these and other ways yet to be mentioned the observation of chorea, as it seems to me, may be turned to account for its benefit. What is needed to that end is, not to check spasm—the books, I would maintain, are so far wrong,—it is to restore a due measure of muscular control. You may narcotise the patient, or paralyse his restless limbs, and by either means obtain a temporary stillness, which is but the rough counterfeit of that stability you have to seek. By persisting in such treatment it is possible, no doubt, either to mask the disorder until the time of its proper recovery, or to displace it by some general illness. But you do not so meet the real "indications" of treatment. Muscular stillness, no less than muscular consensus in voluntary movements, is not obtained by stilling spasm, but by developing the power of self-direction and order. Individuals attain to that power at various ages, in various degrees, and in the several groups of voluntary muscles in succession. Many never reach it at all, and none maintain it in perfection. In childhood, like the mind it so faithfully reflects, this muscular stability is necessarily imperfect and precarious. As a property (d) of the individual it is not gained by direct attention, but by the gradual growth of intelligence. Even when fairly attained, there are well-known ways of disturbing it. When made the object of notice, the child will become awkward and fidgetty, and often emotional as well. It is the same law, modified by the time of life, which makes the strong contrast between the grace of the Italian or Indian peasant-girl and the awkward attitudes of our own women of the same class when most anxious to attract, or the difference between a French soldier in uniform and the same soldier dressed out for a holiday. Muscular propriety is never so difficult to preserve as when care is taken about it with the knowledge that it is being overlooked, and the apprehension that failure will entail some kind of penalty.

The adoption of a formal and systematic treatment in the cure of chorea would seem a strange application of these well-recognised principles. Those who show themselves unsteady and disobedient under the easiest circumstances we would make steady and obedient in circumstances known to be more difficult; to the want of confidence and the failures of a particular limb we would add more want of confidence by openly distrusting it, and directing attention to its mistakes. That which promotes the disorder—which sometimes, indeed, has been its immediate cause—is also that which is to remove it. *Similia similibus curantur.*

On the other hand, the apparent neglect, yet actual discouragement, of over-movement or mis-movement; the avoidance of all tasks or duties which may cause the affected muscles to err, and of all notice or reprimand of such errors as must occur; the maintenance of equanimity, and devising such employment as will procure diversion without mental excitement or bodily fatigue,—these are measures which (quite independently of any dispute as to its pathology) seem plainly dictated by the observation of the causes, associations, and course of chorea. I have spoken of such management as "no treatment" to distinguish it from medication and confinement, but it is, in truth, treatment demanding the greatest nicety and tact. It must vary so much with the nature of the patient that, as is the case with hysteria, it can only be indicated in general terms, and seldom carried out in perfection.

The great principle which underlies this method of cure—for so in some measure, as I hope to show, it deserves to be called—is so familiar and of such wide application that the only difficulty is to express it in its most general terms. It is the principle which makes success easier when some degree of it has been already attained, which makes the knowledge of help at hand almost as good as help rendered, which makes the confidence of others, however partial or ill-informed, a distinct reinforcement to self-reliance, which makes moral support material support; a principle which, because it cannot be measured by instruments, we may be apt on that account to undervalue—the real source of victory, the essential ingredient of success, and almost its guarantee. *Possunt quia posse videntur.*

(d) Children, like some of the lower animals, can be trained to be still for a given period. Yet such stillness never becomes the *habit of the child*, and it can seldom be preserved for long at a time. It will be noticed in those families where this kind of stillness is enforced that the children when released will relieve themselves by extra movement and shouting. The same thing is to be seen in children just out from school.

ON CHINESE HÆMATOZOA.

ADDITIONAL PARTICULARS OF A CASE.(a)

By PATRICK MANSON, M.D.,
of Amoy.

In a former paper I referred to a form of disease sometimes met with here, and characterised by recurring attacks of fever, anasarca, and great debility. This I once found associated with *Filaria sanguinis hominis*. This case, No. 7 of the series, is since dead, and I had an opportunity of making a post-mortem examination. This was done under circumstances of extreme difficulty. The privilege had to be paid for, and was hampered with the condition that the widow should be present to see that no part of the body was removed. Besides, it had to be made secretly, with closed doors, quickly, and in the room the man died in—a place hardly big enough to turn in; the light was very bad, and the heat overpowering: so from this unfortunate combination of circumstances the examination was far from thorough or satisfactory, and did not result, as we had hoped, in the discovery of the parent worm. I will give my notes of the case in continuation of those in the paper referred to (vide *Medical Times and Gazette*, vol. ii. 1877, page 564):—

"*Case 7 (continued).*—May 25: Filariæ in large numbers in the blood. August 10: Siengoo has been better and worse since the above date. Latterly he has been quite bedridden, and often very foolish in his conversation. I saw him about a week ago; he was bedridden, incapable of moving himself, universally œdematous, though not to a great degree. I noticed that the transverse præcordial dulness extended from nipple line to well over on the right side of sternum; a distinct soft systolic bruit audible all over the heart, but loudest at sternal end of left third rib; second sound indistinct everywhere; throbbing of vessels of neck; a full, strong, regular pulse. This morning he died comatose.

"*Post-mortem Examination.*—Skin slightly jaundiced, generally œdematous, but not much so. No enlarged glands in groin or elsewhere, nor any particular marks on skin. A live filaria embryo seen by the microscope in blood from a small vein in integuments of thorax. Deep epigastric veins much dilated. Liver coarsely cirrhosed and contracted to half its proper size. Spleen much enlarged, measuring perhaps nine inches by seven inches by four inches, soft,

(a) Received through Dr. Spencer Cobbold.

with abundant tar-like pulp. Considerable amount of serum in cavity of peritoneum; Glisson's capsule thick and matted, and the lesser omentum at its attachment thick, matted, a confused mass of what seemed to be dilated veins, enlarged glands, and cellular tissue. Bladder full and normal; kidneys large, healthy; ureters large; pancreas hard and matted with the omentum. Heart much dilated in all its cavities, but there was no valvular lesion; blood fluid in right side, which was in diastole; left side empty. Lungs much pigmented; left pleura contained a considerable quantity of serum. Aorta and vena cava inferior normal. No parent worm found in any vessel opened. Thoracic duct and receptaculum chyli searched for, but not found. Head not opened. Examination made under very disadvantageous circumstances: relatives crying; wife in room, obstructive; temperature over 100°; no air; bad light; much fatigue; not allowed to remove any part of body."

I am particular in mentioning the disadvantages under which the examination was made, to avoid giving grounds for the conclusion that because no parent worm was found none existed. I believe that had we been allowed to remove and carefully examine the mass of glands, vessels, and cellular tissue that lay in front of the vertebræ in the abdomen, the animal would have been discovered.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CASES OF HEMIPLEGIA AS A SEQUEL OF TYPHOID FEVER.

NORTH-EASTERN HOSPITAL FOR CHILDREN.

Case 1.—*Typhoid Fever—Peritonitis—Right Hemiplegia during Convalescence—No Aphasia.*

(Under the care of Dr. CAYLEY.)

W. H., aged eleven, was admitted into the North-Eastern Hospital for Children, under the care of Dr. Cayley, on December 4, 1877. It was stated that he had been ill about a week, and three days ago he had been brought as an out-patient, his chief complaint being pain in the abdomen.

On admission the boy, who was well grown for his age, complained of severe pain over the abdomen, which was rather full and exquisitely tender on pressure, especially about the umbilicus; he lay on his back with his knees drawn up. His breathing was shallow and thoracic, and coughing gave him great pain; his aspect was heavy, face flushed, tongue coated, with red edges and tip; heart- and breath-sounds normal; no eruption; bowels stated to be confined; urine turbid with lithates, not albuminous; pulse 100; respirations 24; temperature 104°. Ordered two leeches to the umbilical region, half a grain of opium every four hours. Evening temperature 105°.

The opium was continued for three days, by which time the signs of peritonitis had much abated, but the temperature continued high, varying from 102° to 104·8°. The tongue became dry and cracked. There was nocturnal delirium and much prostration; the bowels became much relaxed, with light yellow stools; and on December 9 a crop of rose-coloured spots appeared on the abdomen. Signs of consolidation of the right lung now appeared, and the boy passed through a severe attack of typhoid fever. The case was treated with cold baths, temperature about 70°, and quinine and salicylate of soda, each given in doses of fifteen grains from time to time whenever the temperature rose to 103°. He was also given six ounces of wine daily. Towards the middle of the month decided improvement showed itself.

December 17.—Is decidedly better; tongue moist; asks for more to eat; maximum temperature 100°. A few more spots have appeared. The improvement continued; the spots disappeared, and the temperature fell to below normal in the morning, continuing, however, to rise to 100°-101° in the evening. After the 22nd it became sub-normal in the evening. The diarrhœa quite ceased, and the motions became solid. His diet was, however, still restricted to milk, eggs, beef-tea, and on the 29th he was allowed a little semolina pudding. He was still confined to bed.

29th.—His temperature rose in the evening to 102°, and the next evening to 103·5°. On the 30th he had one solid motion. He was given ten grains of quinine, and at night a cold bath was administered.

31st.—Temperature after the bath 97°; at 7 a.m., 98·4°; at 9 p.m., 101·2°. Complains of a constant pain in left inguinal region. Bowels not open this day. This febrile exacerbation now subsided, and the temperature again became sub-normal.

January 3.—Note states that he has been perspiring freely, has slept well, and is free from fever or pain. Temperature 96°. On the evening of this day patient again became feverish; the temperature rose to 103°; his face was flushed, but he did not complain of any pain. Pulse was 120. He was ordered another bath, after which his temperature fell to 97°; three hours afterwards it rose again to 101·2°.

The following morning, January 4, boy said he felt much better. Pulse 87; temperature 98°. It was, however, now apparent that the right arm was partially paralysed. This paralysis rapidly extended and became more complete. The next day there was complete motor paralysis of the right arm and leg; the face was slightly drawn; the paralysed limbs were somewhat hyperæsthetic; speech not affected; pulse 78; temperature 97°.

6th.—Paralysis less complete. Temperature 98·6°.

7th.—Passed a good night; continues to recover power in the paralysed limbs. Pulse 84; temperature 97°.

8th.—Continues to improve. Has a good appetite; sleeps well.

From this time the patient steadily improved, and at the end of February was sent to the Convalescent Home at Croydon. He was now able to walk pretty well, but still dragged the right leg, and there was still considerable loss of power in the right arm and hand. The heart-sounds throughout remain normal, and there was never any rigidity or twitching of the muscles of the affected side. The urine, too, remained free from albumen.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

Case 2.—*Right Hemiplegia with Ataxic Aphasia after Typhoid Fever.*

(Under the care of Dr. GEE.)

[Reported by Dr. GARLICK, Registrar.]

Chas. W. G., aged seven years and eight months, was admitted July 9, 1877. The family history was good, with the exception of one stillborn child. This boy was quite healthy up to seven weeks before admission. Then he had typhoid fever, and was ill five weeks. He was recovering, when two weeks ago he was seized with a fit. The mother says both sides of the body moved equally, but that the right side of the face moved more than the left, and his face seemed drawn to that side. During the fit he foamed at the mouth. Mother thinks fit began between seven and eight in the morning, and lasted till three in the afternoon, but did not notice any paralysis until the morning after. Then it was found that the boy could not use the right side of his body and could not speak. Speechlessness continued for three or four days; then he began to use the words "No," "Daddy," in reply to any question that was put to him. Said to have dribbled from the right corner of his mouth. Has swallowed well. No subsequent fit. Has not seemed to be in pain anywhere.

When admitted he seemed a little pale, otherwise fairly nourished. He took notice of things around, and seemed to understand what was said to him; at all events, when told to put his hand to his head he did so promptly. Smiled when watch was put to his ear. To every question put to him he answered "Daddy," which appeared to him a perfectly satisfactory answer. He generally answered in a low but distinct whisper, but sometimes spoke aloud. No paralysis of tongue; protrudes it straight. Pupils equal and normal; no strabismus or ptosis. Deficient mobility of right angle of mouth; sometimes more marked than at other times; not more marked when he cries. The right arm is perhaps a trifle thinner than the left; it lies by his side with the elbow and wrist flexed, and the forearm pronated, the fingers being also a little flexed, and the thumb opposed to the palm. Rigidity marked in the wrist; often absent in the elbow; but biceps becomes rigid on passive movement. The movement of the right shoulder and elbow is retained, but is weak. The boy feeds himself with the

left hand. Sensibility apparently a little impaired in right leg. When put on his feet he stands and walks alone; he drags with the fore part of the right foot. Heart-sounds quite natural; no hypertrophy. No albumen in the urine.

July 12.—Muscles of back of forearm react well to faradism. R. Ol. morrhuæ 3 j. ter die.

16th.—Eyes to ophthalmoscopic examination natural.

23rd.—Child improved in all ways except his speech. Rigidity this morning absent; voluntary movements at right shoulder and elbow much freer—in fact, almost as good as on the left side; he cannot supinate on the right side; improved with respect to wrist and fingers—still defective. He can just pick up a penny; generally brings his hand down on to the bed about two inches away from the penny, and slides his hand up to it. Walks now very well, using right leg freely, the only fault being that he raises the right foot rather high, perhaps to keep the toes up, which tend to drag. There is still a slight droop in the right corner of the mouth.

August 2.—Thumb still flexed on the palm; this is the only remnant of the rigidity. He still cannot supinate. The right hand is generally a little colder than the left. To have right forearm shampooed and faradised every day. Sometimes the boy utters words spontaneously, but he cannot repeat words after one, and to every question he still replies "Daddy." The nurse reports that he has said "No" and "I shan't," but it is doubtful whether these were replies or not. He sings songs, but without words. Occasionally, however, in singing he gives utterance to a few words from the chorus of his songs.

13th.—Can now supinate right forearm a little; prefers to use left hand to right. The thumb of the right hand is often flexed on the palm, but he can extend it when told to do so; but he does not flex or extend his fingers very quickly—seems to have to "gather" up his will in order to do it; the fingers do not move equally—the index lags after the others. He walks well.

30th.—Movements greatly improved; still thumb a little awkward. When the boy attempts to grasp, however, there is often a litle coarse tremor in the right hand and arm. He has changed now his reply to questions: instead of "Daddy" it is "Chassy" (this is believed to be meant for Charley, his own name). Spontaneously he uses many words—*e.g.*, yesterday he said, "They frightened me." If told to repeat any word after one, he simply says "Chassy." He seems otherwise quite up to the average in intelligence. He is exceedingly good-tempered; is getting quite fat. His temperature during the first month was several times 99·4°, 99·8°, and twice 100° in the evening; during the second month it ranged from 98° to 99°, except for four days, during which he had a little inexplicable pyrexia, 100°, 100·4°, 101°, and 102°. He was sent to Highgate on August 30, and returned for examination on his way home on September 27. Note then made was as follows:—He moves his right arm more than he did, but still prefers to use the left. All the movements good, but still does not pick things up quickly with right thumb and forefinger; grasp with right hand nearly as good as with left. No wasting. In walking he turns toes of right foot inwards. Movement of right ankle, when told to move it, is slower and more deliberate than of left. When attempting to move the right ankle quickly he often moves the right knee as well; he moves the right knee more quickly when told to do so than the ankle, but as quickly as the left knee. Still replies "Chassy" when asked questions; says at times "No," and attempts "Yes," saying "Ye"; sometimes utters a long speech of unintelligible sounds; occasionally utters intelligible sentences—*e.g.*, yesterday, looking out of the window, he said, "I see something—I see a face"; still, when told to repeat words like "No" and "Ah," he says "Chassy." Is in good health.

Remarks.—Hemiplegia occurring as a sequel of fevers other than rheumatic, and in various exhausting or cachectic conditions, has been several times observed. In such cases where embolism from a diseased valve cannot be resorted to for explanation of the lesion it seems reasonable to invoke embolism from broken-up thrombus in the left auricle. Such at all events seemed the probable mode in which convulsion and hemiplegia were produced in a case of noma vulvæ under Dr. Gee, where a post-mortem was obtained (see *Medical Times and Gazette*, April 7, 1877.) It may be assumed in the present case that a patch of embolic softening had taken place in Broca's region from plugging of some branch or branches of the left middle cerebral, the plug being derived from some broken-up fibrin in the left auricle. From the early rigidity of the arm it was feared that some degenerative changes might have begun to extend downwards from the site of the brain-lesion; but this was afterwards given up when the boy's improvement became so marked. The order of recovery well illustrates the rule so often insisted upon by Hughlings-Jackson, that the less differentiated portions of the limbs recover before the more differentiated. The leg recovered before the arm. Ready command was more quickly obtained over the knee than the ankle; over the shoulder and elbow long before the wrist and fingers; and of the fingers the thumb and index were the last to become quite co-ordinated. The aphasia was of the ataxic rather than the amnesic form, according to the distinction laid down by Dr. Ogle—viz., that in the first the patient has lost the power of repeating, by imitation, words uttered to him. The occasional utterance, whilst singing, of words from the chorus of a song, and occasional "thinking aloud," noticed two or three times in this case, are of interest, and may be put alongside the facts of "automatic speech," to which Hughlings-Jackson has directed attention in several cases of aphasia.

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Medical Times and Gazette.

SATURDAY, MARCH 23, 1878.

THE ROYAL COLLEGE OF PHYSICIANS AND MEDICAL WOMEN.

An extraordinary meeting of the Royal College of Physicians was held on Monday last, the 18th inst., "to consider whether, under any circumstances, the Royal College of Physicians of London is prepared to grant its licence to practise physic to women"; and a very large number of the Fellows—about ninety—attended. Some surprise has, we believe, been expressed that such a question should have been raised just now, some of the Fellows considering that the College should have expressed an opinion on the subject long ago, or have waited till it was asked to confer its licence on a woman; that, in short, it was either much too late or much too soon to consider the question proposed. But the answer to this is very simple, and, to our mind, quite sufficient. The

scheme for a Conjoint Examining Board for England provides "that every candidate who shall have passed the final examination conducted by the Board shall, subject to the by-laws of each licensing body, and to the provisions hereinafter contained, be entitled to receive," among other qualifications, "the licence of the Royal College of Physicians of London." The mode of carrying out the scheme is being shaped by the Committee of Reference, and it is almost certain that they will decide that the Conjoint Board shall admit female candidates to its examinations. It was surely, then, much better that the College of Physicians should decide whether or not it would avail itself of the Russell-Gurney Act, and alter its by-laws so as to enable it to confer its licence upon women—which it could not do without a new by-law, before the new examining Board is in operation,—than wait till then. Had the College remained silent, female candidates might very fairly have counted on being able to obtain its stamp on their entering the profession, and the longer the College delayed in declaring its determination not to give them its licence, the more unexpected and bitter would the disappointment have been. The most frank, honest, and we will say manly, course was for the College to come to a decision on the subject as soon as it seemed certain, or highly probable, that women would be admitted to the examinations of the Conjoint Board.

The question then was raised in the College on Monday by the following resolution, proposed by Sir George Burrows, and seconded by Dr. West, viz.:—"That the Royal College of Physicians, having considered the important question of granting licences to practise physic to women, resolves: 'That the College do steadily adhere to the terms of its charter, and do not grant licences to practise physic to women.'" To this Dr. Maudsley moved, and Dr. J. E. Pollock seconded, the amendment—"That this College is prepared to grant its licence to women who submit to all the requirements of medical study, and all the tests of examination which it considers sufficient for men." The discussion on the original motion and the amendment was long, though the speakers in favour of the latter were, we believe, but few in comparison with those who spoke in support of the former; and in the end Sir George Burrows' motion was carried by an overwhelming majority, only fifteen Fellows, it is said, voting for the amendment. We cannot pretend, of course, to give the discussion, for reporters are not admitted to the meetings of the College; but, remembering the discussions on similar questions elsewhere, it is not difficult to imagine the arguments urged on both sides. We may feel pretty sure that, in support of the amendment, it was said that the nation demanded that women should be permitted to enter the profession; that the General Medical Council had declared in favour of it; and that the Legislature had settled the matter by enacting that women should become doctors; that the College could not prevent their doing so if it would; was making a great mistake in meddling with the matter at all; and would be acting foolishly and illiberally, and be courting danger to itself, if it refused to open its doors to women: foolishly, because women could and would enter the profession in spite of the closed doors of the College; illiberally, because true liberty consisted in allowing every person perfect freedom of action so long as he or she did not injure anyone else; and the College had no right to prevent women from making an interesting and instructive experiment to find out whether they are really as unfitted for the practice of the profession as nearly all medical men believe them to be; and dangerously, because if the College did not open its doors voluntarily, Government would soon compel it to do so, or the advancing tide of public opinion would thrust it on one side as an effete body, or sweep it away as an obstructive one. On the other side of the question we may suppose that it was said that there is no evidence whatever that the movement is in any true sense whatever a national one or a very general one, that the ablest of all the medical women at present in practice—Mrs. Garrett-Anderson—in her address at the opening of the London Medical School for Women, last year, had acknowledged that were the women of England to be polled on the question the vast majority of them would vote against it; that the General Medical Council had recorded their deliberate conviction that of all careers the medical is the most unsuitable for women, though they had added that they were not prepared to say that women ought to be excluded from the profession; that all that the Legislature had as yet done was to pass a Bill permitting any licensing body that chose to do so to admit female candidates to examination for its qualification to practise; that the College recognised, of course, that it is a settled thing that women shall enter the profession, and was not foolish enough to try to prevent, or to think that it could prevent, their doing so; but that the point at issue was, should the College *further* the movement by declaring its readiness to grant its licence to practise to women? The profession at large believe that women are unfitted for the profession; that there is no place in it that they can fill with advantage; that they would not be able to add in any point to the science or art of medicine; and that they would do no good to society or to themselves. Would it be right, then, for the Fellows of the College to *help* them to enter the profession? We need not attempt further to state the arguments that may have been used. The question really before the College was, in dimensions, a very narrow one, and may be put in a very few words. The Fellows believe that women are making a grievous mistake in desiring to become practitioners of medicine; that it is a career eminently unsuited for them; and that entering on it, besides being of no benefit to themselves generally, will be of no gain to medicine, and will be bad for the public. Believing this—and it must not be forgotten that this is believed also by some, if not by most, of the few Fellows who support the Medical Woman movement,—believing this, will it be right or honest for the Fellows to help them to make this great mistake (to give them a help which, be it remembered, they do not require), to tempt them further to enter on this career by offering them the licence of the College? The Fellows, by an immense majority, answered the question in the negative; and we hold that they answered rightly, and in a manner worthy of the high position that the College holds in the profession.

WHAT IS THE LEGAL MEANING OF INSANITY?—TWO CRIMINAL TRIALS.

Within the last few days two cases have been tried in our criminal courts—one at Oxford, and one in London—which demand notice on account of the remarkable contrast they offer as to the legal acceptance of evidence of insanity.

At Oxford, a young man, Harry Rowles, aged twenty-six, was tried, on March 13 and 14, on a charge of murdering Mary Hannah Allen, a young woman whom he was about to marry, and whom he had shot with a revolver, apparently without cause or provocation. The prisoner, the son of a well-to-do farmer, from whom he had inherited a considerable sum of money, and the girl became acquainted two or three years ago. The friendship between them ripened quickly into love, and whenever they were apart they carried on a copious correspondence; and some letters were read to the Court showing that shortly before the murder there had been a difference between the lovers, arising out of jealousy, and that the prisoner reproached the girl for her levity and indifference. On December 14 he saw her at her grand-

father's house, and, having left her after a short visit, she was observed to be crying, and something she said to her grandfather induced him to go next morning and see a magistrate. In the middle of that day the prisoner called again, and the deceased let him into the house. A servant-girl who was in the house, and was sent into the kitchen, deposed that the prisoner asked the deceased if she had told her grandfather what had occurred on the previous evening, and that she next heard him say, "I shall be pulled, I shall be hung." A few minutes afterwards she heard deceased exclaim, "Oh, Harry, dearest, what are you going to do?" She was frightened, and ran out of the house, hearing as she left several pistol-shots in succession. Returning with a neighbour, they found the deceased had been shot, and she exclaimed that the prisoner had shot her; upon which he said, "I had a right to do it; she was my wife, and had been married to me some time." The gardener was brought to the house, and found the prisoner standing there with a pistol in his hand, and he said he had shot the girl. He refused to give up his pistol, but volunteered to go with the gardener to the police-station, and he did so. On the way the gardener remarked to him that he must have been mad to do such a thing, to which the prisoner replied that he "had been mad for a long time." In answer to more questions he described what he had done, saying that he had fired four times, and had missed the girl once; that the devil had tempted him, and he could not help it; that he had loved the girl, and had spent £300 on her, but that she had been very false and cruel to him. At the police-station he again described in detail what had passed, and stated that before he shot the girl he had prayed with her that the Lord would have mercy on her soul. This witness, the gardener, said that he thought the prisoner was mad, that he was like a man in a violent passion, swinging his arms and talking very fast; that he talked very wild on the way to Woodstock, a walk of five miles. At Woodstock he had a fit, which lasted a few minutes; and on recovery he was more calm, and, speaking of what he had done, observed that it was a horrible affair. He expressed also great anxiety about some letters which had passed between himself and the deceased, and said they would help a great deal to clear the matter up. We do not find any clear evidence of the character of the fit which the prisoner had, but a medical man, who attended the deceased, deposed that "he thought it must have been epilepsy, and that the coming on of such a fit indicated mischief in the brain." Evidence was given showing that the prisoner's mother had feared that her child would be born an idiot owing to a fright she had shortly before his birth; that he was wayward and wilful as a boy; that after his apprenticeship, in 1867, he attempted suicide, and afterwards ran away and enlisted in the Artillery; that he was discharged in 1869, and that since then he had been even more strange than before. Dr. Tuke, who had seen and examined the prisoner twice, spoke of his heavy, dull demeanour, and of the constant twitching of his face (this was observable also while the prisoner was in the dock), and deposed that "he had come to the conclusion that the prisoner was suffering under strongly marked mental disease, from organic brain affection, which had existed for some time." The surgeon of Oxford Gaol, the governor, and the chaplain, all deposed that they had not observed anything peculiar in the prisoner, and that he always appeared to them calm and sensible; but the surgeon admitted that he was not a specialist in cases of insanity, and that he had made no study of the prisoner's mind, because he saw nothing to make him consider such a study necessary. The Judge (Lord Justice Baggallay) summed up with great care and minuteness, reviewing the evidence as to the state of the prisoner's mind from his boyhood down to the date of the trial. In addition to the evidence we have already mentioned, it appeared that the prisoner had sent to a newspaper an advertisement of his marriage, but this his Lordship thought was of little importance—"it might have been the result of a delusion, or it might have been done as a joke, or for private reasons." The letters of the prisoner were also commented on, and one, of great importance, was read to the jury. It was written in peneil, and very lengthy. It began, "My darling pet Polly,—My heart is made easy, and turned from those horrible, cruel, and wicked thoughts through your kind and loving affection." He then complained of the treatment he had received from his friends, saying, "For all that, Polly dear, we shall see something bad sooner or later befall them. At one time I was only one step out of hell, but God has turned my wrath, and cleansed my mind and body from that impurity; but I will plump it out what the above sins were to have been;" and he then described by their initials different people whom he meant to shoot or kill had he been slighted by the deceased. The letter ended by giving thanks to God for his merciful bounty, and by drawing, in nonsensical language, a picture of his future happiness with his betrothed. Added to the letter was a postscript, asking the deceased not to destroy it, as the writer would want it again. His Lordship also read a long letter written by the prisoner two days after he had killed the deceased, and observed that, if not written for a purpose, it certainly bore the appearance of a wandering mind. His Lordship impressed carefully upon the jury the definition of legal insanity, pointing out that it was not because a person was more or less of unsound mind that he was not to be punished for his acts, but only if he did not know the nature of the act he was doing; or if he did know it, did not know that it was wrong. The jury found the prisoner "Guilty of wilful murder," but recommended him to mercy on account of the provocation he had received; and the Judge, after remarking that the jury, having regard to their oaths, could hardly have arrived at a different conclusion, sentenced the prisoner to death; of course stating that the recommendation to mercy would receive proper attention. We must confess that, to our thinking, the verdict is astonishing, and we should like to know how few medical men would hesitate to say that the unfortunate prisoner was mad. As to "the provocation the prisoner had received," we find no evidence whatever of any provocation except in the prisoner's own statements.

But we will turn now to the second trial we wish to speak of. On March 15, at the Central Criminal Court, the Rev. Henry John Dodwell, fifty-two years of age, a clergyman of the Church of England, was tried, before Baron Huddleston, for feloniously shooting at the Right Hon. Sir George Jessel, Master of the Rolls, with intent to murder him. In other counts of the indictment, the intent alleged was to do grievous bodily harm; and the prisoner was also charged with an assault. The prisoner defended himself. The story of the crime for which he was tried is well known. Mr. Dodwell had two grievances, which had brought him into courts of justice, and the Master of the Rolls had had to decide against him. He had been a schoolmaster at Collaton, in Devonshire, and the governing body had dismissed him for an alleged misconduct, and had brought an action against him for refusing to give up his house. He had retained a solicitor, but quarrelled with him, and no defence having been put in to the action, judgment went for the plaintiff by default. Then the prisoner took his case into his own hands, and appeared at various times, to plead his own cause; but of course, was not well acquainted with, and could not be made to understand, the technicalities or the machinery of legal proceedings, nor upon what points the court in which he appeared could give any

decision. He only insisted that he had been ill-treated, and ought to have redress. On a subsequent occasion he again appeared. He had been appointed chaplain to an industrial school at Brighton, and the guardians of the poor had dismissed him. He presented a petition of right to the Queen, asking her Majesty to reinstate him in the office; and the case was heard before Vice-Chancellor Malins and before the Court of Appeal, the prisoner always appearing to conduct his case; and apparently he never argued his case properly—that is, he never troubled himself about points of law, but made long speeches relating to the way in which he had been treated. At last, on the morning of February 22, he went to the Rolls Court, awaited the arrival of the Master of the Rolls, and as soon as his Lordship arrived fired a pistol at his head. Sir George Jessel felt a blow on the right side of his head as if some one had hit him with his fist, and the feeling lasted for some hours; but he was not wounded, and he took his seat in Court as usual. It appeared that the pistol contained only powder and paper, and the jury found the prisoner not guilty, on the ground that the pistol was not loaded so as to kill or murder, or do any grievous bodily harm; but on the charge of having committed a common assault they found the prisoner guilty, but not responsible for his actions—which amounted to a verdict of "Not guilty on the ground of insanity"; and it is to the evidence of insanity that we wish to direct attention. After the prisoner had fired he made no attempt to run away, and on the appearance of a policeman he remarked to him, "I have shot the Master of the Rolls, which is what I intended to do." He also said that the Master of the Rolls had done him out of two of his rights; and on him was found a letter, which he asked the policeman to post, addressed to a Mr. Taylor, whom he begged to go and see his wife and "break to her the fact that I am in custody for assaulting one of her Majesty's judges. After five years of successive struggling, I have come to the marvellous conclusion that I can gain a hearing only by breaking the law." Sir George Jessel, in his evidence, stated that when the prisoner last appeared before him, in the Court of Appeal, he said he appealed on the ground that the Vice-Chancellor was a corrupt judge. Sir George said: "I told him that I could not hear him further, and should have to have him removed, and he said he would not put me to that, and retired. His demeanour was incoherent and irrational, and he appeared to be under a delusion. He seemed to believe that everyone was in conspiracy against him, which is a common thing when the mind is giving way. When he was asked why he said the Vice-Chancellor was a corrupt judge, he replied that on another occasion he had been allowed to call the Vice-Chancellor a corrupt judge without reproof from the Bench, and therefore he was a corrupt judge. That I thought evidence of delusion." The prisoner cross-examined Sir George Jessel sensibly and coherently, though showing that he did not comprehend legal technicalities and formalities. He also called witnesses, who stated that they knew him well, that they had seen him excited, but never thought him insane; that he had never had any angry feeling towards the judges, but he had said he was only trying for a hearing on the ground that every man had a right to be heard, and that he felt that he must do something desperate, for he would be heard. Among other witnesses, the prisoner called the Marquis of Lorne to prove that he had written to him, begging him to convey to the Queen his deep regret at being obliged to break the law. The prisoner wished to put this evidence in in mitigation of punishment, and to show intent, but it was not admitted. No medical evidence was called on either side. Baron Huddleston, in the course of summing up the case to the jury, said that, "if they came to the conclusion that the prisoner was guilty on any of the counts, there would come the more serious question whether he was responsible for that act. If they thought he was not responsible, they would say, 'Not guilty, on the ground of insanity.' The defence of insanity was not one to be lightly entertained; it must be clearly made out. The misfortune was that in this case the prisoner was defending himself, and he had strenuously insisted that he was a perfectly rational being. He had even called witnesses to support him in that view. But though that point had not been supported in the present instance by counsel and witnesses, it was not less the duty of the Court and the jury to take care, if the prisoner was insane, that he should have the benefit which the clemency of the law always exercised. It was difficult to fix a rule with regard to insanity, but in the case of M'Naughten the matter was fully discussed, and the judge laid it down as a rule that the person doing the act knew at the time that he was doing a wrong act." The learned judge has not been clearly reported here, but he evidently meant to state the legal maxim, that if a person doing a wrong act knew at the time that it was a wrong act, he was not insane. The judge went on to say that "no one could doubt that the prisoner was under a strange delusion—was labouring under the notion that he had been the victim of injustice. The failure of the actions he had taken seemed to weigh upon his mind, and in respect to that no one would doubt that he was labouring under a considerable delusion, as was shown by the evidence of the Master of the Rolls; and it was for the jury to say whether they considered he was responsible for his act, committed at a time when he was manifestly labouring under a delusion." We have already stated the finding of the jury; and the prisoner was ordered to be detained during her Majesty's pleasure.

Now, no one, certainly no medical man, can read these two trials without a sense of painful astonishment at the difference of the results. We do not say that poor Mr. Dodwell was not insane; but we do say that there was no evidence at all that he was insane according to the test always, hitherto, insisted upon by lawyers. He is a quarrelsome man, of ill-regulated mind and temper, and ignorant of law; and he has certainly proved the truth of the saying that a man who is his own lawyer has a fool for his client. But, wearied out by his ill-conducted efforts to get what he considered to be his rights, and thinking that he would obtain in a criminal court the full and fair hearing of his wrongs which he had failed to get from the Master of the Rolls, the Vice-Chancellor, and the Court of Appeal, he deliberately determined to break the law by assaulting one of the judges, though taking care not to injure either the judge or anyone else. All the evidence went to show that he knew perfectly well that he was going to do a wrong act, and that, at the time he did it, he knew it was wrong. Yet he was acquitted on the ground of insanity. Even as to the assertion that he was labouring under a delusion, Sir George Jessel's evidence was the only proof in support of it. It is not very uncommon, we fancy, for persons who lose lawsuits to think they are the victims of injustice: but who ever, before this, heard that such a "delusion" would be accepted in a court of law as a proof of insanity if they committed a crime; or that any mere delusion would be accepted as proof of "legal insanity"? Medical men and experts in lunacy have, indeed, long insisted that delusions are evidences of insanity, but the law has always demanded proof of inability to distinguish between right and wrong, though medical science has proved over and over again that the test is an utterly fallacious one.

Compare the two trials, occurring almost on the same day. In the first, a very young man, who had been strange, wayward, and wilful from his birth; who had attempted, when a youth, to commit suicide; who believed that his friends were

hostile to him, and had drawn up a list of those among them whom he thought of killing; who believed—though no evidence was given to support the belief—that his betrothed was cruel and false to him, killed her because "tempted by the devil, so that he could not help doing it." Immediately after the deed he is "wild" and passionate, and declares that he had acted rightly; his excitement ends in "a fit," and when recovered from that he was calm, and spoke of what he had done as a "horrible affair." Yet in spite of all this, and in spite of medical evidence of his being insane, he is found guilty of "wilful murder," the judge approves of the verdict, and the wretched man is sentenced to death! In the second trial, a man fifty-two years of age, wearied out, and despairing of justice, because of his foolish and mismanaged attempts to get a "fair hearing" of his grievances in some courts of law, deliberately assaults a judge, that he may obtain a hearing in a criminal court. He knows that his act is a wrong one; he does it simply because it is a wrong one, and for the sake of breaking the law. He had no wish to injure the judge, and took good care not to do so; but he committed the assault in order that he might fall into the hands of the police. No medical opinion as to his sanity or insanity is offered, and friends of his depose that they never thought him insane; but the judge whom he assaulted deposes that he had a delusion, and that a delusion is a sign of insanity; and, in spite of the definition of "legal insanity," the prisoner is "acquitted on the ground of insanity"! If this verdict is a just and righteous one, does not the other seem a horrible mockery of justice? But how is the second trial to be explained? Is the firing a pistol, charged with powder and paper only, at a judge proof of legal insanity? or does the proof lie in the fact that the pistol contained no dangerous missile? or does a delusion constitute insanity when a judge is in the witness-box, but not when a medical man is? or—though this seems too good to be true—are the lawyers coming round to the opinion of the doctors with regard to what constitutes insanity? At any rate, it is difficult to see how the lawyers can possibly uphold the legal test of insanity after the trial of Mr. Dodwell.

THE NEW MEDICAL BILL.

The new Medical Bill, the early appearance of which we anticipated last week, was introduced by the President of her Majesty's Privy Council on Tuesday evening. The Bill has not yet been published, and cannot therefore be fully examined, but the leading provisions of the measure may be ascertained from the Duke of Richmond's speech on the occasion of the first reading. We propose to review these provisions *seriatim*.

The first object of the proposed Act is to require a person registered on the "Medical Register" to have both a medical and a surgical qualification. While we approve of this provision we anticipate considerable difficulty in its enactment. What will become of the licence of the College of Physicians of London, the privileges of which were secured by the Act of the 32nd Henry VIII., quoted by the Duke, and which entitles its holders to practise both medicine and surgery? What will the great English Universities have to say in the matter, whose degrees in medicine at present represent qualification in both departments? And what will the most powerful of our corporations, the Royal College of Surgeons of England, do about it?

The second object of the Bill is to allow the registration of foreign and colonial practitioners. We trust that discretion will be used in the application of this provision, to insure the protection of the public, and to guard against the admission of uneducated foreigners on easier terms than our own countrymen. A separate register ought to be kept for this purpose.

The third provision amends the 40th or penal clause of the Medical Act of 1858, and is very satisfactory. The judicial task that this imposes upon the Medical Council will in future be discharged by a committee of five, which is also a most satisfactory arrangement; but we trust that there will be secured the right of appeal to the Council at large by any individual who may consider himself aggrieved.

Fourthly, the responsibility of regulating what is intended to be the minimum qualification for admission to the profession is taken from the individual licensing bodies and transferred to the Medical Council, which shall in future make rules for regulating the examinations, the conditions of admission, and the standard to be obtained for passing them. This is a great change, and we question whether, on the one hand, the licensing bodies will willingly surrender this power; and whether, on the other hand, the Medical Council will be pleased to accept it. The greatest vigilance will be required to see that the regulations that may be framed for the purpose are faithfully observed. But, beyond these practical difficulties, this provision seems to be an unsatisfactory substitute for the means of securing uniformity of qualification which we discussed last week as the probable measure—namely, a Conjoint Board of Examinations for the three kingdoms. The nineteen bodies will still be left free to confer their separate qualifications at prices varying from 10s. 6d. to £25. Not that the probable existence of conjoint boards is altogether ignored in the Bill, for the Duke of Richmond recognises the advantages of such a scheme if it were practicable, and it is permitted to the Scotch and Irish bodies to conjoin, and to grant a certificate which should entitle its holder to obtain the diplomas of one or more of the conjoining bodies.

In the event of the formation of any Conjoint Board, it will be provided by the Act that women shall be admitted to the examinations, and any woman who may pass this test will be entitled to obtain a registrable diploma from the bodies in conjunction; but whether the successful candidate be man or woman, he or she shall not be entitled to any share in the government of the licensing body without its consent. In other words, any of the conjoining bodies will be required to confer a right to practise on women as well as on men. But the formation of a Board is a voluntary matter, and it is highly probable, we think, that no such Board will be formed, and that, therefore, no women will be admitted. Whether each of the individual bodies is permitted by the Bill to admit women to their examinations, we cannot say until we have seen the Bill itself.

But here we must mention, only to condemn, one remarkable provision of the proposed Act, and that is, that women shall not be compelled, if they object, to pass the same examination as men—*i.e.*, that they will be exempted from certain parts of the test; and that, nevertheless, they will be placed on the Register side by side with men (who have been examined on every subject) as fully qualified to practise. Such a blot as this is enough to ruin any Bill, however perfect otherwise.

It will thus be seen that the Conjoint Scheme, after costing years of labour, may not improbably be set aside when ready for application. If a like system of examination is not to be adopted in Scotland and Ireland, the result will be to send candidates to obtain qualifications in those countries, which would be obtained, notwithstanding all efforts of the Medical Council to secure uniformity, on easier terms than in England. The President of the Privy Council said that there was a difficulty in Scotland, arising from the number of universities and medical corporations there; but he did not state what that difficulty

was. "Where there's a will there's a way;" and no doubt, if the peculiar interests of certain corporations were not allowed to outweigh the public good, there would be no greater difficulty in establishing a Conjoint Board in Scotland and in Ireland than there has been in England.

Fifthly, with regard to the education and registration of dentists and midwives, we must postpone the consideration of the subject till the Bill is in our hands. As far as we can gather, the regulations applying to the registration of dentists and midwives are the same as those for medical practitioners. Thus we may have a separate list of medical practitioners, male and female; another of dentists; and another of midwives; but all in the same Register; and it remains to be seen whether such association would be agreeable to the medical profession. We have already hinted that the duties of the General Medical Council are too onerous as they are—they are said to be imperfectly discharged; and if these duties become more exacting from the necessity of insuring uniformity of qualification throughout the three kingdoms, it would be unreasonable to expect the Council also to superintend the education and registration of dentists and midwives.

On reviewing what we have said our readers will see that the abstract of the Bill, as given by the Duke of Richmond on Tuesday evening, differs in several important respects, more especially with reference to the Conjoint Scheme, to what is called the means of securing uniformity of qualification, and to the admission of women, from the measure described by us last week. Our statement was founded essentially on what we knew had been asked for as necessary requirements in the Act by the Medical Council; and we further knew that the Duke of Richmond had had interviews with the members of the Executive Committee representing the Medical Council, who had expressed their general satisfaction with the measures submitted to them. At whose suggestion these most important changes have been made, which certainly render the passing of the Bill in many respects undesirable, seems to require explanation. For it has been well said that the chief point required by the Medical Council—namely, the compulsory appointment of conjoint boards—has not received attention, whilst several points which the Council did not ask for, and probably will not be willing to accept, have been introduced into the Bill.

THE WEEK.

TOPICS OF THE DAY.

By permission of the Lord Mayor, a meeting was last week held at the Mansion House in support of the North-Eastern Hospital for Children, situate in the Hackney-road. Sir Robert Carden presided over a numerous and influential assemblage, and explained the claims of the charity to the support of the public. He informed them that the institution was established in 1867, and that last year 330 in-patients were received, whilst 44,925 cases were treated as out-patients, of which number 13,308 were new cases. The demand for medical relief for poor children had increased during the past year, and, although the capacity of the Hospital had been increased by eight additional beds, the wards had always been full, and great numbers of deserving cases had necessarily been rejected for want of room. The Convalescent Home at Croydon had supplied constant and invaluable aid in re-establishing the health of many of the sickly children of the poor of the East-end, suffering from the too common debility so largely due to the want of fresh air and proper food. The medical staff had presented a strong memorial forcibly urging the need of at once erecting wards with more adequate arrangements for the accommodation of a larger number of in-patients. Towards the £5000 required for the erection of the new buildings about £3000 has already been received, and several donations were handed to the Treasurer during the course of the proceedings.

Under the provisions of the Rivers' Pollution Bill, the Hereford Corporation has been proceeded against by a Mr. Lloyd for polluting the river Wye with sewage. The case was heard in the County Court at Hereford last week, when counsel for the Corporation admitted the offence, but applied for an adjournment of six months. This application was opposed by the plaintiff's lawyer, who urged the Court to make a formal order under the Act at once, but to suspend the operation of it for a reasonable time. The Court, however, declined to make the order, and ultimately agreed to an adjournment of the case for six months on the Corporation undertaking to consider in the meantime the best means of abating the nuisance complained of.

The medical officers of health of the districts of Lee, Eltham, Charlton, and Plumstead have been appointed to meet, with a view of endeavouring to discover the origin of a severe epidemic of scarlet fever which has broken out in the neighbourhood of Lee, Kidbrooke, and Blackheath. The disease has shown itself chiefly amongst the families of the upper classes residing in this locality; and as the sanitary arrangements of the district are ostensibly of the most perfect description, it is thought that the origin of the fever may possibly be traced to the milk-supply. The board of medical officers will accordingly endeavour to trace the sources of the milk-supply of the neighbourhood, and otherwise discover what causes are responsible for this outbreak of fever.

The principles of the vegetarians have hitherto been looked upon as tolerably harmless, if slightly eccentric; but a case recently reported from Oldham is worthy of comparison with the criminal ignorance of that class of society known as the "Peculiar People." At an inquest recently held at the foregoing town, on the body of Mary Phelon, the wife of an insurance agent, who was stated to be a "strict vegetarian," it appeared in evidence that the deceased had lately been confined, and, although in a very low condition, she would not call in a medical man without her husband's consent. A neighbour went in to see her, and found that some pearl barley and wheat had been prepared for her. She continued to get worse, but the same food only, wheat and barley, was provided. A witness stated that the barley and wheat were thick like porridge, and the deceased could not take them. The husband stated that there was plenty of food of a "vegetarian character" in the house. The Coroner explained to the jury that there was no evidence to support a criminal charge against the husband, and the jury returned a verdict to the effect that the deceased had died from puerperal fever, but censured the husband for not calling in medical aid sooner.

The *Sanitary Record* says:—"One of the most satisfactory features in the mortality statistics for England in recent years is the marked and steady decline in the mortality from fever. The annual death-rate from fever, including typhus, enteric or typhoid, and simple fever, was equal to 0·92 per 1000 persons living in 1868, since which it has steadily declined year by year, and in 1877 it did not exceed 0·39 per 1000, or little more than a third of the rate which prevailed in 1868. The decline in the prevalence of fever affords the strongest evidence of sanitary progress, which is most marked in our largest urban populations."

The Volunteer Ambulance Association recently established bids fair to become a permanent and most useful institution. It is stated that Mr. Gathorne Hardy has placed the services of Surgeon-Major Falwasser at the disposal of the St. John

Ambulance Association for the instruction of the classes meeting in Chelsea. For the convenience of pupils at the East-end of London a class has been opened in the Custom House, and another is in course of formation at Hackney. The instruction is in all cases gratuitous. The Marquis of Conyngham has offered the use of his steam-yacht to the Order of St. John for the conveyance of trained men and nurses, together with ambulance *matérial*, in case of emergency. This was announced at a recent meeting of the Woolwich centre of the Association, when fifty-eight certificates of proficiency were distributed to pupils who had successfully passed the required examination.

The Pharmaceutical Society of Great Britain recently obtained three summonses against the officials of the London and Provincial Supply Association, trading in Tottenham Court-road, for selling oxalic acid and other poisons without distinctly labelling the wrapper or cover in which such poison was contained, with the name and address of the seller of such poison, contrary to the Pharmacy Act of 1868. In the course of the hearing of the case before the magistrate at the Marlborough Police-court, the Association admitted that an irregularity had occurred, but not with any intention of evading the law. Mr. Newton imposed costs in the first case, dismissed the second, and inflicted a fine of £2 10s. and costs in the third.

From a statement which appears in the *Natal Witness* of January last, it seems that Mr. Harry Leach, the Medical Officer of Health for the Port of London, and Inspector to the Board of Trade, has proceeded to Africa in order to collect particulars as to climate, cost of travelling, accommodation, etc., for the benefit of physicians and their patients in this country. Bloemfontein, which has been mentioned in several medical works, is now being visited by some of the first medical men in the colony, and a few from England. It possesses several qualifications for a sanatorium, the climate being undoubtedly good, but, in common with the generality of towns in Africa, its sanitary arrangements are far from perfect.

Shocking accounts as to the sanitary condition of the Russian troops still continue to be reported. The Adrianople correspondent of the *Golos*, telegraphing under date of the 12th inst., states that typhus has swept away an entire sanitary corps of doctors consisting of twelve individuals, and that the mortality among the remainder of the medical staff has been such that many sick and wounded are left without attendance. The hospitals are full of invalids, and 2000 soldiers suffering from typhus are billeted in various houses in the town. The same journal states that at the moment of going to press it had received a communication from the Minister for War announcing that a special train conveying thirty-five doctors had been despatched from Warsaw to Adrianople, and that twenty medical men had already set out from Odessa to take the place of those who had succumbed to fever.

A case of poisoning recently reported as having occurred at Bromley is noticeable from the diabolical nature of the means chosen, without any apparent object. An adjourned inquest on the body of a boy aged nine years, who resided with his parents at Bromley, elicited the following evidence:—On the 24th ult. the boy was sent to make some trifling purchase, and whilst out he picked up an orange in the street and took it home. He remarked that it had a very bitter taste, and his mother told him to throw it away; he, however, persisted in eating it, and was soon after seized with violent pains and vomiting. The medical man, summoned at once, saw that the child had been poisoned; he then examined a piece of the orange which was left, and found that it was literally crammed with arsenic. A post-mortem examination confirmed the fact that death was due to arsenical poisoning. The jury returned an open verdict. We have here one of those cases in which a crime appears to have been perpetrated without any possible object. The orange could not have been prepared with the view of getting rid of any obnoxious dog, cat, or other animal, as they would not be likely to touch it; and the motive can only be supposed to have been identical with that which some time ago prompted an insane lady at Brighton to administer poisoned sweatmeats to several children she had never seen before.

On Saturday afternoon last the first meeting for the present year of the promoters of the Hospital Saturday Fund was held at the Lying-in Hospital, City-road, under the presidency of Mr. John Hughes, chairman of the Council. In the course of the meeting an opinion was expressed that the Fund was only in its infancy, and that with very little difficulty it might be made to yield—not £6000 a year, as now, but £20,000 per annum. The first Saturday in September was proposed for this year's collection, and, after some opposition, this date was finally decided upon.

THE PUBLIC MEDICAL SERVICES.

At this particular time, when so much is being written on the drawbacks attaching to medical service in the Army and Navy, we have much satisfaction in calling the attention of the junior members of the profession to a little work anonymously published, which conveys an amount of information on the Public Medical Services never before got together in the limits of one book. The title of this little work is "The Public Medical Services—the Army, Navy, and Indian Medical Services; What they Are, and What they Are Not: Being Hints to Candidates for Commissions on the Choice of a Service." It is published by H. K. Lewis, 136, Gower-street, and the price is two shillings. The subjects treated on and the information given are exactly what every candidate should know before embarking on a career in either of the Services; and although in a small compass, the several details are most minute, and so clearly arranged as to be within the grasp of the meanest capacity. Thus the necessary outfit is described, the life and work at Netley Hospital, the final Netley examination, the outfit necessary for India, the cost of living there, the medical works advisable to be carried, and there is even a short vocabulary of Hindustani medical terms. One important fact makes itself felt all through the pages. The work is not that of a novice, but the valuable opinions of a shrewd, close, and impartial observer; the numerous "hints" given are gathered from the personal experiences of one who has been through all he describes, and who has evidently kept his eyes open during the journey. He arranges the questions which a young surgeon should ask himself before choosing the Services as a career, under four heads—means, health, taste, and professional capabilities. We are rather surprised to find that after very careful comparison he gives the decided preference to the Army over the Indian Medical Service, and the reasons which he adduces in support of his opinion certainly seem sufficiently conclusive. Candidates, he says, are misled as to the value of the Indian service; they go out to India expecting that as soon as they pass the lower standard examination in Hindustani they will receive never less than 450 rupees per month, and that, in addition to this, there is no end of lucrative practice to be had among natives: whereas, the truth is that surgeons in the Army Medical Department, barring the fact that they only receive pay for six months when they are invalided home from India, are better off on their arrival in that country than their brethren of the Indian Service; and

surgeons who have held charge of second-class civil stations in India for eight or ten years assert that in the whole course of that time they have not received 1000 rupees in fees from natives. Many other reasons are given adverse to the Indian Medical Service, but we have not sufficient space to detail them. We can only add that for a temperate statement of facts, and for a minute description of many minor points, especially useful to a candidate, and which, up to this time, have only been able to be acquired by actual experience after the decisive step in life had been taken, we can confidently recommend this pamphlet to the notice of those who are meditating a career in the Public Services. The compilation of the book is so good that, unless there are Service reasons, we must express our surprise that the author has thought fit to withhold his name from it.

THE HARVEY TERCENTENARY MEMORIAL FUND.

We published last week a letter from Mr. George Eastes, the Secretary to the Harvey Tercentenary Memorial Fund, drawing attention to the fact that only about half the sum required to carry out the object of the fund has as yet been subscribed. It will be remembered that the project of commemorating in some lasting mode the three hundredth anniversary of Harvey's birth was originally set on foot at a public meeting held, some three years ago, at Folkestone, the birth-place of Harvey; and that after the discussion of various schemes it was decided, by a large majority, that the proposed memorial should be a statue of Harvey, to be erected in the town. The sum needed to complete this project is about £1600, and half of this is still wanting. We hope that this appeal now made by the London Executive Committee will be liberally and promptly responded to. We cannot imagine any member of the profession thinking that Harvey does not deserve every mark of honour that can be paid to his memory, though some may think that no new public recognition of what the world owes to him is necessary. But the real reason why the few hundreds needed have not long ere this been subscribed is, no doubt, an idea that everybody would subscribe, and that, therefore, individuals need not. The three hundredth anniversary of Harvey's birth occurs on the 1st of next month, and it would be desirable for the profession to supply the Committee by then with the funds required to enable them to complete their labours, and thus to prevent a delay that might bear a semblance to a forgetfulness of Harvey. Donations may be paid to the hon. treasurers of the fund, Sir George Burrows and Mr. Prescott Hewett; or to the energetic and indefatigable hon. secretary, Mr. George Eastes, M.B., 69, Connaught-street, Hyde-park-square, W.

THE COMMITTEE OF COUNCIL OF THE BRITISH MEDICAL ASSOCIATION.

Since we last wrote upon the subject of the management of the British Medical Association, the Committee of Council have held a "special meeting," to consider the question of the publication of their proceedings, and also the question of female members. After a protest by Dr. Grigg against the meeting as illegal, on account of a fault in the summons, the Committee proceeded to pass a resolution fully approving of the conduct of the President in the matter of the publication of the proceedings; determined to publish a statement of their transaction for securing premises in the Strand; and, in response to a requisition signed by a large number of the metropolitan members, resolved to call a special general meeting of the Association, to consider the two subjects just mentioned, as well as the question of women-members. The last part of this seems very satisfactory; but not so what remains. The Committee could not possibly escape from the necessity of calling a general meeting under such pressure, but they have done it in a way that seems as if adopted with the object of neutralising the effects of the meeting. By a device such as cannot fail to excite the astonishment, if not the indignation, of the Association at large, they have summoned the meeting at Birmingham for the afternoon of Tuesday, April 2. It might have been expected that a special general meeting of the Association, to have a thoroughly representative character, would have been called in London; and when the questions to be referred to the meeting are considered, the action of the Committee becomes doubly difficult to explain. One of the questions relates to female members, and has been raised by two of the leading metropolitan members. The other question, which also arises out of resolutions passed by the Metropolitan Branch, concerns an alleged extravagance of the Committee in expending a large sum of money in establishing the Association in a shop in the Strand, "which will contribute to the success of the *Journal* as an advertising medium, and thus add to the revenue of the Association." Under these circumstances, if ever, the metropolis would seem to most minds the proper place for holding the meeting. But the Committee of Council have chosen Birmingham. No doubt that place is convenient for some members, and it is far from the disturbing voices of leading metropolitan members. But will the metropolitan members, or, indeed, the members generally, approve of such treatment? As we have already noticed, it has been asserted that the special meeting of the Committee that called the general meeting was illegal according to the by-laws of the Association, and no special meeting that it summons can have any more legality than itself; and this question will, we suppose, be raised again. But we cannot but regret very much to see the Committee of Council persist in a course of conduct that must excite very grave dissatisfaction, and may end in imperilling the prosperity, if not the existence, of the Association.

LYMPHATIC DISEASES AT THE PATHOLOGICAL SOCIETY.

The meeting of the Pathological Society on Tuesday evening was specially devoted to the exhibition of specimens illustrative of diseases of the lymphatic system, including lymphadenoma and leucocythæmia. There was a very full attendance of members, and the greatest interest was shown in the large collection of microscopical specimens and drawings. Three communications were delivered in the course of the evening by Dr. Wilks, Dr. Greenfield, and Dr. Gowers. Dr. Wilks very fittingly opened the discussion of a class of diseases with which his name as a physician and pathologist is intimately associated. He exhibited to the Society the original specimen of lymphadenoma on which Dr. Hodgkin wrote the first account of the condition as a distinct disease, and reminded the Society of the remarkable fact that this paper of Hodgkin's lay buried in the *Medico-Chirurgical Transactions* for more than twenty years. It was Dr. Wilks himself that "unearthed" Hodgkin's paper; and in exhibiting the original specimens at the Pathological Society, he pointed out how accurately Hodgkin had described the disease and proximately appreciated its nature. Hodgkin not only recognised the glandular disease that bears his name as a real "disease," but described it as a "primitive," and not a secondary enlargement of the glands, non-inflammatory, non-malignant, but a general uniform enlargement. Hodgkin further appreciated the true nature of the growths in the spleen as a hypertrophy of normal structure, which at that time had not indeed been discovered in the human spleen. Bright, who followed Hodgkin, seems to have had less clear views upon the splenic change. It was not until 1853 that the first specimens of lymphadenoma were exhibited at the Pathological Society, and we need not be surprised to learn that they were for a time considered

malignant. Dr Wilks, after giving the history of the pathology of Hodgkin's disease, indicated several directions in which information might be furnished during the present discussion. The relation of lymphadenoma to malignant disease is obscure; and the condition of the blood, and the relation of lymphadenoma to leucocythæmia, require to be more clearly defined. Dr. Wilks pointed out what we believe is perfectly true—that a notion prevails that there is marked increase of the white corpuscles of the blood in Hodgkin's disease; in other words, that Hodgkin's disease is often confounded with lymphatic leucocythæmia. The regular exhibition of specimens and drawings and patients was then commenced by Drs. Greenfield and Gowers, and will be continued at the next meeting. We shall consider the whole question when the discussion has been brought to an end.

THE PROPERTIES AND NUTRITIVE VALUE OF PEPTONE.

When an albuminous substance is digested with hydrochloric acid and pepsine at the temperature of the body it becomes converted into "peptone"—that is to say, it has acquired properties which it had not before, and has ceased to be precipitable by heat or dilute mineral acids, though its chemical composition is apparently the same as that of true albumen. The nature of this puzzling change has been lately examined by Dr. Adamkiewicz, Privatdocent at Berlin ("Die Natur und der Nahrwerth des Peptons," Berlin, 1877; and *Berliner Klin. Wochenschrift*, No. 2, 1878, "Vorträg ueber Pepton"); and he finds that it is partly explained by the fact that the ashes of peptone always contain less salts (phosphates) than those of albumen, for Alex. Schmidt, of Dorpat, has shown that by removing the salts from albumen by dialysis the latter ceases to be coaguble on boiling, but recovers the property of coagulating on the restoration of the salts. That this is only a partial explanation is clear, because peptone cannot be rendered coagulable by adding salts to it; and hence some deeper molecular change has probably occurred in it since it existed in the form of albumen. This is not mere theory, as is proved by the fact brought to light by Adamkiewicz, that if peptone be freshly precipitated (as it can be by certain metallic salts) and warmed it melts as if it were a fat, and solidifies again on cooling. On the other hand, we know that heat coagulates albumen; hence, as liquefaction involves a loosening of the cohesion of the molecules of a body to one another, and solidification their firmer aggregation, and as the molecules of a body are the more closely united when they are combined in definite groups, it is clear that the molecular constitution of albumen is more definite than that of peptone.

Is peptone decomposed within the body in the same way as albumen? This question Dr. Adamkiewicz has tried to answer experimentally. He first fed dogs with a diet insufficient for their actual needs until the daily excretion of nitrogen became very nearly constant. He then added peptone to the above for two days, kept them on the former diet for two days, and on two other days fed them on white of egg. The result was, chemically, practically identical in the two cases—about two-thirds of the nitrogen of the peptone and egg-albumen being retained in the body; but there was this one difference between the results of feeding with peptone and albumen: that in the former case the nitrogen corresponding to the decomposed peptone appeared in the urine during the next twenty-four hours, whereas the albumen-nitrogen took two days for its elimination. From these observations Adamkiewicz concludes that peptone is better suited than albumen (as indeed we should *à priori* have expected) for entrance into the animal juices, and elaboration by the tissue-cells. Other experiments proved that peptone increases the body-weight as decidedly as dry serum-albumen and egg-albumen; and further, that it does not, like gelatine, merely spare the waste of the tissues without itself undergoing organisation. Hence, as peptone is as nutritious as albumen, and at the same time more readily assimilable, it follows that, as Adamkiewicz expresses it, "there must be indications for its therapeutic use." Dr. Witte, of Rostock, has succeeded in preparing it on a large scale, and a few observations have been made with it on patients in the Berlin Charité Hospital and elsewhere, and with success as far as they go. Thus, a female lunatic, who had previously vomited everything she took, was treated with enemata, each containing peptone equivalent to fifty grammes of meat. This quantity was absorbed by the bowel in a few minutes, and as long as the enemata were continued the patient ceased to go to stool—a striking proof of the complete assimilation of the peptone. Another woman similarly ceased to vomit when all albuminous food was withdrawn from her diet and replaced by peptone.

One word of caution is necessary as to the use of this substance in medicine. As we saw above, it contains a smaller proportion of salts than albumen, and it is also deficient in creatinin and the extractives which occur in meat, which is the most natural source from which the human subject is supplied with albumen; hence we must add all these to the peptone, and the best way to do this is to dissolve the latter in ordinary warm meat broth. The quantity of peptone ingested daily must correspond to about fifty to sixty grammes of pure albumen, or 200 to 250 grammes of meat. We hope soon to be able to report the result of further clinical experiments with peptone.

ROYAL COLLEGE OF SURGEONS.

At a meeting of the Council on the 14th inst. the following members of the College were elected Fellows, viz.:—Messrs. Norman Chevers, of Tavistock-road, W., diploma of membership dated January 8, 1841; and Walter Charles Freer, L.S.A., of Birmingham, late Senior Surgeon to the General Hospital. At this meeting of the Council, Dr. Humphry, F.R.S., was nominated Hunterian Orator for 1879. At the preliminary examination in Arts, etc., at Burlington House, on the 21st inst., for the diplomas of Fellowship and Membership of the College, 340 candidates presented themselves—viz., 98 for the first-named distinction, and 242 for the membership. Owing to the large number of papers to be read, the result cannot be published for several weeks. Professor Flower will bring his course of lectures on the Comparative Anatomy of Man to a close this day (Friday).

THE UNIVERSITY OF DUBLIN AND VIVISECTION.

Among the resolutions adopted by the Academic Council of the University on Wednesday, March 13, was the following:—"That, in the opinion of the Council, it is desirable that some suitable places, either within the Medical School or in the Museum-buildings should be duly registered under the Act 39 and 40 Vict., chap. 77; and that application be made to the Chief Secretary for this purpose. That, in passing this resolution, the Council desire to state that they do not thereby intend to sanction the practice of vivisection in the University of Dublin, but only to avail themselves of the provisions of the Act to enable such demonstrations to be performed as have hitherto been considered essential to medical teaching."

MEDICAL SOCIETY.

The following is a list of the officers and Council elected at the annual meeting, held on March 4, for the ensuing year:—*President*: Erasmus Wilson, F.R.S. *Vice-Presidents*: Leonard Sedgwick, M.D.; Richard Davy, F.R.C.S.; Sir Joseph Fayrer, K.C.S.I.; Clement Godson, M.D. *Treasurer*: Thomas Harvey Hill. *Librarian*: C. Theodore Williams.

M.D., F.R.C.P. *Secretaries-in-Ordinary:* J. Astley Bloxam, F.R.C.S.; F. de Havilland Hall, M.D. *Secretary for Foreign Correspondence:* T. S. Dowse, M.D. *Council:* William Adams, F.R.C.S.; H. Royes Bell, F.R.C.S.; Percy Boulton, M.D.; Woodhouse Braine, F.R.C.S.; Crichton Browne, M.D.; T. Lauder Brunton, M.D.; Thomas Bryant, F.R.C.S.; George Buchanan, M.D.; Alfred Carpenter, M.D.; W. H. Corfield, M.D.; A. E. Durham, F.R.C.S.; D. H. Goodsall, F.R.C.S.; J. D. Heaton, M.D. (Leeds); J. Braxton Hicks, M.D.; Constantine Holman, M.D. (Reigate); R. J. Lee, M.D.; Francis Mason, M.D.; J. C. Thorowgood, M.D.; Alfred Wiltshire, M.D.; J. C. Wordsworth, F.R.C.S.

MEMORIAL TO CLAUDE BERNARD.

THE Société de Biologie desires to erect a monument to the memory of its late President, Claude Bernard; and the Secretary, M. Dumontpallier, has suggested the co-operation of English physiologists, as "Claude Bernard, by his genius, belonged to all nations." Many gentlemen have already expressed their anxiety to contribute, and thus show their admiration of the illustrious physiologist. A sub-committee, for the purpose of opening an English subscription-list, has been formed, consisting of Sir James Paget, Professor Huxley, Dr. J. Burdon-Sanderson, Professor Humphry, Dr. Michael Foster, Mr. Ernest Hart, Mr. G. J. Romanes (18, Cornwall-terrace, Regent's-park), and Professor Gerald Yeo (King's College). To either of the latter gentlemen, as honorary secretaries, subscriptions may be sent.

FATAL ACCIDENT TO A SHEFFIELD SURGEON.

WE very much regret to have to record a fatal accident which befell Mr. Marriott Hall, a leading surgeon of Sheffield, on Sunday last. Mr. Hall started in the morning to visit several of his patients, and rode a very high-spirited horse that had been some time in the stable without exercise. On his way back the animal became unmanageable, reared, and fell on Mr. Hall, whose head came into violent contact with the kerbstone. Mr. Hall was only thirty-eight years of age, and his untimely decease will be much felt amongst a large circle of friends and patients.

MEETING OF THE GENERAL MEDICAL COUNCIL.

THE General Medical Council has been summoned for April 10, for the purpose of considering the proposed Medical Bill (to which we refer in another column) prior to its second reading. No doubt there will be much interesting discussion on the subject, and suggestions may be offered which may lead either to the abandonment of the measure or to very considerable modifications in it.

MEDICAL PARLIAMENTARY AFFAIRS.

English Doctors in Bulgaria.—In the House of Commons, on Thursday, March 13, Mr. Bourke in reply to Mr. Cowen, said that there would be no objection to lay on the table of the House, and to that extent to publish, the affidavits made by Drs. Leslie, Neville, and Kirkpatrick relative to the sufferings they endured when imprisoned by the Russians for five weeks.

On Friday, the 14th, the Dental Practitioners Bill passed the second reading; and in the debate for the Navy estimates a vote for £66,400 for medical establishment at home and abroad was agreed to, and £77,230 for medicines and medical stores.

On Monday, March 18, the House of Commons went into Committee on Supply, and a vote of £50,412 was agreed to for salaries and expenses of the Local Government Board after a short discussion, in which Mr. Sclater-Booth explained that much of the increased expense was on account of the large increase of lunatics in the asylums at the present time, many having been removed from private houses, and there had been an increase in the number from workhouses. By one of the clauses of the County Government Bill he had endeavoured to provide cheaper accommodation for imbeciles than had previously been available, and he believed that would be found one of the most useful clauses of the Bill.

Medical Acts Amendment Bill.—On Wednesday, in the House of Lords, the Duke of Richmond introduced the Medical Acts Amendment Bill. During the last 300 years many Acts have been passed to regulate the competency of persons practising and to provide for the mode in which that competency was to be ascertained. In the reign of Henry VIII. an Act was passed which provided that no person within the City of London, or seven miles thereof, should take upon himself to practise as a surgeon without having first been examined by the Bishop of London, "the Dean of Paul's," and four professional men; and by the same Act no person was allowed to practise the art in the provinces unless he had been examined by the Bishop and the Vicar-General. Both those clauses were still on the Statute-Book. He proposed by this Bill to abolish these enactments. It appears to have been assumed that every medical practitioner possessed a double qualification—one in medicine and one in surgery. Previously to the passing of the Medical Act of 1858 medical legislation was in a most unsatisfactory condition. There were various bodies in the three kingdoms all entitled to confer medical or surgical diplomas, and all competing with each other. Some of those bodies could grant diplomas which were good over the whole kingdom, while the diplomas of others were good only in particular parts of the kingdom in which they were issued. The result was that some of the most competent of the profession in England would be precluded from practising in Scotland and Ireland, and an equally competent Scotch surgeon might be precluded from practising in this country. The Act of 1858 provided an authoritative registry on which the names of all qualified persons should be inscribed and their qualifications defined; and it removed the legal restriction. Since it became law various things have occurred to show that it is desirable to amend it. That Act provides a Medical Council, and it provides that a single qualification from any of the licensing bodies shall be sufficient to entitle the person who holds it to be placed on the register which is compiled under the authority of the Medical Council. The 19th clause of the Act suggests a mode in which uniformity of qualification for the medical profession might be obtained, and the English medical bodies have been engaged in drawing up a scheme known as the "Conjoint Scheme," and which has for its object that all bodies licensing in medicine and surgery should be included in one associated body. Difficulties to the establishment of that scheme have presented themselves; the English bodies have been endeavouring to perfect a conjoint scheme, and before this Bill becomes law those bodies may have come to such arrangements as will enable them to establish a Conjoint Board, leaving the medical bodies of Scotland and Ireland to come into the scheme after them should those bodies think fit. There are provisions in the Bill under which the Scotch medical bodies can form part of the Conjoint Board after the passing of this measure. The present Act does not provide for the registration of persons who have qualified in the colonies or abroad. This Bill does so provide. The provisions in the existing Act referring to unregistered persons require amendment. Mr. Russell Gurney's Act requires amendment, and that is done by this Bill. That Act was so drawn as, by its wording, to enable women to be members of the Corporation and Senate, which was never intended. Clause 3 will prevent a person being registered in future unless he has obtained two diplomas—one for medicine and one for surgery—or a certificate of proficiency, both in medicine and surgery, from a medical board established under the Act, and representing two or more of the medical authorities of the United Kingdom. A saving clause is made in favour of persons entitled to be registered before the passing of the Bill. Clauses 5 to 7 enable a person who has obtained a medical diploma entitling him to practise in a colony or in a foreign country to be registered on proof of good character, if the diploma is one recognised by the General Medical Council as representing a degree of knowledge, tested by examination, equal to that which is required for obtaining in the United Kingdom a qualification for registration. If the General Medical Council refuses to recognise a diploma, an appeal is allowed to the Privy Council. Clause 9 requires colonial and foreign practitioners to be entered in separate lists distinct from those who obtain their qualifications in the United Kingdom. Clause 13 requires the General Medical

Council to exercise the power of striking a name out of or restoring a name to the Register, by means of a committee of five. A large body such as the General Medical Council is unsuited for exercising such a power, which is quasi-judicial in its character. The object of Clause 14 is to extend the power, which the General Medical Council possess, of superintending the examinations for medical diplomas conducted by the different authorities. It allows them to make, with the approval of the Privy Council, and subject to appeal by authorities and persons interested to the Privy Council, rules for regulating the examinations, the conditions of admission, and the standard to be obtained for passing them. The rules are required to provide for the admission of women to the examination, subject to two provisos—1. That a medical authority who now is not bound to and does not examine women shall not be obliged to do so; 2. That women shall not be compelled, if they object, to pass the same examination as men. As these examinations are the only means of entering the profession, and the Bill makes the law against unregistered practitioners more strict, it seems just that the conditions of admission to the examinations should be subject to some general control, such as that of the Privy Council, given by the Bill, and not merely to the control of the profession itself. The object of clauses from 15 to 18 is to extend the power given by Section 19 of the Medical Act, 1858, to two or more of the medical authorities to combine for the purpose of conducting joint examinations. A scheme made for the purpose before the passing of the Act, with the approval of the General Medical Council and of the Privy Council, is confirmed by the Bill. Subsequent schemes will require the confirmation of the Privy Council. The Board established for conducting the examinations is to certify the names of the persons who pass both in medicine and in surgery, and these will be entitled to certain diplomas from one of the medical corporations. As it will be possible for women to pass those examinations, it is provided that the obtaining a diploma is not to entitle a person to any right in connexion with the Corporation. The first part of Clause 20 allows a medical authority, with the approval of the Privy Council, to make a new medical diploma for the purpose of being granted to those who pass the joint examination of any medical board established under this Bill. By this means a medical authority will be able to grant a diploma entitling a person to be registered, without granting any rights in connexion with that authority. The second paragraph of this clause is to effect the intention of 39 and 40 Vict., cap. 41 (commonly known as Russell Gurney's Act), which has failed in effect from a technical mistake. Clause 21 enables the University of London and the College of Surgeons and the Society of Apothecaries by special Acts to remove any obstacles to their combining in the joint scheme for the Medical Board, which may arise from any of their Acts or Charters. Clause 22 extends very largely the provision against the assumption by unregistered persons of designations which imply that they are duly qualified practitioners in medicine or in surgery. It does not prohibit any unregistered person from practising—that is impossible; but it does prohibit a person who practises for gain from assuming certain designations. It further prohibits persons who practise for gain from assuming any of the medical or surgical designations to which they are not entitled. The clause also imposes a penalty upon a person who gives any certificate which is invalid when signed by an unregistered person. It also restricts the right of prosecution by private persons without the consent of the General or a branch Medical Council. The clause is justified on the ground that in the Bill every person who really possesses proper qualifications, whether obtained in the United Kingdom or in a foreign country or in a colony, will be free to be registered, without any restrictions or condition based on grounds other than that of ignorance or of improper conduct. Clause 23 enables the Medical Council, with the consent of the Privy Council, to legislate for the examination, licensing, and registration of dentists. The clause requires them to register existing practitioners and also foreign and colonial dentists. The clause provides that if a scheme is made, a person not registered either in the "Medical Register" or in the "Dentists' Register" shall not be entitled to recover fees, and shall not be allowed to assume the designation of dentist or any designation implying that he is duly qualified to practise dentistry. This provision will avoid the objection raised to the Dental Practitioners Bill of Sir John Lubbock, that it prohibits surgeons from practising dentistry or calling themselves dental surgeons. Clause 24 allows the Medical Council, with the consent of the Privy Council, to legislate for the examination, licensing, and registration of midwives. The clause requires the register to include existing practitioners, but makes no provision for foreigners or colonists. The clause enables local authorities to undertake at their own expense any duties of examination or registration which the scheme throws upon them, but does not compel them to do so. If the scheme takes effect, a person not registered in the "Medical Register" or in the "Midwives' Register" will not be able to use any designation implying due qualification to practise midwifery. Clause 29 is intended to encourage those who have only a single to obtain a double qualification. The object of Clause 30 is to remove a difficulty which has arisen under the Lunacy Acts. There are separate sets of Lunacy Acts for England, Scotland, and Ireland. Under each set a certificate from a medical practitioner is required in certain cases—for example, for removing a lunatic to an asylum; and penalties are imposed for giving a certificate improperly. The Lunacy Commissioners were not altogether satisfied with this clause; but they proposed no amendment, and the clause is left as it is. If a medical practitioner in Scotland gave a certificate for the removal of a lunatic to an asylum in England, he would not be punishable if he gave a false or improper certificate. This has led to some inconvenience, and to a conflict between the Scotch and English authorities. The clause provides that the certificate may be given by a medical practitioner residing in any part of the United Kingdom, and that he shall be punishable for any false or improper certificate. Clause 31 will remedy an injustice as pointed out by the Board of Trade. It is caused by Section 36 of 21 and 22 Vict., cap. 90, preventing a person not registered from holding an appointment in any vessel, even though the vessel may be the vessel of a colony, and the person may be a registered medical practitioner in that colony. The provision of the Bill allowing a colonial practitioner to be registered in England will not quite meet the case, inasmuch as it would be hard to require every surgeon on a colonial ship to be registered in this country, and, secondly, he might be unable to obtain registration because he had not practised for more than ten years out of the United Kingdom, and might technically be domiciled in the United Kingdom. The Bill was read a first time, and the second reading was fixed for Monday, April 15.

Vivisection.—On the motion of Mr. Mellor, a return of the licences granted by the Home Secretary permitting vivisection was ordered to be made, in continuation of the return made in 1877.

West Kent Medico-Chirurgical Society.—The sixth meeting of the twenty-second session was held on Friday, March 1, at the Royal Kent Dispensary, Greenwich-road, at 8 p.m.; W. Johnson Smith, F.R.C.S. (President), in the chair. Dr. A. L. Galabin (Guy's Hospital) read a very interesting paper "On Operative Measures for the Relief of Congenital Atresia Vaginæ." The next meeting is on Friday, April 5, same time and place. Dr. J. C. Thorowgood will read a paper "On the Use of Mercury in Certain Inflammations."

The International Sanitary Congress at Paris in 1878.—The complete success which attended the meeting of the Sanitary Congress at Brussels last year induced some of the leading members to express strong wishes that the next meeting should be held at Paris this year during the Exhibition. The King of the Belgians also announced his intention of offering at the next Congress a gold cup to the corporate body, association, or individual who, by ameliorating the dwellings of the lower classes, succeeded in reducing the mortality among these classes. The Queen also offers a gold medal for the most successful efforts in the preservation of life in orphanages. Dr. Lionville, member of the Chamber of Deputies, who was a delegate of the French Government at the Brussels Exhibition, brought the subject before the Paris Society of Public Medicine and Hygiene, where it was very warmly received, and a committee was appointed to confer with the Ministers of the Republic, and has succeeded in obtaining their patronage. It is therefore about to enter actively upon the organisation of the Congress.—*Gaz. Méd.*, March 16.

FROM ABROAD.

Discharges from the Ear.

Under this title, Prof. Joseph Gruber, the celebrated Vienna aurist, contributes to the *Allg. Wien. Med. Zeit.*, January 1 and 8, a paper which is especially valuable for the precautionary treatment which it insists on. He dwelt strongly on the mischief which so often arises from treating this troublesome affection by applications to the meatus without the precise source of the discharge having been ascertained; and even in cases where this is apparent the most suitable kind of application is frequently not selected. When there is a circumscribed inflammation of the walls of the meatus, the membrana tympani being intact, we should abstain as much as possible from dropping stimulating liquids into the ear, as experience has shown that this procedure favours the extension of the inflammation to the membrane, while the end in view may be accomplished by other means. And especially should we abstain from the use of astringent or stimulant fluids when the membrane is perforated, the deeper structures being in a healthy condition; for these fluids, passing into the tympanum, or even into the pharynx, through the Eustachian tube, may prove the primary cause of a consecutive affection of the cavity of the tympanum, or induce great irritation in the pharynx. When it is remembered that the mucous membrane of the pharynx is far less sensitive than that of the cavity of the tympanum, we can easily infer how dangerous these applications may prove to the latter. Moreover, it is not necessary that such fluid substances should be of a stimulant character to do harm; for even simple water poured into the ear will often (as may be seen on inspection) induce hyperæmia in the normal membrana, and still more easily in the mucous membrane of the tympanum, that may easily go on to inflammatory action. Still more easily is this effect produced when these liquids are forcibly propelled into the ear by means of a powerful syringe.

Enough has been said to show that the practitioner in treating otorrhœa through the meatus should not only make use of suitable substances, but be also very careful in his mode of applying them. Strong solutions or ointments are usually applied to the meatus, when the inflammation is circumscribed, by means of pencils or other contrivances; but Prof. Gruber employs for this purpose, on a large scale, at his clinic, plugs prepared in a suitable way with the medicinal substances. These medicated plugs can be applied very easily by means of the ear-forceps while the patient holds his mouth open, and admit of being readily adapted to any part of the meatus that may seem especially to need them. Even in cases in which the amount of swelling of the external part of the meatus prevents inspection of its deeper portion, and where other symptoms lead to the suspicion that the deeper structures of the ear are also suffering, yet, unless some pressing indication be present, it is preferable to proceed first by treating the affection of the outer part of the meatus by means of the medicated plugs. The deeper parts can then be inspected, and the further plan of treatment be decided upon; and it has often been found that in this way recovery is effected much more rapidly than if the usual plan of dropping liquids into the ear from the commencement had been pursued. Instead of these medicated charpie plugs, we may use in some cases, with excellent effect, plugs of *laminaria digitata* shaped conformably to the meatus, and smeared before application with a suitable ointment. A thread should be attached to the outer end in order to facilitate removal. In long-continued affections of the ear attended with otorrhœa, the cavity of the meatus may have become obstructed by hypertrophied tissue, so that the passage may seem quite obliterated; and in such cases the formation of pus in the deeper-situated parts becomes of the more consequence by reason of the difficulty of its discharge. Here the application of the *laminaria* becomes very useful by re-establishing the passage and frequently enabling us to inspect the deeper tissues. In not a few cases this improvement of the local conditions, by securing the freedom and the cleanliness of the meatus, has sufficed to relieve the inflammation and to arrest an otorrhœa which has for years resisted the treatment by heroic measures. Accumulating experience has more and more convinced Prof. Gruber that otorrhœa which has been so over-treated should, as a general rule, be treated by mere expectation until the exact condition of the diseased processes can be ascertained and separated from those which have been artificially engendered by the treatment adopted; and in not a few cases he has been able by the use of simple water for the purpose of cleanliness to effect more than have others by very tedious and sometimes very teasing modes of treatment. Dropping astringent substances into the ear has been practised in the most objectless or even mischievous manner in otorrhœa dependent upon chronic or acute inflammation of the meatus, or upon the partial suppuration of polypous growths, the increase of the latter instead of their diminution being the consequence. The same objection to this form of treatment applies also to insufflation of astringent powders into the meatus. Not only may the alum or other powder be deposited on places where it may prove mischievous, but, detained in the crypts of the meatus, it may form, where cleanliness is neglected, concretions with the discharges, and increase rather than diminish the irritation. In such cases, the first procedure in treatment often consists in removing these concretions, which sometimes are the sole cause of very violent pains.

In otorrhœa dependent upon inflammation of the meatus or membrana, Prof. Gruber has long employed an artificial membrana tympani as a means of cure. He has so modified Toynbee's membrana that any patient can easily construct, and by means of a forceps apply it for himself. This may be formed of very different materials, but fine linen is usually preferred. This is smeared with weak stimulating ointments of oxide of zinc or red precipitate. The artificial membrane is also of great protective use in inflammation of the cavity of the tympanum, shielding it from external irritating influences—a protection that sometimes suffices for the arrest of the otorrhœa. Quite recently Prof. Gruber has had prepared medicated gelatine, in the form of globules and almonds of various sizes, and which contain medicinal substances in different quantities—as zinc, tannin, borax, sublimate, nitrate of silver; and in painful affections, opium or morphia. After cleansing the meatus, the preparation is deposited in this either by means of the finger or forceps, and, if required, pushed further in by a pencil of wadding. The meatus is then closed by wool, and the medicinal substance gradually dissolves and acts for a long time on the diseased parts. In proper cases this means of medication suits better than any other, and is likely to find acceptance in affections of the ear. Its prolonged action renders its frequent renewal unnecessary, while the gradual manner in which it operates causes it to be easily borne by the patient. Prof. Gruber anticipates that he will have conferred an important benefit by the introduction of this procedure. It seems especially useful in the tumefied condition of the mucous membrane of the cavity of the tympanum accompanying destruction of the membrana tympani.

The Telegraphic Writers' Cramp.

In March, 1875, M. Onimus read a paper to the Société de Biologie (*Medical Times and Gazette*, April 17, 1875, page 427), in which he called attention to a form of functional spasm observed in telegraph *employés*, and which they themselves have named the *mal télégraphique*. We have never understood that this form of spasm has been met with among telegraphic writers in this country; but M. Onimus, in another communication read at a recent meeting of the Biological Society (*Gaz. des Hop.* and *Gaz. Hebdom.*, March 16), states that he has had many additional opportunities of observing such cases. It is chiefly observed in those engaged in the manipulation of Morse's machine, and seems to arise from the difficulty of co-ordinating the motions which are required alternately for the formation of the dots and the dashes. Much depends upon individual temperament and the condition of the nervous system, as the existence of more or less irritability seems quite as necessary for the production of this cramp as the frequent repetition of the same movements. Some *employés* who are naturally nervous and excitable have the cramp after only a short time of service, their general health suffering at the same time. The same circumstances operate in writers' cramp, this especially occurring when a great number of letters or despatches have to be executed in a given time under a state of feverish

activity. The direction of the movements also exerts an influence. An *employé* successively employed the thumb, the index, and the median finger, each of these manipulating during two or three months, but one after the other then being seized with the cramp. He then used his wrist, which after a while also refused service. As the expeditionary despatches are manipulated by a movement of the entire hand as well as of the fingers from above downwards, when these vertical movements had become difficult an *employé* contrived a means of acting on the lever in a horizontal direction by means of a thread stretched from a point of support to the lever. For a while he was able to forward his despatches, but these new movements soon became embarrassed, and gave rise to the cramps. It seems that an *employé* of a medium skilfulness transmits or receives alternately about 7000 signals in an hour, making for the day of seven hours a total of about 49,000 signals. Under penalty of causing the receiver of the despatch to commit an error, the movements of the manipulator must be cadenced with perfect regularity. The transmission has also to be marked by periods of arrest of a conventional duration, being longer between each word than between each letter of the same word, and than between each signal of the same letter. "Taking, for example, my name," says Dr. Onimus, "a simple difference of the period of arrest may cause it to be read Otéimus, Otomus, Obmus, Omittus, and Oteittus. According to the calculation of a very skilful *employé* who has communicated these details to me, the mere defective transmission of the 'é' may cause the garbling (*tronquer*) of the word *référé* in 447 different manners. Besides the muscular contraction, the transmission occasions consequently at the same time great fatigue from the constant mental tension which it exacts."

The symptoms of the affection are more easily and more rapidly produced in women. The general symptoms consist principally in palpitations, vertigo, sleeplessness, perhaps impairment of vision (most of the older and laborious *employés* wearing spectacles), and a sense of constriction opposite the nape of the neck, seeming to hold the back part of the head in a vice. This sensation is not uncommon in men of business rendered ill or over-excited in important transactions in commerce, and it is especially met with when attempts are made to force intellectual functions that are already fatigued. To a state of over-excitement succeeds one of depression and melancholy, and moral and physical atony. Memory becomes bad, and, according to some, insanity may in the course of some years supervene on this pathological condition. During the progress of this pathological state the transmission of despatches presents some curious peculiarities, dependent on reflex movements produced by habit and in an unconscious manner. The hand does not always obey the determinations of the will: a word badly read is often correctly transmitted. On the other hand, an *employé* whose mode of transmission is naturally slow is not always, when dozing, interrupted in transmitting to his correspondent the ideas accompanying his half-dreamy state, for he continues to act on the lever and expedite his despatches. In some cases there exists, too, a state of things quite the opposite of spasm and rigidity, for the hand proceeds more rapidly than the will, and performs a series of movements which are co-ordinated and decipherable, but too rapid. It is especially after the manipulation has lasted for some time that these phenomena may be produced. Normally, it is only after an hour of work that the manipulation attains its maximum of rapidity.

Insufflation of Air in aid of Operation.—Dr. Bourel-Roncière, of the Buenos Ayres Hospital, publishes an account of twenty-five cases in which the execution of operations was greatly facilitated by this practice. A trocar is passed into the skin in the vicinity of the part to be operated upon, its canula being connected with a syringe, by means of which the operator injects air slowly, so as to distend the surrounding cellular tissue, the object being to separate and isolate the different layers and superficial tissues, the practice of the operation and the search for vessels being thus much facilitated. Pressure must be made near the part in order to prevent the infiltration of air extending too far. Among the operations performed were ten for strangulated hernia, nine for the removal of tumours of different kinds, twoexcisions of the maxilla, and ligatures of large bloodvessels.—*Archives de Méd. Navale*, No. 2, 1878.

REVIEWS.

La Chirurgie Journalière: Leçons de Clinique Chirurgicale Professées a l'Hopital Cochin. Par Armand Desprès, Chirurgien de l'Hopital Cochin, etc. Paris: Baillière et fils. 1877.

Daily Surgery: Lectures in Clinical Surgery. By Armand Desprès.

This is a volume of lectures on a great variety of surgical subjects, amongst which especial attention is directed to many of the most common diseases, which, as the author justly remarks, merit our closest study. The book is based upon a large clinical experience, and the topics are treated in a practical manner. In the first lecture are some very good remarks upon the importance of studying the natural history of disease, and recognising the varieties and different stages of the same affection. It is only possible to form a just diagnosis and prognosis by such studies, from which also it will become apparent that no dressing is universally applicable to all kinds of wounds, nor even all through the progress of the same wound. It is to be noted, too, that wounds of internal cavities, such as the rectum or mouth, heal readily without any dressing; and, after all, the greatest care should be devoted to securing rest to the injured part, which, of all things, most promotes healing. We think, however, that the author does not give the full value to drainage in the treatment of wounds. After discussing the various kinds of wounds and their treatment, several chapters are devoted to the management of the ordinary fractures; and illustrations are given of some of the apparatus that may be used. For the reduction of dislocations of the shoulder, the author recommends continuous traction upon the arm at a right angle to the trunk, the patient sitting on a chair, an assistant on one side making counter-extension on the trunk, and one on the other side pulling at the arm, while the surgeon manipulates the shoulder.

The value of rest is shown in the treatment of blood-tumours, and of varix; and the danger of opening the former is pointed out. The chapter on acute abscess contains many useful hints; and the various origins of the affection are well illustrated. We think the author exaggerates the rarity of retro-pharyngeal abscess, which is by no means uncommon in children and young persons. In speaking of glandular inflammations, it is shown how little prone to suppurate are some glands—*e.g.*, the parotid, thyroid, testis, salivary, and lachrymal glands.

A chapter is devoted to carbuncle, in the treatment of which the author is against incision. There are some useful hints on facial carbuncle, of which the extreme gravity is said to depend upon the phlebitis which accompanies it. To prevent the extension of this, pressure is recommended.

Necrosis is next treated of, and the author recommends that after the extraction of a sequestrum the cavity should be kept free of pus by a drainage-tube passed through the bone and soft parts. He is, however, averse to opening chronic abscesses connected with bone disease.

In a short chapter on recurrent ulcers, are some useful hints upon the advantage of supporting and protecting recently formed cicatrices by carefully applied pressure.

Several chapters are devoted to the subject of strangulated hernia. The author does not recommend aspiration, nor does he place any confidence in the application of ice for aiding the reduction of a hernia; neither does he think the administration of chloroform of service; but he depends chiefly upon the hot bath. We cannot agree with the author's estimate of the value of these methods, but we can commend his remarks upon the dangers of forcible taxis, and the cautions he gives as to the use of taxis in any way. As to the kind of operation for strangulated hernia, the author advises, as a rule, that the sac should be opened, excepting when the case is operated upon very early, or if it be one of simple epiplocele.

Stricture of the urethra is spoken of at considerable length; and the author, after speaking of the various kinds of stricture and their origin, gives his opinion as to the best methods of treatment. He argues against the use of internal urethrotomy, and recommends the continuous dilatation. There are chapters on the common diseases of the eye, on hydrocele, and on flat foot.

In speaking of the perforating ulcer of the foot, the author

points out that it almost always originates in a corn; and he regards the vascular and nervous lesions that have been observed in this disease as an effect rather than a cause of the malady. The book ends with a lecture on the use of derivatives and counter-irritation in surgery. There is little of originality or novelty in the work, but the author states that he wrote it for those about to enter on the practice of surgery, and probably M. Desprès' pupils may be glad to have this permanent record of his clinical teaching.

Chirurgie Réparatrice. Par le Dr. A. Verneuil. Paris: G. Masson. 1877.

Reparative Surgery. By Dr. A. Verneuil.

In this volume M. Verneuil collects together his various contributions to the literature of reparative surgery, which he prefaces with a characteristic introduction.

In the first articles, on *Anaplastie* and *Autoplastie*, the author classifies the deformities met with, and discusses the general principles on which measures for their relief should be undertaken, and which should guide us in the performance of the necessary operations. Then, after a lengthy disquisition on the history of autoplastie surgery, he describes in a series of essays the various conditions requiring its aid. Among these are cases of congenital closure or narrowing of the natural orifices, as imperforate anus and phimosis; and also the different kinds of acquired stricture, inflammatory and traumatic.

A paper on the history of the subcutaneous method of dividing contractions is followed by some observations on restoration of the nose, hare-lip, and staphyloraphy; a number of cases illustrating deformities from burns and other contractions, and the method pursued in their treatment, are given; and, finally, the surgery of recto- and vesico-vaginal fistulæ forms the subject of several chapters. The value of the book is chiefly historical; and, unfortunately, it has no index to facilitate reference.

GENERAL CORRESPONDENCE.

HYDROPHOBIA.

Letter from Dr. G. W. Callender.

[To the Editor of the Medical Times and Gazette.]

Sir,—May I ask you to state, on behalf of myself and of my colleagues on the Hydrophobia and Rabies Committee of the British Medical Association, that we should be glad to receive any intimation from medical men of any case of hydrophobia which actually comes under their notice, and in which they would be willing to allow Dr. Burdon-Sanderson or Dr. Lauder Brunton and myself to witness the progress of the case. I am, &c.,

George W. Callender.

7, Queen Anne-street, March 19.

THE THROAT HOSPITAL.

Letter from Mr. W. Pugin Thornton.

[To the Editor of the Medical Times and Gazette.]

Sir,—The following appeared in your article on the Throat Hospital last week:—"We are sorry to say that we cannot exonerate Mr. Pugin Thornton, the surgeon referred to, from something more than a want of delicacy in being instrumental as regards bringing forward such charges."

I deny that I was "instrumental as regards bringing forward" the charges against the Throat Hospital management, and enclose a statement from the late Chairman of the Hospital, General the Honourable Percy Feilding, in confirmation of my denial, and I beg that you will withdraw your remarks in your next issue. I am, &c.,

W. Pugin Thornton.

42, Devonshire-street, Portland-place, W., March 19.

With regard to an imputation contained in an article in the *Medical Times and Gazette*, that Mr. Thornton was instrumental in bringing forward certain charges against the management of the Throat Hospital, I beg to state that the charges submitted to the Court of Inquiry, of which the Duke of Grafton was president, were, at the request of that Court of Inquiry, submitted by myself and Mr. Sidney Smith, the late Chairman and Vice-Chairman, and with the approval of others who had also retired from the management. To the best of my belief Mr. Thornton never saw the charges before they were submitted.

P. Feildino, Major-General.

107, Queen's-gate, S.W., March 19.

[We really do not see what we have to withdraw. We never said that Mr. Pugin Thornton "saw the charges before they were submitted." We said—and we believe—that Mr. Thornton was instrumental as regards bringing forward these charges. This he has been in various ways—by the resignation of his appointment, let us say, or by his silence with reference to the charges. We put this on its very mildest grounds.

Next, as regards the want of delicacy. Such a charge is not one of a criminal nature—it is merely a matter of opinion; and, in our opinion, anyone who could take part in a public or private meeting where such matters as the following were discussed, he being the surgeon alluded to, betrayed what we call a want of delicacy. If it was more than this, we are sorry for it. We again submit the points which concern Mr. Pugin Thornton to our readers:—

"That Dr. Mackenzie instructed the Matron to summon a clinical assistant by messenger in cases of emergency, and forbade her summoning the Surgeon by telegraph.

"That the Committee showed their approval of such instructions by allowing them to remain in force even after the occurrence of the case, when more than half an hour elapsed before a clinical assistant could be procured, and the patient died before his arrival.

"That in the case of Fanny Brooks, the clinical assistant sent for was a gentleman not on the staff of the Hospital, and, therefore, not a proper person to be summoned, as his position as a clinical assistant had not been recognised by the Committee, in accordance with the by-laws then in existence.

"That he had never before attempted to perform tracheotomy, unassisted, in the dead of night, and had only once performed the operation at all, and had then not completed it.

"That to entrust such a dangerous operation to such inexperienced hands, when the Surgeon (who had performed similar operations nearly fifty times) could have been summoned by telegraph, showed a want of regard for the interests of the Hospital, if not an absolute disregard of human life."

It is plain the whole thing has ended in a *fiasco*. The whole inquiry has degenerated into a petty squabble between individuals, in which we cannot think that Mr. Pugin Thornton and his friends have, thus far, had the best of it. If they think otherwise, why does not General Feilding publish his report? However, we are glad to see that Mr. Pugin Thornton has the good sense not to be perfectly pleased with his share in the business.—Ed. *Med. Times and Gaz.*]

THE APOTHECARIES' COMPANY *v.* SHEPPERLEY.

Letter from Mr. H. R. Hatherly.

[To the Editor of the Medical Times and Gazette.]

Sir,—The appeal made by Mr. Stanger in your issue of the 16th inst. has met with a very satisfactory response, and I beg to acknowledge, on behalf of the Nottingham Branch of the Medical Defence Association, the receipt of many encouraging promises of support from influential medical men. It is not thought necessary or desirable to publish the names of those who have promised pecuniary assistance, especially as no consent has hitherto been obtained to such a course.

The importance of this prosecution to the profession at large can scarcely be over-estimated, the issue involved

being neither more nor less than the right of chemists and druggists to prescribe. It is obvious that if we admit the "right" of prescribing at all, it is difficult to draw any line or limit where the practice shall cease, and chemists and druggists will become to all intents and purposes medical practitioners. The prefix "counter" to the word "prescribing" does not alter in the slightest degree the meaning of the latter word. If chemists can prescribe legally, there is no law which limits them to prescribe across a counter. If they visit a patient at his own residence the offence is not in the visiting, but in the prescribing. Chemists and druggists have not received the professional training which would enable them to distinguish between the premonitory symptoms of dangerous diseases and what they are pleased to term simple ailments; the patient they prescribe for across the counter for a cough or cold may be in reality suffering from consumption or heart disease.

The case of the Apothecaries' Company *v.* Shepperley is a test-case, and from its very simplicity will solve in the most decisive manner the important question: Have druggists a right to prescribe? The chemists and druggists contend that they have a right to the practice of "counter-prescribing," and are fighting for this alleged right with all the weight, influence, and pecuniary support of a powerful association. The Nottingham Branch of the Medical Defence Association is but a small local society. Nevertheless, we hope to have the question finally settled, and if the prosecution is successful—which we have good grounds for believing it will be—the Branch will be able and willing to meet all liabilities. But there is a proverbial uncertainty about law, and the Nottingham Branch feels that it is absolutely necessary to have a guarantee fund to provide against the possibility of an adverse decision, or of an appeal to a higher court. It is with this object we are soliciting the aid of our medical brethren, and we look with confidence to the profession at large for such support as will enable us to fight the Chemists' and Druggists' Association (the real, although not the nominal, defendants) on equal terms.

I am, &c., Henry R. Hatheely,
Hon. Sec. to the Nottingham Branch of the
Medical Defence Association.

An Artificial Leg in Basket-Work.—Dr. Boens introduced to the notice of the Belgian Academy of Medicine (*Bulletin de l'Acad.*, December 29) an artificial thigh and leg constructed in osier by M. Pochet, of Flawinnes, who had himself undergone amputation in the upper third of the thigh. The apparatus, of which a drawing is given, is represented as being cheap, and, although of extreme lightness, yet possessing ample solidity. It is made in two forms—straight, without articulation, replacing the old classic wooden leg; and furnished with articulations of the knee and foot, so as to impart great mobility to these parts. Dr. Boens considers Pochet's leg as the best and most economical that has hitherto been constructed.

Delayed Ligature of the Funis.—Dr. Budin, while *interne* at the Maternité, came to the conclusion from his investigations that it is better not to tie the funis until one or two minutes after the complete cessation of the pulsation. By tying it immediately after birth we, in fact, prevent the child deriving about ninety-two grammes of blood from the placenta. Now, as Welcker, Bischoff, and others have shown that the weight of the blood of a new-born infant amounts on a mean to 270 grammes, or about a thirteenth part of the weight of the body, abstracting ninety-two grammes may be considered as equivalent to bleeding an adult of the weight of sixty-five kilogrammes to the extent of 1764 grammes. Dr. Hélot, Surgeon to the Hospice at Ronen, has since examined the subject with the intention of showing whether the infant really acquires this blood, by counting the globules of blood by Hayem's method, and by weighing the infant immediately after birth before dividing the cord, and then again when the cord has ceased to beat. By these means he found that there was an increase of 209,632 globules, and an addition to the weight of the child of fifty-three grammes. He therefore thinks that in normal cases rapid ligature of the cord should be entirely rejected, this operation not being performed until some instants after respiration has been completely established.—*Gaz. des Hop.*, March 14.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, March 6.

Charles West, M.D., F.R.C.P., President, in the Chair.

The following gentlemen were elected Fellows of the Society:—Henry Allen Aldred, M.D.; Frederick Stephen Alford, M.R.C.S.; Walter Edward Husband, M.R.C.S.; and John Archibald Lorimer, L.R.C.P. (Farnham).

New Form of Metrotome.

Dr. Galabin showed a modified form of Dr. Peaslee's instrument. The principle was the same as that applied in Civiale's urethrotome, and in that of Sir Henry Thompson. It was especially applicable for incision in cases of stenosis of the internal os, although it might be used for the external os. The advantage was that it divided both sides equally, to an exact and very moderate extent, while Simpson's or other similar metrotomes were apt either to cut too deeply, or, if the operator were timid, not deeply enough. It could also be introduced through a very small canal, while the single or double-bladed metrotomes were usually made larger than the ordinary sound, and could not be passed in the cases which most required incision. In the modified instrument the tube was made round instead of flat, which much facilitated its introduction. A spring was also introduced within the instrument, which prevented the blades sliding forward prematurely, and returned it after use.

Dr. Avelino had for many years used an instrument very similar to that showed by Dr. Galabin. As a rule he preferred metrotomes which cut only in one direction.

Fibro-cystic Disease of Uterus.

The report of Dr. Galabin and Dr. Herman on the tumour shown by Dr. Thomas Chambers at the last meeting of the Society was then read, together with Dr. Chambers' account of the subsequent history of the case, and of the post-mortem examination. Sections of the tumour under the microscope were also exhibited by Dr. Galabin. These showed its structure to be that of a fibro-myoma having very numerous and wide interspaces between the bundles of fibres. The subsequent history of the case as given by Dr. Chambers told that the patient died twenty-six hours after the operation. At the autopsy the bladder was found to be very much elongated, and appeared to have been drawn upwards as by the ascent of the tumour so as to form a cone-shaped cavity, the cone being involved with the tumour so intimately as to escape recognition during the operation. The result was the ensnaring of a small piece of the cone or fundus in the ligature which embraced the whole stump. Although the bladder was not inflamed, it was but fair to suppose that the injury it sustained contributed greatly to the result.

Tubes for Injecting the Uterus after Parturition.

Dr. Hayes showed a new form of tube which he had devised for the injection of the uterus after labour or abortion, with a solution of Condy's fluid or other disinfectant, and also for what was now becoming a favourite measure, the injection of hot water. The advantages he claimed for this tube over others were—its non-flexibility; its increased length, enabling it to reach the fundus easily; and the number of perforations in its extremity, so that the fluid was discharged into the uterus in the form of a spray, which insured the whole of the uterine cavity becoming bathed by the fluid.

Dr. Rogers had a precisely similar tube made for him twenty years ago. It was constructed of the same metal, and was perforated in the same way.

Dr. Cleveland had never heard of the short tubes condemned by Dr. Hayes being used for injecting the uterus. They were only intended for washing out the vagina.

Dr. Murray thought that the tube for intra-uterine injection should have large apertures in preference to small ones, which were very liable to become clogged up. He had used for many years a vulcanite tube of the same length as that shown by Dr. Hayes; in accordance with the views he had expressed, it had large apertures.

Dr. Fancourt Barnes exhibited some vulcanite tubes which had been devised by Dr. Robert Barnes for injection of the uterus with solution of perchloride of iron after

abortion. They contained pieces of sponge soaked with the solution, which was made to ooze slowly out through eyelet holes at the end of the tube by means of a piston. The alleged danger of forcing the fluid through the Fallopian tubes into the peritoneal cavity was thereby obviated.

Unicorned Uterus.

Dr. Herman exhibited a specimen of a unicorned uterus, and read the following description:—The uterus lay close to the right pelvic wall. The right Fallopian tube and ligaments were short, but otherwise normal. The left ovary was high up on the left side near the internal abdominal ring. The left canal of Nuck was very large, and a thick fibrous band proceeded from the ovary down this canal. The end of this band presented an enlargement, which was more vascular than the rest. A thin but firm and strong fibrous cord, between two and three inches in length, united the ovary to the upper part of the rectum. On the surface of the pelvic peritoneum a flat band of slightly diverging fibres could be seen running from the cervix uteri in the direction of the left ovary. Both ovaries showed signs of having discharged ova. The patient was unmarried, and aged forty-nine. It was stated by her sister that she had ceased to menstruate for three years, that the flow had always been scanty, and that she never complained of pain. She died from capillary bronchitis.

On Traction by the Lower Jaw in Head-last Cases.

Dr. Matthews Duncan contributed a paper on this subject. He commenced by saying that by the traction referred to, two objects were professed to be gained—flexion of the head, and extraction. Attempts to secure these objects by the fingers applied to the fossæ caninæ were in vain, because the force in a right direction available by such procedure was of too small amount. Besides traction of the lower jaw there were two other sources of power—first, pulling by the feet or otherwise through the spine (this was the paramount force); second, expression, which by mere strength of the accoucheur's arm might be estimated at from thirty to forty pounds, or, using the weight of the accoucheur's body, might reach one hundred pounds. The dangers attending spinal pulling and expression were very considerable. Those of the latter method were as yet but little known. Danger in head-last cases, when the base of the skull was in the brim of the pelvis, was not from compression of the cord, but from asphyxia through inhalation of solid and fluid matters into the lungs. Speedy delivery was often desirable, and lower-jaw traction deserved consideration when there was obstruction requiring the use of force, and when the other forces were not sufficient. Injuries resulted in two of Dr. Duncan's four experiments with lower-jaw traction—separation of the two halves of the bone in one case, in which fifty-eight pounds were suspended on it; and laceration of the inside of the mouth with dislocation in the other. The force applied through the lower jaw, acting as it did chiefly through the maxillary joints, was favourably applied for producing extraction, but not for producing flexion, because of the nearness of the joint to the centre of the head's motion, the bitemporal diameter (in a contracted brim). The whole force so applicable might be more than fifty-eight pounds, and might be used in cases of dead children, or children certainly doomed to death, or in cases where the head was left in utero. Further experience was required to show how much could be safely used in a living fœtus. Lower-jaw traction did not produce considerable flexion of the head. Flexional efforts are seldom required. The paramount dragging by the spine, as it acted in a case of contracted brim behind the centre of the head's motion, annulled or undid any slight flexion produced by the lower-jaw traction. But spinal pulling could easily be made to produce flexion, after the head's passage of the brim, by giving it a proper direction, and at this time flexion is essential.

The President said that years ago he used to practise and to teach the drawing down of the head by applying the fingers of one hand to the canine fossæ, and pressing up the occiput with the other hand. But we now learnt from Dr. Duncan that it was not possible to achieve much by this method, nor, indeed, did it appear from his paper that we were able to do much more by traction on the lower jaw.

Dr. Fancourt Barnes stated, with regard to the application of the forceps to the after-coming head, that he had practised this operation on the phantom repeatedly, and had found it remarkably easy. He had no experience of the operation on the living subject, but he thought that it had many advantages over traction on the body of the child, for there was no danger of nicking the neck or injuriously stretching the spinal cord.

The President said that it had always appeared to him one of the great disadvantages of the use of the phantom, that operations upon it seemed so uncommonly easy, and he had always hesitated to draw conclusions from these operations to those on living women.

In reply to the President's previous remarks,

Dr. Matthews Duncan said that he had particularly pointed out in his paper that the method of Smellie—that of traction with the fingers in the fossæ caninæ, and simultaneous pressure upwards on the occiput—was an efficient and valuable method of delivery in head-last cases.

Dr. Playfair said that of late years, since becoming familiar with the writings of Goodell on the subject, he had been much impressed with the great advantage of the expression of the head from above in these cases. It seemed to him that it was of primary importance not to depend on one method alone, and the great advantage of expression was that it could be performed in union with traction.

Dr. Cleveland said that it was pleasing to learn that one might justifiably use such a large amount of force as mentioned by Dr. Duncan without doing any material damage. There still, however, remained one want, and that was a means of determining what muscular force one was putting forth. How, he would ask, was the operator to know that he was using a force not exceeding fifty pounds?

Dr. Roper pointed out that the conditions present in different cases of head-last delivery varied very much. There was a great difference between the cases in which the head was delayed above the brim, and those in which it was only delayed in the cavity of the pelvis. He believed that where podalic version had been effected as an alternative to craniotomy, the life of the child was often lost from the head being delayed at the brim of the pelvis. If the head was fixed above the brim, there was not much scope for manipulation, as it was hardly possible to reach the jaw and the occiput, and we had therefore to rely on traction by the spine in the axis of the brim. It was the later movement of the head through the pelvis which required its rotation on its transverse axis. This distinction had hardly been pointed out in Dr. Duncan's paper.

Dr. Braxton Hicks felt that there was considerable difficulty in discussing Dr. Duncan's paper, for the author had not attempted to treat the whole question of the delivery of the after-coming head. Had he done so, he would probably have advocated a combination of traction on chin and neck, and pushing up the occiput, combined with pressure from above—a plan which he had adopted and taught many years. But the point dealt with by Dr. Duncan was quite different from this general question, and consisted in the determination of how much force might be safely used in a particular direction.

Dr. Wynn Williams thought it well to point out that a living muscle, as regarded its resistance to tension, was under very different conditions from a dead muscle. He did not believe that a living child could safely bear the same force that could be applied with impunity to a dead child. The active resistance of a living muscle made it much more liable to injury than a dead muscle; and a drunken man in falling from his horse almost invariably escaped injury, the reason being that his muscles were paralysed. He believed that much injury was often done by undue traction being made to deliver the after-coming head.

Dr. Clement Godson said that he had been much struck during Dr. Duncan's experiments with the small amount of force necessary to deliver the after-coming head of an unusually large child on a phantom pelvis, with a conjugate diameter of three inches, and the question occurred to him whether the soft parts did not interfere with delivery very much more materially than was generally imagined. He could not agree with Dr. Duncan in regarding with disfavour the application of forceps in head-last deliveries. He had himself in one case failed to deliver by Smellie's method; but on applying the forceps he had succeeded in at once extracting the head without any difficulty whatever.

After remarks from Mr. Poole, of Sidcup, and Mr. Mason,

The President pointed out that it was much easier to

apply the forceps to the after-coming head when the patient was delivered in what he might call the continental position where she lay on her back. Here it was possible to secure ample space for the use of the forceps by drawing the body of the child well forward towards the abdomen of the mother.

Dr. Murray agreed with the President as to position making some difference; but he had nevertheless applied the forceps in two cases with complete success, though the patient remained in the ordinary position, and he considered that the use of the forceps was indicated sooner rather than later in the delivery of the after-coming head when difficulty arose.

Dr. John Williams said that he had several times applied the forceps to the after-coming head, and with the greatest facility. In the last case of this kind which he had seen, he had found it impossible to deliver by any other means.

Mr. Cockell urged the importance of sweeping the body of the child round towards the mother's abdomen before applying the forceps.

A Case of Protracted Labour in which the use of the Forceps was Typically Indicated.

This paper was communicated by Dr. George Roper. The case referred to in it occurred in October last in a woman aged forty, who had had thirteen previous labours at full term, all of them severe. On being called to the case by a midwife, Dr. Roper found that delivery had taken place naturally, except for the use of ergot, which had been given seventeen hours after the rupture of the membranes, the os being fully dilated. The drug was speedily followed by very severe and frequent pains, and delivery ensued in two hours and a half. The child, a male, weighing nine pounds and a half, was stillborn, and its appearance indicated that it had very recently died in its birth. The head was of very large size, and the ossification of the cranial bones was so complete that the fontanelles and sutures were nearly obliterated. For the purpose of contrasting this head with one of normal size, casts had been prepared, a comparison of which showed that the measurements of the former exceeded those of the latter in all the usual diameters by one-half to three-quarters of an inch. Another interesting point in the shape of this head was that the vault of the cranium was twisted on the base, so that the measurement from the left mastoid process of the temporal bone to the posterior-superior angle of the right parietal was much greater than a corresponding line drawn between the same points on the opposite sides of the head. This lateral obliquity was probably to be explained by the severe pressure the left side of the vertex had to sustain against the rami of the left ischium and pubes in the rotation of the head, the corresponding area of the right side of the vertex being exposed to no obstacle, but having the expanse of the pubic arch before it, became elongated. In his comment on this case Dr. Roper observed that he felt strongly that whenever it was determined to use forceps, the operator should be able plainly to state the indication pointing to the necessity for its use. In the present case there were, apart from death of the child, many indications of necessity:—(1.) Accidental discharge of liquor amnii at the very beginning of labour. (2.) A woman aged forty, whose many previous hard labours had enfeebled the uterine force. (3.) Great fatness, especially of the abdominal walls, and a weakened state of the abdominal muscles. (4.) A large and hardly ossified head to be felt during labour. (5.) Three hours of slow progression in the second stage of labour in a woman who had had twelve living children. Dr. Roper thought it could be scarcely doubted that if forceps had been used an hour before the ergot had been given the mother would have been delivered with much less suffering, and of a living child.

After some remaks from Dr. Heywood Smith,

Dr. Wiltshire called the attention of the Fellows to the case of the normal child, as well illustrating what he might call the natural asymmetry of the fœtal head. The cast before them was very well adapted for this purpose, as, the child being delivered by the feet, the head had not undergone much compression during delivery. The two halves of the head might be equal in bulk, though he doubted whether they were so; but, in 60 per cent. of the cases which he had examined, the right half of the head was in a plane a little in advance of the left half. This asymmetry affected not only the cranial bones proper, but also the arch of the palate. His own observations had convinced him that it was independent of any compression to which the head might have been exposed during delivery, for it was seen in children delivered by Cæsarean section. He thought the fact was important, as it might have some influence on the mode of presentation of the head during delivery.

The meeting then adjourned.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 12.

Charles West, M.D., F.R.C.P., President, in the Chair

Five Hundred Cases of Operation for Stone in the Bladder of the Male.

Sir Henry Thompson read an account of 500 cases of operation for stone in the bladder of the male adult, with remarks on the most important incidents which occurred in connexion with them. The 500 cases were in adult males—that is, of twenty years old and upwards—the great majority being from fifty to seventy years; the mean age sixty-one and a half. They comprised the author's entire and unselected work, from the first case up to January, 1877. The published experience of Cheselden, Martineau, Brodie, and Fergusson is recorded: the sum of similar cases treated, by number 422. Of these 422, 69 were fatal, or 16½ per cent. (*i.e.*, one in rather more than 6 cases). Of the 500 cases in question, 422 were by lithotrity, and 78 by lithotomy. The number of individuals operated upon was 420; several of the lithotrity patients being operated upon twice, a few three times. In all cases a considerable interval and evidence of fresh formation, mostly a newly descended uric acid calculus, had existed. Small phosphatic concretions, although removed by lithotrity, had not been reckoned as stone in the bladder. The chemical constitution of the calculi was given as follows:—Uric acid, 313; phosphatic, 99; mixed, 81; cystic oxide, 1; pure phosphate and carbonate of lime, 2; phosphatic calculi formed on foreign bodies, 4. The mortality, accepting almost any death occurring within six weeks of the operation, was—in the 422 cases of lithotrity 32 deaths, or one in 13, and in the 78 cases of lithotomy 29 deaths, or 1 in 2¾, giving a total of 500 cases with 61 deaths, or 1 death in 8½ cases. The causes of death given in each case were tabulated, compared, and contrasted in the two operations, with inferences thereupon. The accidents met with in operating by each mode were also detailed, and the manner in which they were dealt with. The general inference arrived at was, that it is unwise to apply, as a rule, lithotrity to any stones above moderate size; and if any calculus is sufficiently large to require what is known as the fenestrated instrument, it is better to employ lithotomy. The author had not employed such an instrument during the last ten years. Finally, the after-history of patients who had been operated on by lithotrity was remarked upon.

The President thanked the author of the paper on behalf of the outside public, among whom, in a certain sense, he felt himself, for having been the means of mitigating so much human suffering and saving human life. The paper was so clear, concise, and simple, that all must feel they had learned something by it.

Mr. Cadge, of Norwich, said that, living so far away as he did, he had seldom an opportunity for joining in such discussions. Five hundred cases of stone in twenty years showed, whether the profession liked it or not, the tendency to modern specialism. It was remarkable also as indicating the degree of success attained. The paper also prompted the question, What are the relative values of lithotomy and lithotrity in operative proceeding. The time had finally come when the mortality of lithotrity might be estimated. Sir Henry Thompson's experience gave a mortality of 32 out of 422 cases, or in all 8 per cent. Taking the experience of Brodie, Fergusson, Liston, Keith, his own, and the author's, there were 892 cases with 74 deaths, giving a total mortality of 8 per cent.; and this might be taken as the average mortality after lithotrity. In lithotomy the author admitted a mortality of 20 per cent., but this was hardly a fair comparison, for if Mr. Crosse's Norwich tables were taken, the average age was higher than in Sir H. Thompson's cases, and the death-rate as much as 31 per cent.

This certainly showed that in all patients above fifty the immediate danger from lithotomy was very much greater than from lithotrity. But in cases of lithotomy the stone was usually larger and heavier, and this was an important factor in the case. The result was that the total mortality had been reduced in all cases from 31 to 12 per cent. His own experience tallied closely with this. He had operated in all on 220 patients—on 134 by lithotomy, on 86 by lithotrity. In lithotomy 104 were adults and 30 below twenty years of age; of the former 20 per cent. died; of the lithotrity cases 8 died. Recurrence of the stone was, however, rare in lithotomy; in 700 operations Crosse found only 12, and this appeared to be due to leaving fragments behind; but this recurrence was comparatively common in lithotrity, and was one of its chief defects. Another was the cystitis which was often left after lithotrity, and which Sir H. Thompson considered unavoidable, and due to fragments or the repeated use of instruments. A more frequent cause was, however, sacculated bladder from enlarged prostate and accumulation of matters in the bladder. The formation of stone in the bladder was exceedingly rare; when such did form it was usually from the remains of a former calculus. Then, after operation, there were not only those who died or recovered, but those also in whom the stone remained, and he thought this list much longer in lithotrity than lithotomy. And notwithstanding the fact that such was the case, he thought lithotrity an enormous boon.

Mr. Donald Napier insisted on the importance of the early recognition of a stone before a serious operation had become necessary.

Mr. West, of Birmingham, had brought statistics from five hospitals—the two at Birmingham, Dudley, West Bromwich, and Wolverhampton. During three years there had been 108 cases, mostly in children. Out of 81 of these cases, 74 recovered and 7 deaths. In some districts stone was most common in children, in others in adults. Lithotrity generally did well if early performed. In that district some surgeons preferred the median operation in lithotomy. This he thought best suited for children, or where the stone was not large.

Mr. Macnamara referred to his practice in the North-Western Provinces in India, where stone is very common. He had almost entirely performed lithotomy. He followed at first Fergusson's plan of making a small opening, and then enlarging it, but experience showed it was better to make a free incision. With a similar end in view, he often crushed the stone if large before performing lithotomy. He used to devote two or three weeks to preparing the patient for the operation.

Sir J. Fayrer referred to the experience of the native Professor of Surgery, Baboo Ram Dass, in Calcutta, whose experience was very large. He held in his hand a book giving the result of 248 cases of lithotomy with seventeen deaths. The patients did better up the country than in Calcutta, where pyæmia was rife.

Sir James Paget added his congratulations to those already received by Sir H. Thompson. He thought that it was now fair to compare the results of lithotomy and lithotrity, but he confessed to a general feeling in favour of lithotomy. The main ground of his preference was expressed by the list of those who neither died nor recovered after lithotrity. He thought that those cases of cystitis where death ensued within twelve months should be included in the mortality if the cystitis could be clearly traced to the operation. The two operations ought to be fully compared in every possible way, including the pain and suffering after lithotrity and the not unfrequent recurrence of stone. Moreover, it was doubtful, after all the improvements made by Sir H. Thompson, if any further were to be looked for in this direction for some time to come. There was much scope, however, in the after-treatment of lithotomy and in carefully selecting patients. Were he to begin surgical work again, he would adhere to lithotomy, using lithotrity for cases where the stone could be got rid of in a few sittings. He was sure the mortality after lithotrity could be reduced one-half.

Mr. Teevan believed that the condition of the patient after lithotrity was a most important matter. He had performed lithotrity forty-two times in eighty-seven cases of calculus. Lithotrity would sometimes fail most lamentably; but this was no bar to the operation. He had seen five cases in which there had been a recurrence of calculus after lithotomy after intervals of several years. What was to be done with the cases of lithotrity which were neither killed nor cured? In a case of chronic cystitis following lithotrity, he had followed the plan recommended by Dr. Gouley, of New York, and had performed urethral section. The patient recovered, and continued well.

Mr. Lund had given much attention to the antiseptic treatment of wounds. The rare occurrence of septicity after lithotomy was a very good example of the results of irrigation. The lithotomy wound was irrigated by a peculiar fluid—the urine,—which consisted not only of water, but contained saline matters in solution. The urine flowing over the wound constantly removed the morbid products, and sloughing was very rare.

Mr. Holmes suggested that the urine which flowed over the wound contained bacteria. He thought that the success was to be explained by the constant drainage.

Dr. Broadbent thought that an accumulation of morbid material was almost impossible in lithotomy wounds.

Mr. Spencer Wells said that in Sir H. Thompson's cases there was apparently a large number of cases of cystitis. This was probably to a great exteut due to the decomposition of the urine by the introduction of germs or elements of septicity with the lithotrite or catheter. This should be prevented by the use of carbolic acid or thymol or something of the kind. It had been stated by Sir H. Thompson that wounds of the bladder could scarcely occur. He remembered a case in which the late Mr. Tyrrell, at St. Bartholomew's Hospital, wounded the back part of the bladder in performing lithotomy; and Mr. Tyrrell hence recommended that the knife used should be short.

Mr. Walter Coulson referred to some accidents attending lithotrity. He had seen a case where the instrument could not be withdrawn, and it was necessary to make an incision in the perineum. In another case, the screw had broken down, and the male blade of the instrument had cut into the urethra, being released with difficulty only by a series of sharp concussions. In another case, the withdrawal of the instrument was impeded by the lodgment of a fragment of stone between the blades.

Mr. T. Smith said that, if the lithotrite became clogged with a stone, it could be freed by means of the finger introduced into the rectum.

Mr. Maunder congratulated the author of the paper, but doubted whether it was advantageous, as regarded the education of the profession, that so large a proportion of cases of operation for stone should go into the hands of one surgeon.

Sir Henry Thompson thanked the meeting for the manner in which his paper had been received; and especially those members who had come from a distance to take part in the discussion. He thought that lithotomy and lithotrity were often contrasted from a wrong point of view. They were not at all antagonistic, but rather complementary of each other. In but few cases could there be a dispute as to which should be done. He thought all surgeons agreed—a lithotrity which could remove the stone at two sittings was the best operation; and many calculi came into the category. In reply to Mr. Napier, he said that stone in the bladder could be detected at an early stage by any intelligent medical man. The profession was not altogether to blame for the failure to detect stone in the early stage; the explanation lay, to a great extent, in the reluctance of many patients to believe that they had stone. As to the cases of diseased bladder met with after lithotrity, he would say that, if such cases were more rare after lithotomy, it was because they died after the operation. He was not reverting to lithotomy; but he would, perhaps, do it now in some of the cases in which he formerly performed lithotrity. The accidents attending lithotrity were generally due to attempts to crush too large a stone. He agreed with Mr. Spencer Wells as to the value of disinfection of the instruments by antiseptic solutions.

His Royal Highness the Prince of Wales has recently consented to become an annual subscriber to the Hunstanton Convalescent Home. His Grace the Duke of Devonshire, as Chancellor of the University of Cambridge, has accepted the post of one of the presidents of the fund being raised at Cambridge towards completing the memorial building for this Home, which it is hoped may be finished during the forthcoming summer.

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the ordinary monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, March 12, 13, and 14, the following were the successful candidates:—

For the licence to practise Medicine:—

Burke, Andrew Joseph.
Collis, Robert William.
Denson, Joseph Leopold.
Dimond, John Elliott.
Edge, James Joseph.
Minchin, Robert William.

For the licence to practise Midwifery:—

Alford, George Ernest.
Burke, Andrew Joseph.
Collis, Robert William.
Denson, Joseph Leopold.
Dimond, John Elliott.
Edge, James Joseph.
Fogarty, Thomas Frederick W.
Grew, Francis Blaney.
Hall, James Campbell.
Minchin, Robert William.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 14:—

Collins, George Duppa, King's College Hospital.
Diggle, John Arthur, Stretford-road, Manchester.
Pybus, John Alfred, Godalming, Surrey.
Smith, Herbert Arthur, Haverstock-hill.
Webster, Ridley Manning, Colebrook-row, Islington.
Wood, Charles, 38, Trinity-square, S.E.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Hackman, L. K. H., St. Mary's Hospital.
Mennell, Zebulon, St. Thomas's Hospital.
Veale, William Edward, St. Bartholomew's Hospital.

NAVAL, MILITARY, &c., APPOINTMENTS.

ADMIRALTY.—Deputy Inspector-General of Hospitals and Fleets James Jenkins, M.D., C.B., has been promoted to be Inspector-General of Hospitals and Fleets in Her Majesty's Fleet, with seniority of March 8. Surgeon Algernon William Winn has been placed on the retired list from March 13. The undermentioned surgeons have been promoted to the rank of Staff-Surgeon in Her Majesty's Fleet:—Ernest Arthur Hudson, William John Rankin, M.D., Robert George Bird, Eugène Victor de Méric, Charles Gregory Wodsworth, with seniority of March 16, and John Guitton Clarke and Richard James Sweetman with seniority of March 17.

WAR OFFICE.—MEDICAL DEPARTMENT.—Surgeon-Major John Hendley to be Deputy Surgeon-General, *vice* Alfred Crocker, retired upon half-pay.

MILITIA.—MEDICAL DEPARTMENT.—Surgeon-Major Lawrence Bramley, 6th West York, resigns his commission, and is permitted to retain his rank; Surgeon Richard Archer Warwick, 1st Royal Surrey Militia, resigns his commission.

BERKS YEOMANRY CAVALRY.—Surgeon Richard Hemsted Barker resigns his commission.

BIRTHS.

ARCHER.—On March 10, at Royston, Herts, the wife of H. R. Archer, M.D. Lond., of a son.

CHARLES.—On February 22, at 10, Harrington-street, Calcutta, the wife of T. Edmouston Charles, M.D., of a son.

DAVIES.—On March 16, at Umballa, the wife of Surgeon-Major R. W. Davies, M.R.C.S. Eng., of a daughter.

HARLEY.—On March 12, the wife of John Harley, M.D., of 39, Brook-street, Grosvenor-square, W., of a daughter.

HOGG.—On March 12, at Gunnersbury, Chiswick, W., the wife of W. Gordon Hogg, M.D., of a daughter.

IMLACH.—On March 14, at 153, Bedford-street, Liverpool, the wife of Francis Imlach, M.D., of a son.

RENDALL.—On March 13, at Maiden Newton, Dorsetshire, the wife of William Rendall, M.R.C.S.E., of a daughter.

MARRIAGES.

DOWIE—ONNEN.—On February 7, at Batavia, Adam, eldest surviving son of E. J. Dowie, M.D., of Greenock, to Helena Elizabeth, youngest daughter of the late P. L. Onnen, of Batavia.

DEATHS.

BAGG, GEORGE WILLIAM, M.R.C.S.E., of Prior's Marston, Warwickshire, on March 13, aged 58.

HALL, MARRIOTT, M.R.C.S. Eng., of Sheffield, on March 17, aged 38.

SHAW, JOHN PEARSON, at Flanderwell, Rotherham, on March 14, in his 89th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BOOTLE BOROUGH HOSPITAL.—House-Surgeon. Candidates must possess both a medical and a surgical qualification, and be duly registered. Applications, with copies of testimonials, to the Hon. Secretary, on or before April 10.

EAST LONDON HOSPITAL FOR CHILDREN, AND DISPENSARY FOR WOMEN, SHADWELL, E.—Resident Medical Officer. Candidates must be unmarried and fully qualified practitioners in medicine and surgery. Applications to the Secretary at the Hospital, on or before April 11.

KENT AND CANTERBURY HOSPITAL.—House-Surgeon. Candidates must be registered under the Medical Acts as legally qualified to practise medicine and surgery, unmarried, and not more than forty years of age. Applications, with testimonials, to the Secretary, on or before March 29. A copy of the laws regulating the duties of the House Surgeon may be had on application to the Secretary at the Hospital.

MANCHESTER ROYAL INFIRMARY.—Resident Surgical Officer. Applicants must not be less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. Applicants must be not less than twenty-five years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer for the Fever Hospital at Monsall. Applicants must be not less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer of the Convalescent Hospital at Cheadle. Applicants must be not less than twenty-four years of age; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 31.

ROYAL FREE HOSPITAL, GRAY'S-INN-ROAD.—Senior House-Surgeon. Candidates must be possessed of a medical or surgical qualification from one or more of the Examining Boards of the United Kingdom, rendering them eligible for registration under the Medical Act. Testimonials to the Secretary, on or before April 3.

ROYAL FREE HOSPITAL, GRAY'S-INN-ROAD.—Junior Resident Medical Officer. Candidates must be possessed of a medical or surgical qualification from one of the Examining Boards of the United Kingdom. Testimonials to the Secretary, on or before April 3.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Kettering Union.—Mr. Thos. L. Greaves has resigned the Corby District; area 7736; population 1838; salary £35 per annum.

Keynsham Union.—Mr. Riordan has resigned the Marksbury District; area 8895; population 1980; salary £40 per annum.

Newmarket Union.—Mr. Richard Faircloth has resigned the Second District; area 12,559; population 2631; remuneration per case.

Penzance Union.—Mr. George T. Mockett has resigned the Third District; area 12,656; population 10,799; salary £26 per annum.

Torteth Park Township.—Dr. Marc A. Macdonnell has resigned the office of Assistant Medical Officer at the Workhouse; salary £100 per annum.

West Derby Union.—The Garston District is vacant; area 1680; population 7568; salary £120 per annum.

APPOINTMENTS.

Berwick-upon-Tweed.—Mr. John Pattinson as Analyst for the Borough.

Eton Union.—Wm. Fairbank, M.R.C.S. Eng., L.S.A., to the Burnham District.

King's Lynn.—Wm. M. Hamlet, F.C.S., as Analyst for the Borough.

Kingston-upon-Hull.—James Baynes, jun., F.C.S., as Analyst for the Borough.

Newport (Mon.).—Joseph W. Thomas, F.C.S., as Analyst for the Borough.

Stoke-upon-Trent Parish.—James Grant, M.D. and C.M. Aber., to the Longton District.

Woolwich Union.—George Rice, B.M. and M.C. Univ. Edin., to the Infirmary and Workhouse.

"OUR BOYS."—The proceeds of the 1000th performance of the above comedy at the Vaudeville Theatre amounted to £300, which was distributed to various charitable institutions, not forgetting the following hospitals, each of which received £50:—The Charing-cross, the Great Northern, and the Metropolitan Free.

CEREBRAL SYPHILIS.—In a lecture upon this subject (*Annales de Dermatologie et de Syphilographie*, 1878, No. 1), Prof. Fournier states that of forty-seven cases of cerebral syphilis that have come under his care, only three of the number succeeded grave forms of syphilis. In thirty the syphilis was of a medium ordinary character as regards the amount and quality of the secondary symptoms, while in fourteen the symptoms were of so benign a character as to have long passed unperceived and without treatment. He concludes—(1) any attack of syphilis, whether grave, medium, or benign in its primary manifestations, may be followed by cerebral accidents; (2) that the original benignity of a syphilis (whether treated or not) is no guarantee against the ulterior recurrence of these accidents; (3) as far as facts hitherto are known, the originally medium or benign cases appear to be those which are most often followed by cerebral syphilis. He refers to a case in which, seventeen years after the occurrence of the slightest symptoms of syphilis, the health continuing perfectly good in the meantime, cerebral symptoms occurred which proved fatal.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. F. J. de Lisle.—Received with thanks.

A very Old Subscriber.—A member of our staff who has been on this journal from the first number, states that the first contributions of the late Albert Smith to the *Medical Times* were commenced before he became a member of the College of Surgeons. They were "The Confessions of a Dissecting-Room Porter by Jasper Buddle," and signed "Rocket." The treasury not being very flourishing, his friend, the editor and founder of the journal, the late Mr. Frederick Knight Hunt, M.R.C.S., could only afford *half-a-crown a page*—a sum which often afforded amusement years after to mutual friends. Mr. Hunt was chief editor of the *Daily News* when he died several years ago.

A Tutor.—You will see by a notice elsewhere that you are too late, as the examination, which was commenced on Thursday last at Burlington House, will be brought to a close this day (Saturday).

Dr. Campbell.—Mr. Bransby Cooper was a Member of the Council of the Royal College of Surgeons, which institution gave him £1500 for the museum of his uncle, Sir Astley Cooper, in 1843.

A Would-be Candidate.—"The Sugden Prize" was founded by Lord St. Leonards when Lord Chancellor of Ireland, and is awarded by the Royal College of Surgeons of Ireland, to which institution your application should be addressed. We have not heard anything of it, or the subjects for competition, for some time past. The London College of Surgeons publish annually the subjects for the Jacksonian and Collegial-Triennial Prizes and the names of the prize-winners.

A Metropolitan Student and G.L.R.—The registration having been abolished, you will not be required to attend during the last ten days of March, as heretofore.

Hygiene.—The medical officer's last annual report shows that the death-rate of Leamington had only been 12·2 per 1000 inhabitants during the year 1877.

Farmers and London Milk Dealers.—The Metropolitan Dairymen's Society prosecuted, last week, two Berkshire farmers at the Southwark Police-court, for selling to London dealers milk adulterated with water. The delinquents were amerced in £10 and £20 and £2 7s. costs, respectively.

Butter or Butterine.—At the Salford Police-court, last week, Mary Mason was charged with having retailed some butterine for butter, but the charge was dismissed on the ground that "butterine"—an article containing 80 per cent. of foreign fat—is not less nutritious and wholesome than butter itself.

A. D. D., Bristol.—The annual report of the Committee of the Cottage Hospital, Wells, was published a few days since, and is of a satisfactory character. Twenty-five cases had been admitted during the past year, fourteen were discharged cured, nine relieved, one died, and one remained under treatment. The total receipts during the same period amounted to £300, and the expenditure to £218.

M.D. Oxon., and Dr. Campbell.—The Tancred Studentships are confined to the University of Cambridge, and notices of vacancies are inserted in the London and Cambridge newspapers the week before, and the second and third week after, Easter. There are four for the study of Physic at Gonville and Caius College, Cambridge; each student receives a stipend of £100 per annum. The studentship is tenable until a student shall have obtained the degree of Bachelor of Physic, and for three years afterwards only.

Henry Cline.—The inscription on his monument at Hadley, near Barnet, will give you all the information you desire, as follows:—"*Quid et quo modo.*—(The coat of arms).—Sacred to the beloved and revered memory of Joseph Henry Green, F.R.S., D.C.L., President of the General Medical Council of the United Kingdom, and twice President of the Royal College of Surgeons of England, who for the last twenty-eight years of his life dwelt in this village and worshipped in this church. He was born in London, the 1st of March, 1791, and died at The Mount, Hadley, the 13th of December, 1863. His remains rest with those of others of his family in the cemetery at Highgate. 'The Lord ordereth a good man's going, and maketh his way acceptable to Himself' (Psalm xxvii. 23)."

Figaro states that when Dr. B. was asked what was his fee, he said he had no fixed price, adding that a physician's hand should be like the collecting-bag at church, into which the rich put what they please, and the poor what they can.

Cuvier.—Professor Flower will bring his course of lectures on the Comparative Anatomy of Man to a close on Friday next. Amongst his audience we have noticed his Grace the Duke of Argyll, Lord Colin Campbell, Sir Frederick Pollock, the Bishop-designate of Queensland, the Rev. George Stanton, Messrs. George and Henry Pollock, etc.

Physiologicol.—It was, we believe, Auguste Comte who remarked that, "in order to observe, your intellect must pause from activity; yet it is the very activity you want to observe. If you cannot effect the psuse, you cannot observe; if you do effect it, there is nothing to observe."

Dangerous Toys.—Accidents of a serious character, and even fatalities, to children from toys seem to be on the increase. Many of these play-things are, no doubt, decidedly dangerous, a fatal instance of which, caused by a toy, has just been the subject of a coroner's inquiry at Brighton. It appears that a little girl named Virgo dropped down dead in consequence of accidentally swallowing a "squeaking air-bladder." The medical evidence showed that the toy had lodged in the gullet, with the bladder downwards, so that when the child breathed, the bladder filled out, and thus choked her. The jury returned a verdict of "Accidentally suffocated."

Open Spaces.—Mr. Charles Wood, Assistant Enclosure Commissioner, has concluded his inquiry with respect to the memorial of the Metropolitan Board of Works to acquire on behalf of the public the open spaces of Brook-green, Parson's-green, and Erlbrook-common, in Hammersmith and Fulham. The Assistant-Commissioner will shortly lay his report before the Enclosure Commissioners.

Interest.—Mr. F. Soane, one of the candidates for the post of curator of the Soane Museum, vacant by the death of Mr. Bonomi, is the only male representative, we understand, of the founder and his family. He is by profession an architect.

Students.—Dr. Nicholas Whistler Colahan, who has just been appointed to the chair of Materia Medica in Galway, vacant by the promotion of Dr. Pye to the chair of Anatomy, is senior medical officer to the work-house hospital, and has a respectable practice as a physician in the locality. He has been clinical lecturer to the medical students since the opening of the present session. Dr. Colahan graduated with honours in the Queen's University.

"Nauberry."—A charge was brought before the magistrate at Hull, recently, against a butcher for exposing for sale the carcase of a cow which had died from the effects of a disease called "nauberry," a complaint, it appears, which causes great distension of the lungs, it being a species of tumour which spreads to other parts of the body. The defence set up was that such portions of the carcase as were not obviously affected were fit for human food. The magistrate did not concur in this view, and expressed his determination to convict in every case where an attempt was made to sell a carcase affected by such a disease, until he was set right by the higher courts; but as there were some circumstances favourable to the defendant the judgment was respited on paying of costs. The decision of the magistrate will, we should hope, be upheld by the higher courts.

Sober by Compulsion.—The following results of prohibiting the sale of intoxicating liquors (except by agencies) in the State of Maine are given by the ex-Governor Dingley. It appears that in the year 1831 thirteen distilleries made a million gallons of liquor; now there is not a distillery or brewery in the State. In 1832 there were sold by two thousand taverns, hotels, and saloons ten millions of dollars worth of liquors, or twenty dollars worth to each inhabitant of the State. In 1877 the aggregate sales of 160 town agencies were one hundred thousand dollars, or fifteen cents to each inhabitant. Including clandestine sales, the highest total for the year is set down at one million dollars, or two dollars for each inhabitant. In 1855 the deaths from delirium tremens were 200; now they are not over fifty annually.

A Young Military Surgeon.—The large increase of wounded in modern warfare is thus remarked upon by Deputy Inspector-General Longmore:—"Numberless facts concur to prove, as regards particular bodies of troops opposed to each other in actual fighting, that the numbers of *wounds* inflicted within corresponding periods are far greater than they ever were before the introduction of rifles and breechloaders." In all battles, ancient and modern, the proportion of killed is much less than of wounded. At Alma it was 1 killed to 4·6 wounded; at Magenta, 1 to 4·9; at Solferino, 1 to 5·2; at Sadowa, Prussians 1 to 3·6, Austrians 1 to 2·9.

Aqua.—It is well known that Paris and London are situated under strikingly similar geological conditions. In the Paris basin artesian wells have been carried through the chalk into the underlying strata, and have for many years been discharging water from porous rocks belonging to the series popularly known as the lower greensand. The famous boring at Grenelle, a suburb in the south-west of Paris, is the best known example of these deep Artesian wells. Although the work of boring was commenced in 1833, the reservoirs of the lower greensand were not tapped until 1841, when the well had attained to a depth of 1798 feet.

Alleged Infringement of the Lunacy Act.

A surgeon of Windsor was charged at the Berks Assizes last week with unlawfully receiving to board and lodge in a house at Datchet, not duly licensed for that purpose, a lady as a lunatic or alleged lunatic. The prosecutors were the Commissioners of Lunacy. The evidence showed that the defendant received the patient under arrangement with her father; £200 a year being the remuneration. At the time she was admitted into the house it was alleged on the authority of Sir William Gull that she was only suffering from nervous debility. It appeared, however, from the evidence of several witnesses that she became worse, and according to Dr. J. C. Bucknell, one of the visitors of the Commissioners, she was decidedly insane on August 30, on which day he paid her an official visit. The jury were locked up all night, but could not agree, and were consequently discharged the following morning. On the application of the prosecutors a new trial was granted, the Judge postponing the hearing till the next assizes.

Statist: War Sickness and Mortality.—Of the British army in the Crimean war 16,211 men died of sickness, but only 4595 were killed in the field, or died of their wounds. In the Peninsular war 22·5 per cent. of Wellington's fighting strength was always in hospital.

COMMUNICATIONS have been received from—

Mr. W. E. Poole, London; Mr. Jonathan Hutchinson, London; Dr. Thos. Barlow, London; Mr. John Chatto, London; Dr. F. Churchill, London; Dr. J. M. Bruce, London; Mr. B. R. Wheatley, London; Mr. T. M. Stone, London; Dr. J. Pearson Irvine, London; Dr. F. M. Pierce, London; Dr. J. E. Pollock, London; Dr. Squire, London; Dr. Godson, London; Dr. Haviland, London; Mr. Hay, Hull; Dr. O. Sturges, London; Dr. Sullivan, London; Dr. Fearipa, London; Mr. C. J. Cullingworth, Manchester; Dr. Spencer Cobbold, London; Mr. H. R. Hatherly, Nottingham; Mr. Pugin Thornton, London; Mr. G. W. Callender, London; Dr. Sutherland, London; Mr. W. Adam, London; Mr. G. R. Howat, London; "Senex," London; Mr. H. W. Hart, Brixton; Dr. J. W. Moore, Dublin; Mr. R. W. Parker, London; Dr. H. R. Hitchcock, Lewisham; Dr. H. J. Hardwicke, Sheffield; Mr. Wm. Campbell, London; Mr. G. Gaskoin, London; The Secretary of the Royal Institution, London.

BOOKS AND PAMPHLETS RECEIVED—

Dr. Louis Fialla, Guérison de Six Aveugles-Nés—H. Aubrey Husband, M.B., M.C., M.R.C.S., The Student's Handbook of the Practice of Medicine—Edward Levinstein, M.D., Morbid Craving for Morphia—Transactions of the Edinburgh Obstetrical Society, vol. iv.—S. Weir Mitchell, M.D., Fat and Blood, and How to Make Them—James B. Russell, M.D., Report on Outbreak of Enteric Fever in West End of Glasgow and Hillhead—Herbert Junius Hardwicke, M.D., F.R.C.S. Edin., Guide to European Universities—The Seamen's Hospital, Greenwich, S.E., Fifty-Seventh Report—T. Gallard, De l'Avortement au point de vue Médico-Légal—T. Henry Green, M.D., An Introduction to Pathology and Morbid Anatomy, fourth edition—Report of the Building Committee, New York Hospital—Marcus Clarke, The Future Australian Race.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux Gazette Medicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—New York Medical Journal—Boston Journal of Chemistry—Home Chronicler—Canada Lancet—Students' Journal and Hospital Gazette.

APPOINTMENTS FOR THE WEEK.

March 23. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Rev. W. Houghton, "Gleanings from the Natural History of the Ancients."

25. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Drs. Manson and Cobbold, "On Filaria Sanguinis Hominis clinically considered in reference to Elephantiasis, Chyluria, and Allied Diseases" (with Specimens).

26. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

Royal Medical and Chirurgical Society, 8½ p.m. Dr. George Thin, "On the Condition of the Skin in Tinea Tonsurans." Mr. Laidlaw Purves, "On Paracentesis of the Tympanic Membrane." Dr. Southey, "On the Minute Anatomy of the Kidney as bearing on its Physiological Functions."

27. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 2½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

28. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

29. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Prof. Dewar, "On the Chemical Actions of Light and their Electrical Relations."

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 16, 1878.

BIRTHS.

Births of Boys, 1292; Girls, 1260; Total, 2552.
Average of 10 corresponding years 1868-77, 2424·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	792	734	1526
Average of the ten years 1868-77	806·6	755·9	1562·5
Average corrected to increased population ...	...	...	1672
Deaths of people aged 80 and upwards ...	...	...	61

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	7	1	4	2	12	...	3	...	2
North ...	751729	21	5	9	2	16	3	9	1	4
Central ...	334369	...	6	2	...	2	...	...	...	2
East	639111	13	9	6	1	24	2	1	1	1
South	967692	12	11	7	1	30	4	3	...	4
Total	3254260	53	32	28	6	84	9	16	2	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·182 in.
Mean temperature	40·5°
Highest point of thermometer	51·9°
Lowest point of thermometer	27·8°
Mean dew-point temperature	32·8°
General direction of wind	Variable.
Whole amount of rain in the week	0·09 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 16, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Mar. 16.	Deaths Registered during the week ending Mar. 16.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577804	47·5	2552	1626	51·9	27·8	40·5	4·72	0·09	0·23
Brighton	103923	44·1	65	44	52·3	28·0	39·8	4·34	0·05	0·13
Portsmouth ...	129461	28·9	73	41	53·6	31·0	42·3	5·73	0·02	0·05
Norwich	84620	11·3	63	30	51·8	33·0	40·4	4·63	0·17	0·43
Plymouth	73599	52·8	44	50	55·5	30·0	44·8	7·12	0·18	0·46
Bristol	206419	46·4	151	78	53·7	26·6	42·3	5·73	0·00	0·00
Wolverhampton ...	74210	21·9	55	38	50·3	26·7	39·2	4·00	0·11	0·28
Birmingham ...	383117	45·6	329	16...	...	...	...	...	...	...
Leicester	121473	38·0	81	43	53·8	29·8	40·9	4·94	0·12	0·30
Nottingham ...	165267	16·6	105	58	52·8	31·3	41·1	5·06	0·07	0·18
Liverpool	532881	102·2	462	256	50·1	34·2	41·3	5·17	0·17	0·43
Manchester ...	360514	84·0	289	184	...	...	...	...	...	...
Salford	170251	32·9	182	61	54·8	25·5	39·8	4·34	0·12	0·30
Oldham	107366	23·0	87	56	...	...	...	...	...	...
Bradford	185088	25·6	127	78	51·7	31·2	39·9	4·39	0·09	0·23
Leeds	304948	14·1	217	106	52·0	31·0	41·7	5·39	0·12	0·30
Sheffield	289537	14·7	226	126	52·0	30·5	40·2	4·55	0·03	0·08
Hull	143139	39·4	108	49	53·0	30·0	40·4	4·66	0·11	0·28
Sunderland ...	112459	34·0	107	53	56·0	35·0	42·8	6·00	0·11	0·28
Newcastle-on-Tyne	144570	26·9	101	67	...	...	...	...	...	...
Edinburgh	222371	53·1	159	94	50·2	29·7	39·7	4·29	0·14	0·38
Glasgow	566940	94·0	423	290	49·7	30·2	41·2	5·11	0·06	0·15
Dublin	314666	31·9	237	187	54·0	24·6	43·0	6·11	0·16	0·14
Total of 23 Towns in United Kingdom	8373953	37·9	6221	3641	56·0	21·6	41·1	5·08	0·10	0·25

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·18 in. The lowest reading was 29·80 in. on Sunday morning, and the highest 30·48 in. on Saturday at noon.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

LOCALISATION OF CEREBRAL DISEASE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.

LECTURE I.

(*Concluded from page* 302.)

THE lecturer, after quoting Franck and Pitres to show that a distinct retardation of the electrical impulse took place both in the grey matter of the brain and the white conducting fibres, and that this was diminished when the grey matter was removed: also, that after such removal a stronger current was necessary to produce a given effect—both phenomena showing that the grey matter acted as a centre—proceeded to say:—

I have purposely excluded until now the consideration of the effects of localised destruction of the cortex. These, as I hope to be able to show you, are, in the case of man at least, clear and decisive in the same direction. But, it must be admitted, there is a considerable want of unanimity among the conclusions which physiologists have considered themselves entitled to draw from their several experiments. Many of these differences seem to me in a great measure due to narrowness of view, and to the entire disregard of the facts relating to man himself.

We should think it a very misleading research if a pharmacologist were to set himself to determine the mode of action of a drug on the human economy by experiment on an animal, before he had first ascertained whether the animal on which he proposed to experiment exhibited symptoms of being similarly affected by the drug as man himself. Before his researches could be allowed to have any bearing on therapeutics, this would have to be established; for we know that drugs may act differently on different animals. It is even more necessary, in regard to the physiology of the brain, that a similar caution should be exercised. Anatomical homologies must not be pushed too far in support of identity of function.

A frog deprived of its cerebral hemispheres still remains capable of a number of the most complicated and adaptive reactions, so little differing from those normally manifested by this animal that, except for the defect of spontaneity, they might be regarded as identical. But no one will say that the symptoms presented by the brainless frog at all resemble the clinical picture of a case of disorganisation of the cerebral lobes in man. The same may be said of pigeons, the favourite subjects of Flourens' experiments, and the origin of many misleading conclusions in human physiology and pathology. Nor are the phenomena in the case of the much-experimented-on rabbit at all comparable to those observed in cerebral disease in man. We might be led, from the effects of ablation of the cerebral hemispheres in this animal, to regard the cerebral hemispheres as having special functional relation to the upper extremities, as these are more particularly paralysed; and this conclusion has a germ of truth in it, when looked at in the proper light, but is a grave error if applied without qualification to human physiology.

The destruction of the cerebral hemispheres in the dog approaches more nearly in its results to the universal powerlessness caused by a similar lesion in man, but not so complete or enduring. The destruction of the cortex only, however, though at first producing a greater or less degree of paralysis of the opposite limbs, does not render the animal quite powerless; and within a few days or weeks the motor powers are regained to such an extent that, except on hurried movements, a superficial observer might come to the conclusion that the animal had not suffered by the lesion.

Some, who do not extend their view beyond dogs, at once jump to the conclusion that facts like these justify them in asserting that not only in dogs, but in man also, the cortex of the brain has no real relation to motility; and that the phenomena which ensue from cortical lesions are merely transitory disturbances of the functions of other parts. Others, if they do admit any direct relation between the two, assume, from the apparent recovery, that there is no exclusive localisation of function, and formulate a law of functional substitution of one part by another to explain the difficulties, chiefly of their own creation.

When, however, we ascend higher, and come to experiments on animals which in conformation, habits (and shall we say kinship?), most closely approach man, and to the experiments of disease on man himself, we meet with results little in harmony with the conclusions drawn by some from their researches on the lower animals. In monkeys, destruction of those regions, excitation of which gives rise to definite movements of the limbs, causes paralysis of voluntary motion complete and enduring, and restricted to those very movements the centres of which are specially destroyed. It will be my endeavour to show you that what is true of the monkey is strictly true also of man.

Taking these facts as established—the proofs of which will be given subsequently—may we not, instead of trying to contradict one set of facts by the other, find some generalisation which will admit of all these apparently discordant results being harmonised with each other and with the great law of evolution? This, I think, can be arrived at, if we recognise the fact towards which all these experiments on different animals point, viz., that the same movements have a plurality of causes, and are represented, though with different significations, in different centres, higher and lower. Those which involve conscious discrimination, and which we term volitional in the strict sense of the term, are those alone which are necessarily paralysed by destruction of the cortex; while those which are variously described as automatic, instinctive, or responsive, including all the motor adjustments concerned in equilibration, locomotor co-ordination, and instinctive emotional expression, are more or less completely and independently organised in the centres situated below the cortex. Though there is a general solidarity of the whole cerebro-spinal system, yet there exist in different animals great differences in the degree of organisation of such movements in the lower ganglia, and in their relative independence of the higher centres. This is greatest in the frog and pigeon, and lowest in the monkey and man. Hence the marked differences which we observe in different animals in the results of destruction of the cerebral hemispheres.

If we clearly distinguish, therefore, between the different *kinds* of movement and their respective centres, and regard paralysis of truly volitional movements, or those involving conscious discrimination, as the only essential feature of cortical lesions, we shall be in harmony with the results of comparative experimental physiology, and shall not need a hypothesis of functional substitution, which cannot, I think, be maintained consistently by those who accept the doctrine of specific localisation.

In accordance with this generalisation, I ventured to predict that, even in the case of animals whose motor powers did not seem permanently to suffer from destructive lesions of the cortical motor centres, those movements must be paralysed which involved conscious discrimination, and were not automatically organised. This has been amply verified by Goltz's experiments on dogs.(a) Goltz found that, though a dog's paw is not permanently paralysed as an organ of locomotion by destruction of the cortex, yet it remains permanently paralysed for all those actions in which it is employed as a hand.

The conclusion, therefore, which I would provisionally draw from the results of experimental physiology, and proceed to justify by a consideration of the facts of human pathology, is, that there are certain regions in the cortex to which definite functions can be assigned; and that the phenomena of cortical lesions will vary according to their seat, and also according to their character—viz., whether irritative or destructive, two classes into which they may all be theoretically reduced. And, as the experiments of physiology necessitate the strictest topographical accuracy in the position and limits of individual centres, it is of vital importance that the same accuracy should be observed in respect to the situation of lesions in the human brain. For this reason we are, however unwillingly, obliged to discard most of the older records of cerebral disease, unless where supplemented by drawings, or by description of the position

(a) Pflüger's *Archiv für Physiologie*, Band xiii., Heft i., 1878.

of the lesion with reference to certain fixed points; for, although we can now read these cases in the light which laws otherwise arrived at throw upon them, they cannot be used to establish these laws. In the older records, we, as a rule, meet with nothing more exact in the topography of a lesion than that it was situated "on the convexity" of one or other hemisphere, or in the anterior, middle, or posterior lobe—terms which admit of considerable looseness of interpretation. Anatomically, the frontal lobe was generally considered as marked off from the middle lobe by the antero-parietal (Huxley) or precentral sulcus (Ecker); but we find Bouillaud extending the frontal lobe so as to include as much as the half of the hemisphere—an extension of this lobe which may serve to explain his theory as to the seat of the faculty of speech. In the question of localisation of cerebral function, we must follow Bacon's dictum: "Frustra magnum expectatur augmentum in scientiis ex superinductione et insitione novorum super vetera, sed instauratio facienda est ab imis fundamentis."

It is in the observations of the last few years, in which only the necessity of strict accuracy in cerebral topography has been duly recognised, that we must look for our chief material, and of this the largest share has been contributed by Charcot and the French school of pathology. As to the kind of evidence on which we must base our conclusions, I cannot do better than quote and emphasise the injunction given by Charcot and Pitres in their recent valuable papers on the localisation of cerebral disease.(b) "It is necessary rigidly to exclude as valueless in this relation all observations in which the topography of the lesion is not indicated with rigorous exactitude; and among those which, in a topographical point of view, leave nothing to be desired, it is necessary to make a selection and reject the majority of the cases of multiple lesions and all those in which the lesion was diffuse. It is necessary also to accept with extreme caution cases of tumour compressing without destroying the cerebral convolutions; for the effects of pressure may be felt at a distance from the seat of lesion, and complicate the results. In making these estimations, in our opinion absolutely indispensable, the number of ancient observations really available is extremely small; and it is by the aid of new observations, made with all the requisite precautions, that we must approach the study of cerebral localisation." The lesions which are of special value are cases of wounds, laceration, or loss of substance, and various forms of chronic degeneration, such as atrophy, necrosis, etc., and the results of hæmorrhage, inflammation, and the like, which, though at first complex, subside into local lesions, such as softenings, cysts, and abscesses; or, in general, all lesions which exclude diffuse meningo-encephalitis, mechanical compression, or general cerebral disturbance.

From the standpoint of regional diagnosis, the exact nature of the lesion is unimportant, except in so far as it is likely to cause irritation or destruction of the cerebral substance. The diagnosis of the nature of the lesion will depend on other characters, such as its mode of onset, general symptoms, and the various recognised features by which we are enabled, with more or less accuracy, to arrive at it. To discuss these, however, would be foreign to the subject more immediately in hand. I would likewise remark at the outset that, notwithstanding the large and daily increasing body of evidence from the pathological side, for the present at least, physiological experiment is considerably in advance of pathology as regards precision and exactitude; and that, but for the aid of physiological experiment, pathology would not even yet have succeeded in arriving at much beyond general indications as to localisation.

For my part, I should consider it hasty and not to the advantage of *la belle doctrine* of cerebral localisation to make pathological evidence carry more than it can legitimately bear at present, or to found on it measures of treatment not well considered, the only effect of which will be to make cerebral localisation pray earnestly to be saved from its friends.

Lesions of the Frontal Lobes.—I will first direct your attention to lesions of the frontal lobes. The frontal lobe includes the *superior*, *middle*, and *inferior frontal* convolutions, and the *ascending frontal* or *precentral* convolution, together with the *orbital* and internal aspect of the corresponding region.

(b) *Revue Mensuelle*, 1877, No. 1, page 6.

Though anatomically all this region may be included in the frontal lobe, it is necessary for physiological and pathological purposes to subdivide it, and to term that part which, in its relation to the skull, is roughly bounded by the coronal suture, the *prefrontal lobe* or antero-frontal region. In the monkey, electrical irritation of this region causes no motor reaction; and destruction of these lobes causes no paralysis of motion or sensation. If the positive results, which will be alluded to subsequently, are not altogether definite, the negative results are clear and decided.

There are multitudes of cases on record in which these regions have been the seat of extensive disease on one or both sides with a like negative result as regards sensation or motion; and recovery has taken place after the most frightful lacerations and loss of substance. One of the most remarkable of these is that known as the "American Crowbar Case": and as this case, in addition to its importance otherwise, has lately been appealed to by Dr. Dupuy,(c) as showing that lesions of the so-called motor region may occur without paralysis, I have thought it necessary to obtain exact particulars in reference to it. And I am enabled, by the kindness of my friend Professor Bowditch, of Harvard, to place before you photographic delineations of the skull in this case, which was at one time regarded incredulously as a mere "Yankee invention." The skull is preserved in the Medical Museum of Harvard University. There is no doubt about its authenticity. An account of the case was published by Dr. Bigelow,(d) and another and later, after the man's death, by Dr. Harlow,(e) under whose care he came immediately after the accident, and through whose interest in the man till death we owe the preservation of this unique specimen.

The subject of the lesion was a young man, Phineas P. G., aged twenty-five. While he was engaged tamping a blasting charge in a rock with a pointed iron bar, three feet seven inches in length, one inch and a quarter in diameter, and weighing thirteen pounds and a quarter, the charge suddenly exploded. The iron bar, propelled with its pointed end first, entered at the left angle of the patient's jaw, and passed clean through the top of his head, near the sagittal suture in the frontal region, and was picked up at some distance "covered with blood and brains." The patient was for the moment stunned, but, within an hour after the accident, he was able to walk up a long flight of stairs and give the surgeon an intelligible account of the injury he had sustained. His life was naturally for a long time despaired of; but he ultimately recovered, and lived twelve years and a half afterwards. Unfortunately, he died (of epileptic convulsions) at a distance from medical supervision, and no post-mortem examination of the brain was made; but, through the exertions of Dr. Harlow, the skull was exhumed and preserved. Upon this the exact seat of the lesion can be determined. The union of the cicatrices of entrance and exit, however, allowed a pretty accurate estimation of the track of the bar during life, and Dr. Bigelow made experiments on a skull to determine this; and as the photographs, when compared with figures before you, show,(f) with very considerable accuracy. Dr. Bigelow, who examined the man two years after the accident, thus describes the appearances presented:—"A linear cicatrix of an inch in length occupies the left ramus of the jaw near its angle. . . . The eyelid of this side is shut, and the patient unable to open it; the eye considerably more prominent than the other. [Vision lost (Harlow).] . . Upon the head, and covered by the hair, is a large unequal depression and elevation. . . . A piece of the cranium of about the size of the palm of the hand, its posterior border lying near the coronal suture, its anterior edge low on the forehead, was raised upon the latter as a hinge, to allow the egress of the bar; still remains raised and prominent."

From his examination of the skull itself, Dr. Harlow thus describes the track of the bar:—"The missile entered, as previously stated, immediately anterior and external to the angle of the inferior maxillary bone, proceeding obliquely upwards in the line of its axis, passed under the junction of the superior maxillary and malar bones, comminuting the

(c) *Medical Times and Gazette*, 1877.
(d) *American Journal of Medical Sciences* for July, 1850.
(e) "Recovery from the Passage of an Iron Bar through the Head." Read before the Massachusetts Medical Society, June 3, 1868. Boston: 1869.
(f) The lectures were illustrated by numerous diagrams, to which reference was constantly being made.

posterior wall of the antrum, entered the base of the skull at a point the centre of which is an inch and a quarter to the left of the median line, in the junction of the lesser wing of the sphenoid with the orbitar process of the frontal bone —comminuting and removing the entire lesser wing with one half of the greater wing of the sphenoid bone—also fracturing and carrying away a large portion of the orbitar process of the frontal bone, leaving an opening in the base of the cranium, after the natural effects at repair by the deposit of new bone, of one inch in its lateral, by two inches in its antero-posterior, diameters" (page 17). Dr. Harlow does not describe the further track of the bar through the frontal bone, but you will clearly see from the figures that the whole lesion is situated anterior to the coronal suture. If now you will compare the track of the bar through the skull and brain with the diagram before you (Fig. 3), showing the relations between the skull and the brain, you will, I think, have no doubt in convincing yourselves that the whole track is included within that region of the brain which I have described as the prefrontal region, and that, therefore, the absence of paralysis in this case is quite in harmony with the results of experimental physiology. The only other region which the bar could have injured is the tip of the temporo-sphenoidal lobe and the outer root of the olfactory bulb. Respecting the condition as to smell, nothing is, however, said by either Bigelow or Harlow. This case is generally quoted as one in which the man suffered no damage, bodily or mental. But hear what Dr. Harlow says as to his mental condition:—"His contractors, who regarded him as the most efficient and capable foreman in their employ previous to his injury, considered the change in his mind so marked that they could not give him his place again. The equilibrium or balance, so to speak, between his intellectual faculties and animal propensities seems to have been destroyed. He is fitful, irreverent, indulging at times in the grossest profanity (which was not previously his custom), manifesting but little deference for his fellows, impatient of restraint or advice when it conflicts with his desires, at times pertinaciously obstinate, yet capricious and vacillating, devising many plans of future operation, which are no sooner arranged than they are abandoned in turn for others appearing more feasible. A child in his intellectual capacity and manifestations, he has the animal passions of a strong man. Previous to his injury, though untrained in the schools, he possessed a well-balanced mind, and was looked upon by those who knew him as a shrewd, smart business man, very energetic and persistent in executing all his plans of operation. In this regard his mind was radically changed—so decidedly, that his friends and acquaintances said he was 'no longer G.'" (Page 13.)

After these facts I do not think it can be said with justice that the man suffered no damage either bodily or mentally, or that the "American crowbar case" is in opposition to the experimental facts which I have adduced as to the effect of lesions of the frontal lobes.

A boy, aged four, while at dinner, accidentally fell on a cheese-knife, four inches and a half long in the blade, which penetrated the orbit above the right eye to the depth of three inches and a quarter. After removal of the knife some brain-matter escaped, and more was discharged on the eighth day. The accident occurred in September, 1821. At the date of writing (1838), the only symptoms observable were blindness of the right eye, dilated pupil, and ptosis. "As regards the present state of his mind, all the senses are perfect, excepting the vision of the injured eye. The memory is very defective. He is incapable of applying to any pursuit requiring mental activity. His disposition is irritable, especially after indulging in liquor, or after any unusual stimulus. He has occasional pain on the injured side of the forehead, and has once had typhus fever since. His bodily health is now good, and he has the free use of the superior and inferior extremities."

Cases of injury of one or other frontal lobe, without sensory or motor affection, are very numerous. Many are given by M. Pitres, in his recent work,(g) to which reference may be made for exact citations; a case, by Morgagni, of perforation of the right anterior lobe by a pointed iron; a case, by Morrin, of recovery from a bullet-wound of the left frontal lobe; a case, by Padeau, of recovery after a bayonet-wound of the same region; a case, by Tavignot, of fracture of the frontal bone, and death, without affection of sensation or motion, in which the right anterior lobe was disorganised; a case of wound of the left frontal lobe by the ferrule of an umbrella which penetrated the orbit, related in the *Dublin Journal of Medicine*, 1851; a case of a bullet-wound above one of the orbits, the bullet lodging and causing no symptoms, recorded by Quesnay.

I might multiply instances all demonstrating the same fact, that sudden and extensive lacerations may be made in the prefrontal region, and large portions of the brain-substance may be lost, without causing impairment either of sensation or of motion; and, indeed, without very evident disturbance of any kind, bodily or mental, especially if the lesion be unilateral. And if it be true that sudden lesions may be thus latent, *à fortiori*, it might be expected that the slowly progressive lesions of disease would be free from objective symptoms; for it is frequently said that the absence of symptoms may be accounted for by the compensation and functional substitution of other centres—a hypothesis which the negative character of sudden lesions renders altogether inadmissible.

Of cases of softening or abscess, etc., in these regions many are on record. Charcot and Pitres,(h) and Pitres in his before-mentioned memoir,(i) have collected numerous cases in which one or both frontal lobes have been the seat of disease without any objective symptoms. Time will not permit me to describe these cases in detail, and I will content myself with merely giving the headings:—A case of hæmorrhage into the substance of the second right frontal convolution; a case, by Andral, of softening of the orbital lobule of the left hemisphere; a case, by Bergeron, of abscess of the left frontal lobe following a blow; a case, by Hertz, of abscess of the left frontal lobe; a case, by Reed, of fracture of the frontal bone followed by abscess occupying the whole of the right frontal lobe; a case, by Begbie, of abscess of the whole of the left anterior lobe in connexion with an abscess of the ethmoid; a case, by Cholmeley, of abscess of the anterior part of the left hemisphere; a case, by Evans, of abscess of the left frontal lobe following a blow; a case, by Prescott Hewett, of abscess of the left anterior lobe; and a similar case by Bouilly. To these, quoted by Charcot and Pitres, may be added a recent case, reported by Lepine,(k) of abscess of the right frontal lobe, connected with disease of the nasal fossæ.

In all these cases there was an entire absence of sensory or motor paralysis; and in many there was nothing recorded or nothing calling for special attention as regards the mental condition. In some of these, however, and in one or two others to be referred to, the psychological condition seems to have attracted notice. Lepine says of his case of abscess of the right frontal lobe: "He was in a state of hebetude. He seemed to comprehend what was said, but could scarcely be got to utter a word. He would sit down when he was told to do so, and when taken up could walk a few steps with assistance."

A very interesting case is reported by Baraduc,(l) in which there was atrophy of the frontal convolutions in both hemispheres. The patient was an inmate of the Hospice de Ménages for six years. His muscular powers and sensation were unimpaired. He was, however, in a state of complete dementia, marching about restlessly the whole day, picking up what came in his way, mute, and quite oblivious of all the wants of nature, and requiring to be tended like a child. The lesion in this case was purely cortical, atrophic, and dependent on partial obliteration of the arterial supply. The lesion occupied the two anterior lobes, that is to say, the first, second, and third frontal convolutions, and also the internal aspect of the frontal lobes. The ascending frontal, ascending parietal, and paracentral convolutions were intact. The rest of the brain was normal, except in the region of the inferior parietal lobule of the right hemisphere (supra-marginal and angular gyrus).

Another case, presenting several interesting features, has been put on record by Dr. Davidson.(m) A labourer received a severe blow on the head with an iron hook, which smashed and carried away a considerable portion of the frontal bone, exposing and injuring the brain as far back as the coronal

(g) "Lesions du Centre Ovale." Paris, 1877.

(h) *Revue Mensuelle*, 1877. (i) "Lesions du Centre Ovale.'

(k) *Revue Mensuelle*, November, 1877, page 862.

(l) Société Anatomique, March, 1876; *Le Progrès Médical*, August 19, 1876, page 598.

(m) *Lancet*, March 19, 1877, page 342.

sutt[illegible]. The injured portion of the brain, as determined post-mortem, included, on the right side, the greater part of the superior and middle frontal convolutions; and on the left side, a piece of bone was found firmly adherent to the superior frontal convolution at its middle part, this part being disintegrated to the depth of an inch or so. With the exception of a spasmodic extension of the right arm occasionally, the only symptoms of the cerebral lesion in this case were of a psychical nature. Though the man seemed to understand what was said to him, and did what he was told to, "every action he performed left the impression on the mind of the observer that it was purely automatic" or machine-like.

Marked mental deficiency has been frequently noted in connexion with arrested development, or atrophy, of the froutal lobes, without any objective symptoms as regards motility or sensibility. One good instance of this has been described and figured by Cruveilhier. This was a case of a girl aged fifteen, who had remained in a complete state of idiocy from birth. The prefrontal regions or anterior two-thirds of the frontal lobes in this case were completely wanting. But, indeed, the frequent association of idiocy with such defect of the frontal lobes is a generally recognised fact.

Whatever opinion we may form as to the positive indications of disease of the prefrontal lobes, I think it is abundantly manifest, from the cases I have cited from among many, that, in the total absence of affections of motility or sensibility, whether in connexion with sudden or slowly progressive lesions of these regions, we cannot attach objective motor or sensory functions to them. With such evidence before us, to say nothing of the facts of experimental physiology, we cannot regard cases in which, with lesions in the prefrontal lobes, sensation or motion has been affected, as other than cases of co-existence or multiple lesions, whether organic or functional. Between lesions of the prefrontal lobes and such symptoms, we have no grounds for assuming even indirect causal relationship, unless they can be shown to be of very frequent, if not constant, occurrence. Such relationship we all admit in the case of tumours, which, as we know, influence regions at a distance from the actual seat of disease; or in the case of diseases spreading backwards, such as encephalitis or meningitis.

It is chiefly on the indirect or accessory symptoms that we at present rely for our diagnosis of lesions in the frontal regions. We may obtain indications from the history of some traumatic lesion, or from the proximity of some such affection as disease of the nasal fossæ; or we may have uncertain signs of pain localised in the frontal region; or there may be disturbances of the sense of smell. But, in the absence of all these—and they may be absent—the question is, whether there are any symptoms directly indicating disease of the prefrontal lobes? Even if we have to admit that such symptoms cannot be definitely specified, yet it will not have been in vain if experimental physiology has succeeded in bringing into prominence certain facts to which attention should be more particularly paid in future.

Touching the effects of removal of the prefrontal lobes in monkeys, I may be allowed to quote from myself:—"Removal or destruction by the cautery of the antero-frontal lobes is not followed by any definite physiological results. The animals retain their appetites and instincts, and are capable of exhibiting emotional feeling. The sensory faculties—sight, hearing, touch, taste, and smell—remain unimpaired. The powers of voluntary motion are retained in their integrity, and there is little to indicate the presence of such an extensive lesion, or a removal of so large a part of the brain. And yet, notwithstanding this apparent absence of physiological symptoms, I could perceive a very decided alteration in the animals' character and behaviour, though it is difficult to state in precise terms the nature of the change. The animals operated on were selected on account of their intelligent character. After the operation, though they might seem, to one who had not compared their present with their past, fairly up to the average of monkey-intelligence, they had undergone a considerable psychological alteration. Instead of, as before, being actively interested in their surroundings, and curiously prying into all that came within the field of their observation, they remained apathetic or dull, or dozed off to sleep, responding only to the sensations or impressions of the moment, or varying their listlessness with restless and purposeless wanderings to and fro. While not actually deprived of intelligence, they had lost, to all appearance, the faculty of attentive and intelligent observation."(n)

I have elsewhere attempted some explanation of the faculty of attention—the basis of the higher intellectual operations—and its relation to the anatomical substrata of the prefrontal lobes; but I will not enter further on these speculations at present. I would, however, call your attention to the psychical characters in some of the cases of disease and injury of the frontal lobes to which I have referred (*e.g.*, the American "crowbar" case, Baraduc's, Selwyn's, Lepine's, Davidson's), as, in many respects, similar to those seen in monkeys after removal of the prefrontal lobes. I may also adduce the observation of Dr. Crichton Browne on General Paralysis of the Insane,(o) tending to show that the earlier symptoms, *inter alia* "general restlessness and unsteadiness of mind, with impairment of attention, alternating with apathy and drowsiness" (page 223), coincide with the morbid changes occurring at this stage, more particularly in the frontal regions.

ORIGINAL COMMUNICATIONS.

THE TREATMENT OF RHEUMATISM BY THE BATH THERMAL WATERS.

By JOHN KENT SPENDER, M.D. Lond.,
Surgeon to the Mineral Water Hospital, Bath.

An attitude of provisional scepticism is assumed by a large number of medical men who approach the subject of mineral waters. Are these waters medicinal, or are they not? Physicians want to know whether thermal and mineral fountains are merely cosmic accidents and geological curiosities, or whether they deserve a place in scientific medicine. To exclaim with an old physician that such a number of springs could not have been bidden to flow for nothing, is no argument at all from a medical point of view. A variety of telluric purposes are served by running water, which is called medicinal when it has distinct medicinal influences and is free from organic impurity. Now, it is easy to analyse a water, and it seems still easier to deduce therefrom its therapeutic action; but the problem is by no means so quickly solved. We have to reconcile "purely experimental and rational art," and careful inquiry is continually disclosing new facts on the operation of mineral waters, which were not anticipated by reason alone.

Patient and exact observation is above all things necessary, therefore, in examining the medical uses of mineral waters. If we are obliged to obey certain empirical rules in the matter, this is no more than we are obliged to do with a number of other medicines. The most faultless logic will not cure rheumatism or gout. It is an undeniable truth that people come (say, for example) to Bath, bathe in the thermal waters, and at length depart "much better" or "cured," able to walk and run, free from pain, and, as they assert, leaving their rheumatism behind them. It is no answer to say that the rest, or the climate, or the change of scene may have done this good; for most, if not all, of these means have been tried before, besides infinite drugs, and with little or no benefit. It is no answer to affirm that most medical substances have to be prepared by laborious pharmaceutical processes, and that nature is not likely to provide ready-made medicines. The old physicians of Bath eagerly contended for the "force of facts," and I do not see why unsound *à priori* views should make us disbelieve the evidence of our senses. If medical men practising in Bath, and who are as familiar with the effects of the waters as of any common medicines, are confederates in maintaining a gross deceit, it is open to all the world to come here and expose the deception.

Foreign writers have often reproached English balneologists with the little that they have written about the spas of Great Britain and Ireland, and the methods of practice which have been found most successful. The truth is, however, that we are between two fires. On the one hand, if those who have the experience do not publish it, they will

(n) "Functions of the Brain," page 230.
(o) *West Riding Reports*, vol. vi., page 170.

be charged with a wish to keep their practice a secret, and possibly for their own aggrandisement. On the other hand, let success and failure be recorded ever so impartially, and still it may be suspected that there is an endeavour to entice visitors by "exaggerated representations of medical efficacy," as was remarked by the late Dr. Barlow. And a critic who dips his pen in a special drop of gall will, perhaps, insinuate that an author writes mainly for the sake of celebrating his own skill. Such is the soil on which a bountiful crop of quackery has flourished; but there is surely no reason why there may not be honest workers in this department of scientific inquiry as in any other. Nature's products are free to all; everyone can test them for himself, and it is as impossible to erect a fabric of falsehood about the virtue of a mineral water as to build a strong tower upon a foundation of sand.

There is an ideal chivalry in the search for truth, a share in which may be fairly claimed by medical men. The science of balneotherapeutics is passing through a transitional period, during which the best work that can be done is the accumulation of medical facts at the various spas. To try and "explain" everything we see is simply to stand still and do nothing. They whose therapeutic creed is largely made up of "trenchant specifics," will ask innumerable questions which the "bath-doctor" declares that he cannot at present answer. Our obvious duty is to record accurately all we know to be true, and to be critically free from whims and partialities. The operation of most mineral springs is quiet and slow, performing silent changes in the nutritional cycles of the body, and accomplishing their medical object much as a good builder deliberately lays stone upon stone, and brick upon brick. Thus it is that chronic diseases are the elect material for the influence of thermal waters; while diet and hygiene and a hundred minor agencies contribute a certain measure of benefit. The compact which the patient has to observe in the matter is that everything must give way to a punctual observance of the rules of bathing, and that neither business nor pleasure shall interfere with the maintenance of health.

By an understanding which can be hardly called scientific, the term "chronic rheumatism" has come to denote a large group of troubles, characterised by pain and weakness and joint-deformity. The idea of "rheumatism" is so indissolubly associated with disease of the joints, that I may not be thought serious in putting for a moment these important structures in the background. But my present discourse is of muscles, tendons, and fasciæ, and of the connective tissue which binds them all together. After an attack of (acute or subacute) rheumatism which has involved one or more large joints, the adjacent muscles and tendons are often left weak and painful; the pain is called *myalgia*, and the weakness arises from the muscles lying idle during the phase of joint-inflammation. Myalgia is a good name, provided it does not obscure the doctrine that any "algia" is a neuralgia at its root, as pain can be mediated only by nerves. The hyperplasia of connective tissue is shown in knots of fibrinous œdema, which patients call "lumps," and which are sometimes slightly movable under the skin. Thus we see that the parts involved are the subsidiary organs of locomotion, while the nerves are pressed or pushed aside by the inflammatory exudate. Hence the complaints which patients make of "aches" and "stiffness"; and the worst of it is that the less a rheumatic limb is exercised the weaker it becomes, and more languidly the blood circulates through it.

I have sketched a morbid condition which, if let alone, tends to get worse rather than better. To submit it to a long discipline of internal medicines is a solemn trifling, which generally brings little relief to the patient, and anything but credit to the doctor. Whatever may have been the origin of the malady, the consequences are localised in a manner which suggests and invites local treatment. Sometimes the muscular impotence is so great that the patient perpetually lies or sits with the helpless look and gait of a "paralytic"; and yet every joint is flexile and extensible. At other times the neuralgic (myalgic) element predominates, and pain flits about joints and muscles, increased by movements and by sudden changes of weather. It is quite common to find no history of "rheumatic fever," or anything approaching it; a large number of the patients in our Mineral Water Hospital know nothing more about their "rheumatics" than that it came on in a slow, furtive way, against which the bread-winner of a family fought as long as he could, but ultimately was overmastered and knocked down. It seems that we might almost say of chronic rheumatism what Charcot says of disseminated sclerosis, that it is a "polymorphic affection"; and unless we agree with Plato, that physicians may tell lies to their patients to keep up their spirits, we shall talk no soothing nonsense about *vis medicatrix naturæ*, but be thankful for any method, however empirical it looks, which helps to dislodge a treacherous enemy.

There are some advantages in selecting cases from private practice, as they afford better tests of the value of a new remedy. Concerning a poor person who enters a hospital, it may be always said that perhaps he was cured by the rest, or by the improved food and lodging; but no qualifying circumstances of this kind can be urged about patients who belong to the middle and upper classes of society. Such patients enjoy the same home comforts wherever they are; they bring to Bath a full burden of rheumatic affliction; and if they fling away physic, bathe in the thermal waters, and return home cured, can we be logically wrong in affirming that the waters did the healing work? Now and then, however, we meet with a case in the Mineral Water Hospital which is strikingly conclusive; and for other reasons the following history has its value:—

James C., aged fifty-eight, was sent from the Clifton Union Workhouse to the Mineral Water Hospital on October 29, 1877. A journeyman sawyer; was quite well up to one night last May or June, when, about two o'clock in the morning, he was awoke from a sound sleep by sharp pains in the feet. He got out of bed, found the feet swollen, and could not stand. The pain and swelling extended to both legs, and the ankles become almost immovable. The limbs were bathed and poulticed; but as he got no better he was admitted into the Clifton Union Infirmary. There, according to his own statement, every kindness and attention were shown to him; but after seven weeks' sojourn, during which many things were tried, he was dismissed unrelieved. During the next few weeks he became slightly better; but when he was admitted into the Hospital he could walk upstairs only with the greatest difficulty, and not without help. He was kept in bed for a few days, and after five or six baths he rapidly improved. The bathing and shampooing were continued; and now (December 6) he can walk as well as ever. Pain and swelling have entirely gone, and the health seems quite restored. The patient took no medicine during the first three weeks of his stay in the Hospital. Nothing seems to vitiate the conclusion that this man was cured solely by the Bath thermal waters.

Another case, lately in the Mineral Water Hospital, is equally convincing. Samuel F., of Kewstoke, aged twenty-two. Had rheumatic fever in March, 1877; up to this time his health had been always good. The illness left much general weakness, with swelling of one of the feet. He received some benefit at the Weston-super-Mare Sanatorium; but about the beginning of the autumn his local malady returned as badly as ever, and he could walk only with difficulty. He improved rapidly after a few thermal baths, and the foot went down to its natural size, so that he could march up and down the ward without the slightest impediment. The health was restored at the same time.(a)

From numerous cases which have been under my private care I select two or three which may illustrate the subject of this paper:—

E. G., Esq., a solicitor, practising in a southern county, had suffered from lumbago (more or less severely) for nearly two years. During the previous six weeks the pain had been worse than usual, and often so bad at night that Mr. G. was obliged to walk about his room. The health seemed to be good in other respects, and the constitution strong. Mr. G. came to Bath on September 3, 1877, and had five or six baths and wet douches. Writing from his home on December 13, Mr. G. says:—"I am thankful I have had no return of lumbago since the use of the Bath thermal waters in the autumn. I lost the pain after three baths."

C. J. P., Esq., a stipendiary magistrate in a large northern town, consulted me in the third week of August, 1877. He

(a) Since this paper was written, Thomas D., from Aldbourne, in Wiltshire, was brought to the Hospital so crippled from rheumatism that he was carried upstairs to his ward. After three baths he could walk comparatively well.

had suffered for several months from pain on the outside of the right thigh, increased by movement, and especially by the act of rising from a seat. There was some pain also in the knee, which was a little swollen from chronic effusion. Mr. P. bathed on alternate days, and applied the wet douche to the knee. The effect was quickly beneficial in the removal of pain and in the lessening of effusion. During this patient's stay in Bath of nearly a month, the improvement was continuous; and in a letter dated November 18 Mr. P. reported that he was better in every respect.

On the other hand, a gentleman from Edinburgh, who was under my care this autumn for severe myalgia in the back, of obscure origin, derived little or no benefit from systematic bathing and friction. And an aged clergyman in London, recommended to me by Dr. Duffin, bathed as often and as long as his strength allowed, but with little or no relief to a severe back-pain, caused by exposure to cold and wet a few months before. In other respects his health was excellent. The malady was not strictly "rheumatic" in either of these instances; and in the latter case the pain was most likely a local sign of bodily decay.

Shampooing, or *massage*, is a valuable aid to all thermal medication, and is far too little thought of. Stress was laid upon it by the late Dr. H. W. Fuller in the treatment of various forms of chronic rheumatism. In a recent number of the *Boston Medical and Surgical Journal* is a translation of a paper on this subject by Dr. Wagner, of Friedburg. According to this writer, four different manipulations may be accepted as belonging to *massage*—(1) *effleurage*, or stroking; (2) *pétrissage*, or kneading; (3) passive and active motion; (4) *tapotement*, or percussion. All these methods have their uses, and the last three are particularly adapted to chronic inflammations. The theory is that kneading and hard frictions crush and break up old hyperplastic tissue, and the detritus is passed into the lymph-stream; vascular congestions are emptied, and the vaso-motor nerves are mildly irritated. It is evident that resorption of effusions must be hastened by these influences, and swelling and elevated temperature will be reduced. During some years past I have employed a female shampooer who unites the strength of a man's hand with the tender dexterity of a woman's, and the result has been especially beneficial in some painful forms of "muscular rheumatism." More than twenty-three years ago I learnt the value of percussion (or rapid tappings around a joint with the sides of the hands or tips of the fingers) from a small work on Gout and its Complications, by Mr. Spencer Wells. Percussion promotes the natural warmth of a part, and supplies an artificial exercise to joints or muscles which would otherwise remain inactive. The action of tremulous shaking is asserted to give tone to relaxed muscles, and to assist the removal of morbid deposits. The infriction of medicated substances is undoubtedly useful; and among the best are mild iodine ointment, and the liniment of iodide of potassium. When pain has quite left, gymnastic exercises may be freely resorted to, provided that they do not cause fatigue.

Speaking in all truth and earnestness, I doubt whether there are any medicines entitled to be called "specific" for the treatment of chronic rheumatism. So far as the disease is a neurosis, we may fight it with the common-sense weapons of quinine and cod-liver oil, for it is nearly always worse with every deterioration of the general health. It was an aphorism of the late Dr. Sibson's that the kidneys cannot do their work by deputy; and this is almost equally true of the skin. Tender areas of skin must be taken care of, and protected from changes of temperature; for this purpose I recommend them to be covered during the daytime with oil-silk lined with wadding, fastened with tapes or some other suitable contrivance. These pads can be easily fitted to sensitive joints, and a patient thus equipped may do and dare things in our fluctuating climate which would be otherwise rather hazardous.(b) Finally, we must guard against the lazy intellectual habit of designating as "rheumatism" every ache or weakness that infests joints and muscles. It is a note of scientific precision and clinical insight to distinguish accurately neuralgia, myalgia, and spinal irritation; and whether we call it neuropathic diathesis or hyperæsthetic derangement, the group of neuralgic disorders should, if possible, be kept absolutely separate from the effects of rheumatism and of rheumatoid arthritis. I had under my care lately a clergyman, rector of a parish in one of the midland counties, who suffered extraordinary agonies in the back, the cause of which was most obscure, and which were not alleviated by the systematic use of the Bath waters or of voltaic electricity. He was seen in consultation with me by my friends Dr. Coates of Bath, and Dr. E. L. Fox of Clifton; by four of the highest authorities in London; and during the last few months he has enjoyed the benefits of sea-air under the constant attention of Dr. Bowles, at Folkestone. But the net result of this battery of skill and care is that the diagnosis is not even yet established beyond doubt, and not much way has been made towards curing the patient. Such is a specimen of the difficulties which waylay the practitioner and baffle his philosophy.

A word may be desirable on the time of year for coming to Bath. The summer is the best time for nearly all thermal spas; and the treatment of chronic rheumatism is conducted with least risk in the warmest months. Qualities of local climate, however, make Bath a better residence in the earlier part of the summer and the latter part of the spring; April is a good month, but May and June are, on the whole, to be preferred on account of a higher range of temperature, and a greater freedom from daily fluctuations of heat and cold.

(b) Bandaging the lower limbs gives support to weak muscles and dilated bloodvessels. The bandages may be made of domette flannel in winter, and of thin cal co in summer.

ACCUMULATION OF CERUMEN: A LESSON.

By F. M. PIERCE, M.D.,
Senior Surgeon to the Manchester Ear Institution.

THE following case well illustrates the necessity for practitioners and students making themselves acquainted with, at least, the elements of special diseases. Of late years the establishment of lectures and demonstrations on diseases of the eye, ear, throat, and skin have enabled the student to acquire some practical knowledge of those subjects before commencing general practice. There are still, however, many provincial schools in this country without any pretence to the teaching of special diseases. A comparatively short course of the practical study of diseases of the eye and ear will save many a practitioner from falling into the error illustrated by the following case:—

One Sunday evening, about 11 p.m., I called to see Mr. C., a chemist. I found him lying in bed, pale, anxious-looking, bathed in a profuse perspiration, and complaining of intense pain over the vertex and left side of the face, neck, and jaw. He was afraid to eat or speak; had had little or no sleep for the previous three days. The pulse was full and bounding, 120; the tongue dry, but clean; the temperature much increased (thermometer not used). There was nausea, and constant throbbing tinnitus aurium of the left ear.

He did not make any special reference to his ear, except that his illness began four days before with earache after taking a cold bath, which quickly became a diffused incessant pain over the entire head and neck. On the second day of his attack his medical attendant, who had been called in, ordered a mixture, and, as far as I can learn, regarded the complaint as some form of cerebral inflammation. At the time of my visit, on the fifth day of his illness, Mr. C. certainly looked very ill, and was surrounded by his friends, who seemed to have given up hopes of his recovery. He had dosed himself freely with opium, chloral hydrate, etc., but without relief; and when I saw him his head and neck were smeared over with fresh belladonna plaster, but all to no effect.

Everything suggesting the left ear as the seat of mischief, I found on examination that a watch was inaudible at the external meatus; a tuning-fork on the vertex was heard entirely in left ear; the walls of the meatus were greatly swollen and congested; and a smooth, glistening surface covered with a *débris* of white epithelial scales beyond and concealing the membrana tympani.

There was evidently acute inflammation of the outer layer of the membrana tympani and of the adjoining walls of the meatus behind the firm plug of cerumen, most probably due to the entrance of cold water. Syringing with warm water and a weak solution of iodide of potassium had no effect in removing the obstruction, and I therefore used a pair of very fine curved forceps, made on purpose to apply through the

open speculum I use with Brunton's auriscope, and removed the wax piecemeal. This afforded instant and great relief.

A lotion (of carb. sodæ, liq. atropiæ, and liq. opii sedat.) was to be instilled warm and retained all night.

Next day Mr. C. was almost free from all previous symptoms, and had slept well; the tinnitus aurium was now of a buzzing character and very slight, and the hearing distance two inches. There was no pain over head, ear, or neck, and the feverishness and nausea had gone.

After syringing the ear clean, the hearing distance was thirty-six inches; the meatus was seen to be still much inflamed, and there was a most offensive discharge of pus; the membrana tympani was of a yellow sodden opacity, with great congestion of the vessels of the manubrium. An astringent lotion was applied for three or four days, and at the end of that period the Eustachian tube was opened with Politzer's bag. No perforation was observed, although such a condition was probable.

Although the simplicity of treatment and rapidity of recovery in this case may seem almost amusing, the condition of the patient and anxiety of his friends gave an aspect of gravity to his complaint, which might have been avoided by an early and correct diagnosis.

Simple as it may seem, the recognition of a firmly adherent layer of cerumen to the membrana tympani is not so easy unless the medical attendant has had some practical experience in aural disease. A slight acquaintance with the appearance of the various forms of ear disease would have saved any practitioner from the error for which this patient suffered.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

OPERATIONS AT UNIVERSITY COLLEGE HOSPITAL, MARCH 20, 1878.

(Reported by A. J. Pepper, M.S., Surgical Registrar.)

OPERATIONS BY MR. BERKELEY HILL.

Case 1.—Lateral Lithotomy.

J. F., aged sixty-six, had suffered from symptoms of stone for the past eight years. For a long time he had been unable to pass his water without a catheter. On admission last November a calculus was detected, and the prostate found considerably enlarged. Mr. Hill cut him on the 22nd of that month. A slow convalescence followed, but the wound healed well. The patient was readmitted on March 6, 1878, when a recurrence of stone was found to have taken place; in addition there was marked cystitis. Mr. Hill performed lateral lithotomy, making the incision through the cicatrix resulting from the previous operation. The stone was readily seized, but crumbled to pieces under the grasp of the forceps, and some difficulty was experienced in clearing the bladder of *débris*.

Case 2.—Lateral Lithotomy.

A. H., aged sixty-eight, had suffered from undue frequency of micturition for twelve months; other symptoms of vesical calculus had been present. On admission, January 21, 1878, there was found to be a calculus five-eighths of an inch in the diameter in which it was seized by the lithotrite. Patient was strong and healthy in appearance. Mr. Hill crushed the stone first on January 30, and again on February 6. Severe cystitis followed, and subsequently an abscess in connexion with the prostate. No unusual difficulty occurred during the operation of lithotomy. Two large fragments were removed, one consisting of half of the stone, and the other of a quarter; they weighed together 140 grains, and were composed of alternate layers of phosphate and uric acid.

OPERATIONS BY MR. CHRISTOPHER HEATH.

Case 3.—Epithelioma of the Scrotum.

A chimney-sweep, aged thirty. The growth measured one inch and a half by one inch. The inguinal glands were somewhat enlarged. The diseased part was excised by the knife, with the aid of a Smith's clamp. The actual cautery was used to arrest hæmorrhage, but failed to do so. The affection was of twelve months' standing.

Case 4.—Epithelioma of Penis.

G. B., aged thirty-six, a strong, healthy-looking man, had never been able to retract foreskin. The anterior third of the penis was involved in the growth, both glans and prepuce. The skin was not ulcerated, but a quantity of grumous pus could be pressed from the preputial orifice. Inguinal glands enlarged, but not painful. Mr. Heath slit up the prepuce, and then found that amputation was necessary. This was done by an oblique incision, so as to leave the urethra prominent, in order to avoid future stricture at the orifice. The vessels divided were secured by hempen ligatures.

Case 5.—Epithelioma of Tongue.

E. W., aged sixty-five. The whole of the tongue was indurated and puckered by cicatricial contraction. It was bound down to the floor of the mouth, so that it could not be protruded beyond the teeth. One submaxillary gland was slightly enlarged. Mr. Heath freed the tongue at its margins from the floor of the mouth; then passed a strong cord through the tip in order to get complete control over the organ. Curved mounted steel needles were employed to transfix the base; and the loop of the wire-rope écraseur passed beyond them. In this way the entire mass was removed. Comparatively little bleeding occurred. The jaw was left uninjured.

Case 6.—Epithelioma of Lower Jaw, Recurrent after Removal of Lower Lip some months previously.

The patient, a male, was fifty-eight years of age. Mr. Heath made a double elliptical incision to encircle the mass, which occupied the mental portion of the bone. This being done, the anterior part of the jaw was removed by a Hey's saw, cutting from above down. An enlarged lymphatic gland affected by the disease was enucleated. Several vessels bled freely, both in the soft tissues and from the cut surface of the bone: the former were secured by ligature, the latter by the actual cautery.

Case 7.—Soft Fibroma connected with Right Median Nerve an inch above the Wrist.

The patient was a middle-aged woman. The tumour had existed for twenty years, but latterly had increased rapidly in size and had become more painful. The pain was felt in the thumb, fore, and middle fingers, and radial side of the fourth. The growth itself was exquisitely tender to the touch. A longitudinal incision was made over the face of the swelling, when the median nerve was found expanded over the tumour. The former was readily dissected to one side, and the latter quite easily shelled out. The operation was performed antiseptically.

BRISTOL ROYAL INFIRMARY.

CASE OF TUMOUR OF CORPUS STRIATUM—NO PARALYSIS.

(Under the care of Mr. DOWSON.)

[Reported by J. Greig Smith, M.A., M.B., House-Surgeon.]

T. B., aged thirty-four, a robust, finely developed man, was admitted into a surgical ward with extensive ulceration on both legs, apparently syphilitic. There was no other positive evidence of syphilis. No cicatrices on the fauces or genitals were to be made out. To the ordinary questions he gave negative answers, but in doing so he seemed to "protest too much" to be truthful. He had walked a mile to the infirmary, and his duties were such as entailed a great deal of walking. His wife had died ten months previously in a lunatic asylum of "tumour of the brain."

Less than an hour after admission he had a violent epileptiform convulsion, and in rapid succession several more. The fits were very similar throughout. A slow, deep inspiration and general stretching out of the body, as if for a yawn, introduced a violent tonic spasm of all the muscles of the body. The general rigidity soon relaxed and was replaced by clonic convulsions, chiefly of the upper extremities, and violent contortions of the face. These last were most marked on the left side, and appeared to depend chiefly on contraction of the zygomatici. During the whole duration of the fit, a period of about a minute, respiration was completely at a standstill, and the cutaneous lividity was most intense. Rapid lateral movements of the head supervened; breathing began to be established with great difficulty; the spasms gradually abated in severity and rapidity; congestion diminished; and his condition changed into one of profound

coma. The pupils were dilated during the convulsions, natural during the coma, and insensible to light throughout. There was much churning of saliva. The tongue was uninjured.

After about five minutes of coma another fit would come on, in every way similar to the previous ones. The general lividity increased after every attack, and the danger of death from suffocation during a fit became more and more imminent. Chloroform was administered with good effect. Venesection did no good.

In four hours he had about twenty such attacks. Latterly they diminished in frequency, and for three hours before death he continued uninterruptedly comatose, with the exception of one violent paroxysm just before death—seven hours after the first attack. The pulse varied from 130 to 150. The temperature rose to 103·1° just before death, and 103·5° five minutes after death.

Post-mortem.—With the exception of the brain lesion there was nothing interesting to report. In the right corpus striatum, exactly occupying the place of its intraventricular ganglion or nucleus caudatus, was a gelatinous, citron-coloured substance traversed by fine brands of fibrous tissue—a myxomatous glioma. The new growth extended outwards as far as the white fibres in the centre of the ganglion, but did not involve them. The surface of the growth, in contour, colour, and texture, was a *fac-simile* of the surface of the corresponding part on the sound side. Everywhere in its proximity the brain-tissue was normal. There was considerable vascular injection, equally distributed on the brain-surface, and some clear subarachnoid effusion.

Remarks by Mr. Greig Smith.—The interest of this case lies in the fact that there was no paralysis, and, with the important exception of four or five fits in the course of four years, not a single symptom of brain disease. That lesion of the corpus striatum results in hemiplegia is one of the most widely verified conclusions in cerebral pathology; and it is no easy matter to account for an exception of this sort. A hypothesis such as that of Dr. Broadbent, which goes no further than to account for the escape of bilaterally associated or concerted movements in cases of hemiplegia, will not serve our purpose, for we want an explanation of the entire absence of paralysis of any sort; and the ordinary theory of compensation, always unsatisfactory, is at its weakest when it has to find a functional substitute for such a centre as the corpus striatum. Let us admit the correctness of Dr. Ferrier's views as to the functions of the corpora striata—that they are epitomes or synopses, chiefly for reflex purposes, of the cortical motor centres of the brain. To take away the corpora striata is not to take away the prime mover, but the subordinate which discharges the ordinary drudgery-work, so to speak. Of course, if the motor centres in the convolutions are to be laid under contribution, the through-going fibres from them, the corona radiata in the corpus striatum, must be intact: and here they were so. They were, in fact, peculiarly conspicuous, the translucent new growth having gone thus far and no further towards the outside. The problem, then, is whether the ordinary sensori-motor tract through the optic thalamus and corpus striatum having been rendered in parts impassable, the longer circle through the cortical centres might not be made use of. To give a decisive answer to this question it would be necessary to destroy the whole of the grey matter of the corpus striatum without injuring or irritating the white fibres that pass through it—an operation of almost impossible delicacy. In the absence of any such experiments it may be admissible to reason by analogy from the results of ablation of the cortical centres. It is true that, in man and monkey, destruction of the cortical centres, even where the optic thalamus and corpus striatum are intact, has been found to cause permanent paralysis. But seeing that, as we descend in the animal scale, such paralysis becomes less complete and more transient, it may be admitted that the difference is partly one of degree, and not wholly one of kind. Similarly, and perhaps with more reason—for it has infinitely wider potentialities in man than in the lower animals—the cortical may discharge the motor functions of the basal grey matter. And if the experiment be such an one as the above, where the brain structure is removed by the most slow-growing and least irritating of all growths, where the motor paths are undisturbed, and where the substitute is of exactly the same size as the original, there is so much less reason to reject the possibility of such a hypothesis.

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Medical Times and Gazette.

SATURDAY, MARCH 30, 1878.

THE NEW MEDICAL BILL AND CONJOINT EXAMINING BOARDS.

In our review, last week, of the principal provisions of the new Medical Bill, we expressed our strong dissatisfaction with the measures which the Government proposes for dealing with the urgent necessity for securing uniformity of qualification throughout the three kingdoms. Our remarks have been fully justified during the week by the universal condemnation with which this part of a Bill in some respects good has been received. The reader will best appreciate the present condition of matters if we lay before him, to begin with, a brief sketch of the history of the state of affairs prior to 1858, the date of the Medical Act, and since that time.

Prior to 1858 the number of examining bodies in the United Kingdom was the same as at present; and some of them could grant a qualification to practise within a limited area only. Thus persons obtaining degrees in Scotland or Ireland had no legal position in England; and even persons who obtained what was called the extra-licence of the College of Physicians of London had no legal right to practise in the metropolis. Out of this chaos the Medical Act of 1858 created the comparative organisation of to-day. Three great ends were desired by the promoters of that Act—namely, registration, reciprocity of practice among the holders of the various diplomas, and uniformity of qualification: and it was clearly understood, as indeed was but just, that the last two reforms should be mutually dependent; in other words, that reciprocity of practice should be conditional on uniformity of qualification. The Government of the time, however, secured only registration and the reciprocity of practice, while the more important point of enforcing uniformity of qualification was somehow or other kept in abeyance. The only method suggested for securing this end was that the various examining bodies should voluntarily conjoin, with the sanction of the General Medical Council.

No progress, however, was made towards this object; and at last, after twelve years, in 1870, Lord Ripon, as Lord President of the Council, introduced and carried through the House of Lords a Bill which contained, among other important provisions, one compelling the several bodies to join for the purpose of instituting special examinations; and which, in the event of their failing to do so, would have required the General Medical Council to institute special uniform examinations for all persons entering the medical profession. This would in fact have established in a complete form the "one-portal" system. Owing to the opposition of some members of the profession, who insisted upon reform in the constitution of the Medical Council as a *sine quâ non*, the Bill was withdrawn in the Commons before the second reading. Thus was lost the opportunity of passing a measure in many points good, and which had at any rate the virtue of strength. It must be understood that this Bill of Lord Ripon's was introduced, and carried as far as it went, with the entire approval of the General Medical Council.

This measure having failed, the General Medical Council called on the several licensing bodies to form a Board amongst themselves. The English bodies earnestly and honestly undertook to frame a Scheme for this purpose; and this Scheme, we have reason to believe, is now nearly complete. The Scottish licensing bodies entered upon the subject of a Conjoint Board without heart, and came to the conclusion that they could not succeed. The Irish bodies advanced a step further, and only failed on some difference regarding the division of the spoils.

Such, then, is the present state of matters. A Scheme for Conjoint Examination, or the "one-portal" system, is at last prepared in England; in Ireland the Scheme is incomplete, and no attempt is being made to render it complete; while in Scotland nothing whatever has been done. Thus we have in Scotland at this moment four Universities, two Colleges, a Faculty of Physicians and Surgeons in Glasgow, giving amongst them some seventeen different qualifications, and differing more or less in the facilities which they offer candidates and the prices that they charge them. In Ireland there are two Universities and three Licensing Bodies, giving more than a dozen different qualifications, and varying also in the requirements and in the prices of their diplomas, the lowest costing only ten shillings and sixpence! It is true there is a certain competition among these licensing bodies—not as to how they can elevate the standard of examination, but how, on the system of a Dutch auction, they may lower it so as to attract candidates to their examination and fees to their coffers. As a matter of opinion these statements might be questioned, but as matter of fact it cannot be denied that numbers of Englishmen go north of the Tweed to obtain qualifications which they cannot obtain in their own country. They enjoy the privileges of reciprocity of practice, but do not undergo the inconveniences arising from uniformity of examinations. The English public are thus provided with professional material of a cheap and doubtful kind.

Under these circumstances a new Medical Bill is once more before Parliament. It was reasonably and justly expected that the declared abuse arising from a multiplicity of examining bodies, conferring an endless variety of qualifications, and extracting fees from the pockets of students, would be put an end to. It might have been expected that the principles contained in the last Government Bill, introduced by Lord Ripon, would have been adhered to, and that the opinion expressed by the Medical Council over and over again, on the necessity for simplifying examinations by the establishment of conjoint boards, or otherwise, would have not only been maintained, but enforced. But nothing of the kind is to be found. The new Bill does no more than sanction the union of the licensing bodies, as was done by the Act of twenty years ago. It leaves it still permissive: which, after twenty years of permissiveness, is tantamount to saying that it is unnecessary. But the Bill *does* propose some compulsion in connexion with conjoint boards; it requires that if conjoint boards be formed, women shall be examined by them; and, if they obtain a certificate in medicine and surgery, can claim a right to obtain a qualification from any of the co-operating authorities. But as in England both the College of Physicians and the College of Surgeons have decided, in the one case not to give the licence to women, and in the other case not to give the membership, there would be an end to any conjoint scheme in England, unless these bodies were to think fit to give a different diploma to women, which this Act would authorise them to do. So far, then, instead of promoting the union of the bodies, the Bill tends to discourage it; and it leaves the nineteen licensing bodies, with their forty or fifty different qualifications, to which might be added new diplomas for women, to compete among themselves as heretofore. On these grounds alone, then, the strongest opposition must be offered to the passing of this Bill into law.

Before ending these observations for the present, we think it right to say, with the Duke of Richmond, that the difficulty lies, in Scotland, in the number of universities and licensing bodies. But this difficulty should not be insurmountable, and the very number is the chief evidence of the necessity of conjunction. It must also be said that the Bill proposes to secure uniformity of examinations by giving the whole control of them to the General Medical Council. Whether it be desirable that the independence of the licensing bodies should be thus annihilated, and whether the General Medical Council, constituted as it is, could be confidently entrusted with such control, are subjects which, with several others closely related, we propose to discuss at another time.

THE PREVENTION OF PUERPERAL FEVER.—II.

In our number for February 9 we directed the attention of our readers, not for the first time, to the valuable work which our German *confrères* are doing, in attempting to introduce an antiseptic element into the conduct not only of severe, but of normal midwifery cases. The subject is of such importance that we think no apology is needed for again adverting to it, and adducing yet further evidence of its utility. The information of which we are now making use is derived from an excellent article by Professor Zweifel, of Erlangen, in No. 1 of the *Berliner Klin. Wochenschrift*, 1878.

It appears that the idea of "Listering" in obstetrics (the Germans have coined the verb "Listern" to express the use of Professor Lister's antiseptic method, just as from Galvani's name we have coined the verb "galvanise") was first started by Bischoff, of Basle, in 1870 (*Correspondenzblatt für Schweizer-Aertze*, 1875, Nos. 22, 23). His plan consisted in giving a bath as soon as the first pains of labour were observed, washing out the vagina with a 2 per cent. solution of carbolic acid every two hours, and anointing the fingers of the medical attendant with 10 per cent. carbolic oil at each examination, the hands being previously disinfected by washing them with 3 per cent. aqueous carbolic acid. In case the hand had to be passed into the uterus, or if the fœtus was dead and decomposed, the uterus was washed out with a 2 to 3 per cent. solution of carbolic acid; and in every case frequent injections of the latter were made into the vagina and uterus for thirteen days after the birth of the child. Immediately after the labour, any wound was touched with a 10 per cent. carbolic solution, no ligature, if such were

necessary, being applied until this had been done. Lastly, a pad of wadding soaked in carbolic oil (one to ten) was placed in the entrance of the vagina, and constantly renewed. Under this system the number of cases in which morbid symptoms were present, consisting in a febrile temperature of more than two days' duration, and reaching 38·5° Cent. (101·3° Fahr.) at least on one day, tenderness of the abdomen on pressure, and fetid discharge, etc., was, in 1870, 14 per cent.; 1871, 22·3 per cent.; 1872, 24·5 per cent.; 1873, 16·8 per cent.; 1874, 10·7 per cent.; 1875, 8·9 per cent.; or taking the average of the whole, 16·2 per cent. for the six years.

In 1875, H. Fehling published (*Archiv für Gynækologie*, Band viii., s. 298) the results of experiments made for about a year in Professor Credé's clinic at Leipsic, and which consisted in applying a mixture of salicylic acid and starch (one to five) to any wounds of the external genitals, and in syringing the vagina four to eight times daily, in case of fever and fetid discharge, with solutions of salicylic acid ($\frac{1}{6}$th to $\frac{1}{10}$th per cent.). The effect was excellent, but the use of the carbolic spray during labour, which was also tried for some time, was given up in consequence of the post-partum hæmorrhages which it appeared to induce.

In 1877, Adrian Schücking (*Berliner Klin. Wochenschrift*, No. 26) suggested that the vagina should be washed out at the end of the labour with a 5 per cent. carbolic solution, and that immediately afterwards the uterus should be continuously irrigated by means of the apparatus of which we gave a brief description in our former article on this subject. This method was carried out in eight cases, in five of which the patients had had severe labours, and all recovered satisfactorily, no temperature being recorded over 38·4° Cent. In the other three the injection was not begun until after the commencement of febrile symptoms, but an immediate and decided defervescence was the result. Professor Zweifel's objection to Schücking's conclusion, that in the five former cases the fortunate termination was directly due to the treatment, is, first, that the number of Schücking's cases is too small; and secondly, that equally good results are possible without any antiseptic treatment. With this objection most persons will, we think, be inclined to agree.

Professor Zweifel's own method, to which we shall devote the remainder of this article, is founded partly on the use of antiseptic measures, properly speaking, and partly on the adoption of the most scrupulous cleanliness in connexion with the surroundings of the puerperal woman. In the first place, all vaginal examinations *during pregnancy* are in his clinic made only after careful washing of the hands and smearing with carbolic oil, the vagina being further washed out afterwards in some cases with 5 per cent. carbolic solution. The reason for these precautions is the possibility of infectious matter being introduced into the vagina previous to labour, of its lying there and being sucked up into the uterus after the expulsion of the fœtus. "This," says Professor Zweifel, "is a possibility which no one will deny."

The rooms and beds destined for the use of the lying-in women are carefully disinfected by burning sulphur in them in fireproof vessels, allowing about four grammes of sulphur to each cubic metre of space. The bedclothes are spread out so as to expose as large a surface as possible to the fumes, which after a few hours are allowed to escape by opening the windows.

After each labour in which the hand has been introduced into the uterus, or where air has gained entrance to it, or gaseous decomposition occurred in it, the uterus is washed out with several litres of fresh water.

Since almost all the cases of puerperal fever are found to be complicated either with ruptured perineum, small rents in the vagina and vulva, or with the introduction of air into the uterus during some operation, the greatest care is bestowed on all external wounds to which Fehling's mixture of salicylic acid and starch is applied with the best results. Careful examination of the external genitals day by day, and the use of the thermometer, are also rigorously attended to. It should be added that at Erlangen the Obstetric Clinic has a separate pavilion to itself, which was built in 1874. The number of births from April, 1876, to October, 1877, during which period the above method has been carried out "with pedantic strictness," has been 184, with a *single* death—that of a woman with cancer, on whom the Cæsarean operation was performed. In 143 cases the lying-in period was completely normal—that is to say, the temperature never exceeded 38° Cent., or, at any rate, was never above 38·4° on more than one day. Out of the remaining forty-one, thirteen never had any morbid symptom except a rise of temperature on one or two days to 38° to 39° Cent., or on several days to 38° to 38·5°; twenty-eight had the symptoms of puerperal fever in a greater or less degree, but of these only twelve had protracted fever, inflammatory exudation, and showed clear signs of puerperal infection, and in only five cases was life ever in any apparent danger. It was further noticed that the cases which did badly were not evenly distributed through the whole period of observation, but were limited to the months of December, 1876, and January, 1877, and of September and October, 1877, in the form of small epidemics. On the whole, Professor Zweifel considers that his results are by no means inferior to those of Bischoff, and that they do not point to any necessity for introducing a more complicated antiseptic system into his practice. Moreover, Spiegelberg at Breslau has carried out a system closely resembling Zweifel's since 1874, with the splendid result of only *five* deaths in *nine hundred* labours.(a)

With such evidence before us it seems to be our bounden duty to urge on the medical profession in this country to habitually adopt the measures by which alone, as far as present knowledge goes, puerperal infection can be prevented—namely, scrupulous cleanliness and the use of antiseptic lotions, etc., for disinfecting the examining hand and the genital organs. Even the busiest practitioner can manage to invariably examine with carbolic oil instead of ordinary oil or grease, and in the most out-of-the-way places vinegar or brandy, as Professor Zweifel says, are sure to be found as substitutes for carbolic or salicylic acid.

We are not sure that in private practice the need of these precautions is not as great as in the hospital ward; for the risk of picking up infection somewhere, and conveying it to the lying-in room, is naturally very great when the same man is seeing on the same day medical, surgical, and obstetric cases. He may go straight from a scarlet fever case to a woman in labour; and a most melancholy instance occurs to us in which a very valuable life was probably sacrificed in this way not so very long ago. The old discussions about puerperal fever, which we find reproduced even now in text-books on midwifery, are out of date in the light of our modern knowledge. We *know*, for example, that the woman who gets fever, peritonitis, and vomiting just after her confinement, has been infected with poison *from without*, —whether bacterial or otherwise makes not the slightest difference; we *know*, too, how to prevent the entrance of this poison into the woman's system, though we may be very helpless when it has once entered it. Knowing all this, and knowing, too, the high mortality from puerperal fever, and that probably more than a thousand women die of it in England every year, is it not our plain and simple duty to try and carry out, at any rate, the major operations of

(a) For further information on this subject see also the *Zeitschrift f. Geburtshülfe und Gynækologie*, ii., 1, containing papers by Schülein, Richter, and Langenbuch.

midwifery in future with the same attention to antiseptic precautions as Mr. Spencer Wells observes in performing ovariotomy?

INDIAN HOSPITAL SERVANTS.

Our attention has been attracted by the wholesale charges brought against the Subordinate Indian Medical Service by the local newspapers. In an article which appeared originally in the *Englishman* it is unhesitatingly averred, "We shall probably be overwhelmed with indignant letters when we state our belief—a belief shared in a greater or less degree by almost every European medical man in the Service—that not only hospital cooks and other menials, but the Subordinate Medical Service, root and branch—apothecaries, stewards, compounders, dressers—are widely corrupt. There may, perhaps, be here and there an honest man among the class to which we refer, but such instances are too rare to affect the general result." We decline to accept so sweeping a denunciation, and hold the belief that, among the higher ranks, at any rate, of the Subordinate Indian Service the dishonest are the exception, and not the rule. Some allowance must be made for the excessive opportunities afforded in India for yielding to incessant temptation, before we ascribe occasional acts of dishonesty to "class degradation," and jump to the conclusion that all half-caste or native hospital servants are unfit to be trusted, owing to inherent cupidity, want of honour, or even of common sympathy with the patients committed to their charge. We find it stated that in one hospital it was found necessary to padlock the saucepans to prevent the cooks from abstracting the meat that was stewing for "soup diet"; and it is mentioned as a significant fact that the establishment of a new Government hospital in any locality is invariably followed by an abundant crop of new private dispensaries supposed to be supplied with drugs stolen from the hospital stores. It is pointed out that it was not without sufficient reason that the Government determined to dye their quinine "blue" to prevent it from being fraudulently sold in the bazaars. We take all this for granted, and we share the opinion of our Indian contemporary that it is impossible for the European medical officers in charge of a hospital to prevent these abuses so long as his subordinate staff cannot be depended on; but we believe that the men occupying the higher grades of the Indian Subordinate Medical Service can be depended on to a very great extent already; and that the very worst way to strengthen their code of honour is to insist upon their inability to feel such an obligation at all. We know that it is not uncommon, when European regiments are about to leave for India, for a testimonial to be voluntarily presented by the non-commissioned officers and privates to the apothecary or steward who has been attached to the regimental hospital. When we consider the helpless state of the sick in hospital, through the long, weary nights of the Indian "hot season," how they must be left for hours without the supervision of their European medical officers, how they are dependent solely upon the help afforded by the lowest class of hospital native servants, we recognise at once the enormous value of the half-caste apothecary or steward, without whose vigilance not a punkah would be fairly pulled nor a sick man's wishes properly attended to. We look upon the Subordinate Indian Medical Service as one of very great importance, and we should be glad to see it better rewarded, recognised, and honoured than it is. The prejudice that exists so strongly in India among Europeans against any shade of colour, tends to form a barrier between the half-caste apothecary or steward and his European superior officer. Any such obstacle had better be broken down as much as possible where men have to work together in hospitals. Shades of colour matter little by the death-bed; and we think more is to be gained by raising the professional position of the half-caste steward or apothecary than by classing them with the lowest order of hospital servants. In India the apothecary stands midway in hospital management between the European doctor and the common servants. He can do much to insure discipline, or he can allow it to be disregarded. He may be an unjust or a just steward, a strict ruler, or one who can shut his eyes to neglect of duty for a consideration in the shape of rupees. But he is, and must be, the only person to whom the sick European can look for the supply of his constant, hourly minor wants. And, if for no other reason, we are bound to credit him with the good qualities he so often displays, and to try and make the Subordinate Medical Service worthy of the many good men who have undoubtedly adorned it. We observe that Sir R. Temple, the Governor of Bombay, in the course of his speech at the annual meeting of the Grant Medical College lately, spoke at great length, and very emphatically, of the value of the vernacular students, or Medical Subordinates. And after enlarging on the immense field of private practice open to them, and as yet to them only, he went on to say:—"Further, we contend that it is impossible to maintain our operations for medical relief in the Presidency without having a very large number of hospital assistants, a class, too, which must grow in numbers according as the operations expand in extent and in importance. There are now 200 hospitals in this Presidency, including those hospitals attached to the dispensaries in the interior of the country, and there are about 800,000 or more outdoor cases treated in a year; there are 33,000 indoor cases, and there are 2500 major and 44,000 minor surgical operations performed in a year. This work cannot be done by the few scores of licentiates we can turn out of this College in a year; and the work is really too enormous for any number that we can reasonably hope to attain. But a great deal of the work is actually of an ordinary simple character, such as can quite well be performed by men who pass our secondary examination." Sir Richard Temple spoke of the work of these men in civil practice chiefly, no doubt, but his observations will apply with equal force at least to the value, and the absolute necessity, of the Subordinate Medical Officers, whether half-caste or "vernacular," in military hospitals.

THE WEEK.

TOPICS OF THE DAY.

At a meeting of the Meteorological Society, held last week, Dr. John Tripe read a paper on the winter climate of some of the English seaside watering-places. In illustrating his remarks, Dr. Tripe communicated a record of observations taken at Scilly, Torquay, Penzance, Guernsey, Barnstaple, Ventnor, and Llandudno, from December to March in the years 1873 to 1877, and at Ramsgate and Hastings from 1874 to 1877; these he compared with observations taken at Camden Town. The result showed that the mean daily winter temperature of the seaside places specified was 44·5°, against 41·3° at Camden Town. The mean daily maximum and minimum temperatures were also higher at the seaside, so that the daily and monthly ranges of temperature were smaller; the mean humidity was less; the general direction of the wind was about the same; but the number of rainy days and the rainfall were greater at the seaside. As regarded the wind, the chief point for consideration was the amount of shelter afforded by high land, as at Ventnor, and the protection against the stormy and cold winds which ordinarily prevail about the end of February and in March. The soil is another point which should not be forgotten, as heavy rains at chalky and gravelly places were not so objection-

able as on clayey ground. Statistical information of this nature, Dr. Tripe ventures to think, is of great importance to the physician, as it may materially guide him in selecting a locality for patients. Consumptive and asthmatic people, he points out, would not do well in a comparatively moist climate; whilst those affected with bronchitis might be sent to a so-called sedative climate, like that of Penzance, where there is a small range of temperature, and a considerable amount of rain. Only the southern seaside resorts were dealt with in this paper, none others being considered eligible as winter quarters for invalids.

The Local Government Board recently appointed Mr. Arnold Taylor, one of its inspectors, to make an inquiry into the steps which had been taken in the matter of the drainage of the village of South Cave, in Yorkshire. The question at issue is whether small rural villages, where the health is good, and the death-rate lower than the average, are to be compulsorily drained at a large expense, contrary to the wish of the inhabitants. In the present case the death-rate was proved to have been under 13 per 1000 for the last four years, with a perfect immunity from infectious diseases. In the neighbouring village of Welton, which has been recently drained, it was shown that there had been four deaths from typhoid fever, and a death-rate of 28 per 1000. In South Cave there are only seventy houses to be drained, the proposed outlay, £2000, involving an extra rate of 6d. in the pound. The present is admitted to be a representative case, and the decision of the Local Government Board is awaited with considerable interest.

There would appear to be an urgent necessity for the appointment of some competent official to superintend the ventilation of our public courts and buildings. Complaints on this score are continually cropping up, and suffice to show how wide-spread is the evil. Last week, at the Hammersmith Police-court, Mr. Paget, the magistrate, on returning to the court after a short absence, complained of the oppressive state of the atmosphere in it, and ordered the windows to be opened. The usher said the Clerk of the Works who was sent to examine the ventilation of the court had instructed him to burn gas in the sunlight and keep the windows closed. Mr. Paget said the atmosphere in the court was abominable. He ordered the windows in the lantern to be opened, and the gas in the sunlight to be extinguished, remarking that it only made the place hotter. The object of the sunlight was to draw up the foul air, assisted by open ventilators at the bottom of the court, so as to force it through a tube in the roof of the lantern.

At Cork, last week, Dr. Maccabe, Local Government Inspector, opened an inquiry upon an application put forward by the Corporation to be empowered to move under the provisions of the Artisans' and Labourers' Dwellings Act. The authorities have reported that seven areas, situated in different parts of the city, are in a very defective sanitary condition, containing many dwelling-houses wholly unfit for human habitation.

An appeal for aid in the formation of a library for the use of the inmates of the Newington Infirmary, Westmoreland-road, Walworth, has been put forward by the Rev. E. Morris, chaplain to the institution. At the present time, he states, there are more than 900 patients in the Infirmary, and, beyond a few periodicals furnished by the guardians, scarcely any suitable books are available for distribution among the sufferers.

A curious, if real, case of hydrophobia is reported from Chelmsford. A man named Thomas Hicks, while in the act of eating his dinner, was seized with strong convulsions, followed by apparent lock-jaw. He was removed to the infirmary, where he developed pronounced symptoms of hydrophobia, requiring two men to watch him day and night. It was known that he had been bitten by a dog about eight weeks ago; all hope of his recovery was abandoned, but, despite the acute agony he has undergone, he is now believed to be making rapid progress towards recovery. The case is said to have excited great interest amongst the members of the profession, and it is stated that some medical men from London have visited and examined the patient. If this is really the case, we shall, doubtless, have some detailed reports of it.

The Lower Thames Valley Main Sewerage Board having refused to entertain an application to pay the heavy expenses incurred by the Kingston Town Council incident to the formation of a joint Board, the matter was discussed last week at a meeting of the Corporation. Dr. Woolley explained that the opposition led to an improvement in the rating clause of the provisional order, and also an extension of time for carrying out a drainage scheme. He therefore moved that counsel's opinion should be taken on the subject. Councillor Sherrard, on the other hand, believing that the costs were not incurred in the formation of the joint Board, proposed, as an amendment, that no further action be taken. This was seconded and carried, the Mayor observing that the town had got the benefit of the opposition, and that it would only involve the ratepayers in further expense if the Corporation did not allow the matter to drop.

A recent case of snake-bite treated on Professor Halford's plan is recorded in the Melbourne *Argus* of January 15 last:—A young girl, aged fourteen, was engaged in the harvest-field, when she was bitten by a tiger snake on the left leg, about three and a half inches above the ankle. A ligature was immediately tied round the leg, and the wound was sucked; the girl then walked to her home, nearly a mile off, and when she arrived there had become almost blind. Dr. Fergusson was summoned, but when he arrived some three or four hours had been lost, and the patient was in a complete state of coma, the pupils of the eyes much dilated and almost imperceptible. Dr. Fergusson at once resorted to the injection of ammonia, but finding the girl did not return to consciousness, in about half an hour's time he repeated the injection; this seemed to have the desired effect: the coma entirely disappeared, the pulse became much fuller but quicker, and breathing more natural, whilst the patient showed signs of returning to consciousness. The next evening, however, the girl had a relapse, and expired a few hours afterwards.

The inhabitants of Hackney have commenced an agitation for the removal of a nuisance—strangely to say, forced upon them by their own parish authorities. It appears that these gentlemen have entered into a contract with a local builder for the shooting of the dust and *débris* of the parish on a newly formed estate, for road-making and other purposes. The result is, it is asserted, that an outbreak of diphtheria has occurred in the neighbourhood, and already four fatal cases have been recorded. Up to the present time the locality has been conspicuously healthy, and the inhabitants, naturally alarmed, have appealed to the Local Medical Board of Health on the subject. Should this not have the desired effect, they will, no doubt, carry their grievances to the Local Government Board, as the quickest and most effectual method of settling the difficulty.

At the monthly meeting of the Statistical Society held last week, a paper was read by Mr. C. Walford, on the "Famines of the World, Past and Present." The principal feature was a table containing dates and details of some 350 famines, now prepared for the first time. The famines of

India, of which there have been thirty-four within the last century, received especial notice, as also the famine existing at the present time in North China. It was stated that the empire of China had been peculiarly liable to famines, although details concerning them were by no means easy to obtain. Mr. Walford then proceeded to investigate the various causes of famines, and explained that he had not been able to trace the supposed "sun-spot" influence (eleven-year periods) at all clearly in his several tables. The meeting was well attended, and an animated discussion followed the reading of the paper.

A fondness for medicine may be considered the exception rather than the rule, and it is therefore difficult to account for a fatal occurrence which took place at Kidderminster last week. Three men, named Teague, Crane, and Thompson, were drinking together at an inn in that town; Teague mentioned that he had a bottle of medicine in his pocket. Thereupon Crane took it out, saying that if it had done Teague good it would certainly do him good, and he proceeded to drink some of it, Thompson following his example. They had previously been told the contents were poison, and it appeared the bottle contained a preparation of aconite and belladonna. The result was that Crane died whilst being removed to his home, but Thompson is slowly recovering.

The Moss Side Local Board had under discussion on Monday last a report presented by Mr. Sutcliffe, the Medical Officer of Health, relative to a recent outbreak of typhoid fever in the district. Mr. Sutcliffe stated that the disease had been caused by the supply to a local dealer of impure milk from a farm in Cheshire; that the source of the supply had been ascertained, and that no milk had been sent out from the farm since the 1st inst. The nuisance inspector reported that during the past week he had visited 200 houses where milk had been served, and that he found thirteen cases of typhoid fever in the course of his inspection.

SIR JOSEPH FAYER ON THE DESTRUCTION OF LIFE IN INDIA BY WILD ANIMALS.

THE methods of serving the cause of humanity which lie open to those who possess not only the will, but what is of more importance, the knowledge, are numerous and varied, and Sir Joseph Fayrer, K.C.S.I., has undoubtedly done good service in once more calling public attention to the appalling destruction of human life which is annually taking place in India from wild beasts and the bites of venomous snakes. In a paper read before the Indian Section of the Society of Arts on the 1st of the present month, Sir Joseph showed that, from returns furnished to Government, in the year 1875 no less than 20,805 persons and 46,805 head of cattle perished from this cause, the sub-division of this ghastly death-roll being accurately distributed as follows:—Elephants killed 61 human beings and 6 head of cattle; tigers, 828 persons and 12,423 cattle; leopards, 187 persons and 16,157 cattle; bears, 84 persons and 529 cattle; wolves destroyed 1016 persons and 9407 cattle; hyenas, 68 persons and 2116 cattle; whilst jackals, alligators, buffaloes, boars, and other animals are credited with the destruction of 1446 persons and 3001 cattle, the hideous chronicle being completed by the deaths of 17,070 persons and 3166 cattle from the bites of snakes. To mitigate this annual sacrifice of human life, the Indian Government has devised several plans, but, in the opinion of Sir Joseph, their efforts are not sufficiently organised. He says the death-rate in India from disease has been reduced to less than one-third of its former figure (69 to 18) by the scientific application of sanitary laws; and if the same enlightened attention be given to this death-cause, it is not too much to assume that in time equally good results would ensue. At present the Government offers a certain sum for the destruction of wild beasts and snakes; but these rewards are often abused, and one case is quoted in which it is stated that "there was reason to believe that no trouble was taken to procure even a few wolf-skins to give colour to the fraud; for of the forty-five skins which were seized when the fraud was discovered, and for which an order had actually been written on the Treasury to pay the rewards, there was not a single wolf-skin. They consisted of village cat-skins, fox-skins, jackal-skins; and it is probable that the whole of the rewards were paid on this lot of skins brought up over and over again, some of them having been torn across and sewn up again." The plan of putting strychnine in the carcases of animals killed and left by tigers before they came back to eat them has also been recommended, but does not appear to have met with much success; and aconite was also suggested, though with like doubtful results.

Sir Joseph Fayrer called attention to the fact that, although so much persecuted by wild animals, native co-operation is often difficult to obtain; the superstitions of the natives leads to a considerable outlay in the slaughter of a tiger, it being necessary to offer an extraordinary reward to overcome their scruples. They reverence the tiger as they reverence every other object of fear, and he who kills one incurs great expenditure in cleansing himself from the crime. Many, again, would not kill one if they could, for they fear that he would haunt or do them mischief after death. Some they regard as the abode of a spirit which possesses unlimited powers of mischief, and in many districts the peasants are loth to pronounce his proper name. But though they will not always do so themselves, they are willing that others should take his life, and they will not only point out his abode, but rejoice over his death, as it relieves them from destruction of property and fear of their own lives.

In the course of his remarks Sir Joseph observed that there is current a popular belief (not confined to the ignorant) that the wounds from the claws or fangs of a tiger are dangerous, from being of a poisonous nature. This, he says, is an error; it is certainly possible that the teeth and claws may occasionally be contaminated with septic matters from decomposing food, but this is probably rare, as these animals are very particular in keeping themselves clean. The real fact is, the wounds are dangerous because they are deep, punctured, and lacerated; otherwise they have no peculiarity, and not unfrequently heal rapidly, though they often suppurate, and may then induce blood-poisoning. It is also remarkable how many persons escape from the clutches of a tiger. It seldom kills outright, and rarely carries the human victim far from the spot where he was struck down, except, of course, in the case of confirmed "man-eaters." There is a blow, a bite, generally in the shoulder, a shake or two, the victim is dropped, or dragged for a short distance, and then left. Such injuries are frequently fatal, but by no means always so.

In conclusion, Sir Joseph expresses his opinion that if the local governments of India made it part of the duty of district officers not merely to proclaim rewards, but to encourage the destruction of wild animals and snakes, by the operation of an organised establishment, with which they should be supplied in these districts, much benefit would result. The money rewards already offered would probably suffice for wild animals, but those for venomous snakes should be increased; and if the people were encouraged to work for them, and were aided by persons acting under properly selected superiors, the result would soon be a diminution of the wild animals and snakes. But it is his conviction that until some organised establishment is formed, to be worked steadily throughout the whole country—not dependent on the will nor subject to the caprice of individuals, but under local officers subject to one head,—no real or continuously progressive amelioration of the evil can be anticipated. Such a department working

under a selected officer would, as in the case of Thugs and Dacoits, soon make an impression on what, so long as it continues in its present condition, must be regarded as a defect in our administration.

CONDITIONS INFLUENCING THE RENAL SECRETION.

Some experiments have lately been made by Professor Quincke on the effect of sleep on the urinary secretion. The persons experimented on passed their water in the morning and then remained three hours longer in bed without drinking any liquid. On comparing the urine of this latter period with that of the night—that is to say, the urine passed after rest in bed *without* sleep with that after rest in bed *with* sleep,—the former urine was found, contrary to expectation, to have a lower specific gravity, to be paler, and also more abundant in a unit of time than that of the night. The same relation as to quantity secreted in equal times existed between the amount of urine excreted during the three waking hours in bed and that of the whole period of twenty-four hours—or, in other words, the secretion was relatively larger during the former period. If, however, the persons experimented on fell asleep during the three-hour period, the quantity of urine which they passed in a unit of time was always smaller than if they stayed awake, and similarly the quantity of urine passed per hour during the night was always greater if they were awake for some hours in the night. Quincke explains the increased secretion of urine in the three-hours period on two possible assumptions: either retention of water occurs during sleep in all or in some of the organs of the body owing to some functional change or to a more sluggish flow of lymph induced by sleep; or else there is diminished renal activity, probably of nervous origin, and affecting either the secreting tissues, the vessels of the kidneys, or the general arterial pressure. Which of these two possibilities actually occurs, Quincke does not attempt to decide. On the other hand, he rejects a third possibility—viz., that absorption of liquid from the bowel is less active during sleep, and again revives in the waking state, because the results are the same whether the last liquid is drunk immediately before going to sleep or three or four hours earlier.

In this connexion it may not be uninteresting to notice the effect of posture upon the rate of secretion of the urine, as determined by the experiments of Wendt (*Archiv der Heilkunde*, xvii.). This observer, by a method which it is not necessary to enter into here, determined the amount of pressure on the renal region in different positions of the body, and he found that it varied between 12·9 and 14·1 centimetres of water in the sitting posture, 11·1 and 14 centimetres when the patient lay on his back, that it was equal to 9·2 centimetres in standing, 8·1 when resting on the elbows and knees, while with the patient on the side it fell to between 2·3 and 3·7 centimetres. It was also found that if a person were placed on a regulated diet for several days and then the effect of different postures on the daily amount of urine secreted observed, the largest quantity was passed with the patient *on his side*, the next best results being obtained when he rested on his elbows and knees. Thus, on days in which the lateral or the knee-elbow position was the one exclusively or mainly adopted, there was a mean secretion of 5·5 cubic centimetres per minute, against 4·23 cubic centimetres when the sitting posture was entirely or chiefly maintained. The general conclusion which Wendt arrived at, from these and from other similar experiments, was this: that most urine was secreted in those positions in which there was least pressure on the renal region; and this was further confirmed by experiments, in which the amount of urine secreted in the lateral posture in a unit of time with the abdomen girded was compared with that secreted with the abdomen unconfined. Thus, when lying on the left side with a belt on, 452 cubic centimetres of urine were passed in three hours, while 1084 cubic centimetres were passed with the abdomen free; and on the right side the numbers were 582 cubic centimetres with belt, and 892 cubic centimetres without. The explanation of this phenomenon appears to be that increase of intra-abdominal pressure increases the pressure on the renal veins, and this, as Ludwig has shown, diminishes the secretion of urine.

These experiments of Wendt's seem to us to have a practical bearing. It is well known that in ascites, after the removal of the fluid by tapping, the amount of urine passed sometimes increases considerably, probably because the renal veins are no longer compressed by the effusion. Is it not, therefore, possible that similarly, even without tapping, or as in renal dropsy where tapping is inexpedient, by turning the patient on the side, or still better on the belly, the renal veins may in some cases be relieved from pressure, and the kidneys enabled to perform their work more easily?

THE UNIVERSITY OF DUBLIN AND VIVISECTION.

Last week we stated that on March 13 the Academic Council of the University had adopted a resolution to the effect that it was desirable that some suitable places, either within the Medical School or in the Museum buildings, should be duly registered under the Act 39 and 40 Vict., chap. 77; and that application should be made to the Chief Secretary for Ireland for this purpose. The remainder of the resolution was sufficiently guarded in expression, we should think, to discountenance the idea that in taking this action the Academic Council in any way intended to sanction the indiscriminate or reckless practice of vivisection in the University. The resolution was adopted, it is said, by eleven votes to *one*. It is necessary to understand these points clearly, owing to an extraordinary note on the question which has recently been given by the professors of the School of Physic in Ireland. To these gentlemen the resolution quoted above, and which had been submitted by the Council to the Board of Trinity College, was referred with a request that the professors would express their opinion as to the best means of carrying it into effect. The professors met accordingly on Thursday, March 21. Before proceeding to details, the principle of the resolution was submitted to the meeting. Twelve of the professors voted: six were in favour of it, and six were opposed to it. Then, by the casting vote of the chairman (the Regius Professor of Physic), it was ultimately condemned. To an outsider, the action of the professors on this occasion seems most suicidal. If their opinion is ratified and acted upon by the University authorities, a death-blow will be struck at the teaching of even the rudiments of physiology—to say nothing of original research—in the University of Dublin; for by the "Cruelty to Animals Act, 1876" (39 and 40 Vict., chap. 77), so simple an experiment as the demonstration of the circulation of the blood in the web of a frog's foot cannot be made *except by a licensed person in a duly registered place*. Nowadays, we need scarcely add, physiology is one of the foundations of medical science; and physiology, unless practical, is of little or no value.

THE HEALTH OF THE PARISH OF ST. MARYLEBONE.

In his report on the health of the parish of St. Marylebone for the month of February last, Dr. John Whitmore, the Medical Officer of Health, records that amongst diseases of the zymotic class, whooping-cough continues to prove the most fatal; but all other diseases of this class exhibit death-rates below the average. With regard to whooping-cough he points out that the deaths from it occur chiefly amongst children of the poorer classes from neglect of the necessary precautions. If children suffering from it are kept in a

warm and equable temperature until perfectly convalescent, and ordinary care and vigilance are used to ward off inflammatory attacks or other complications, the disease, although sometimes protracted, will, as a rule, end favourably; but if children are exposed constantly to damp and cold the almost certain results will be attacks of either bronchitis or inflammation of the lungs, from which a large proportion of them cannot recover. No death occurred in the parish during the month from small-pox, but during the period six cases were sent to the Asylum Hospitals. Four deaths from typhoid fever were registered in the parish, and six other cases were sent to hospital. The utmost efforts to trace this fever to its source are, Dr. Whitmore explains, very frequently unsuccessful, and he puts forward the suggestion that the evil may arise from cesspools under the older class of houses in the parish. At the time when the drainage of houses was made compulsory, a large number of cesspools, instead of being thoroughly emptied and filled up with clean dry earth, or brick rubbish, as they ought to have been, were simply bricked over and cemented. It may, therefore, be likely that from many of these cesspools the pent-up and poisonous gases, not always offensive, are beginning to escape, and, if this idea were correct, the origin of many cases of enteric fever would not be very far to seek.

LEPROSY FIVE YEARS AFTER RETURN TO EUROPE.

We receive from the Professor Dr. Oscar Wyss, of Zürich (*Correspondenz-Blatt für schweiz Aerzte*, A.D. 1878), a detailed account of a case of leprosy as exhibited in a Swiss soldier who had spent ten years abroad in the Dutch military service—part of the time in Java, part in Amboyna. It is noteworthy that the leprosy (*lepra tuberosa*) only began to show itself five years subsequent to his return home to Europe, and the symptoms commenced in stains of the forehead and face, etc., agreeably to the most usual form of tubercular elephantiasis. In the course of a year the voice was wholly nasal. The description of Dr. Wyss is taken some eighteen months after the commencement of the disorder. At this date any participation of the nervous system was scarcely to be perceived, but modifications in colour of the skin (morphœa) were abundant. The usual difficulty was found in etiology. The lodging and food of the patient were good, better than he found in Europe. He only recollects seeing two cases of leprosy, and had no direct relation with any. It is fair to state that during part of his stay in the Archipelago he had from time to time an open wound—if any suggestions may be framed out of this incident.

THE HEREFORD CITY AND COUNTY LUNATIC ASYLUM.

The sixth annual report on the Hereford City and County Lunatic Asylum for the year 1877 contains no feature of particular interest. The Asylum continues to be worked in the most satisfactory manner under the medical superintendence of Dr. T. A. Chapman; the Herefordshire admissions have not continued at the high figure of 1876, but their character differs little from that of previous years. In only one case can it be positively asserted that the patient was injured by delay in removal to the Asylum, and on inquiry it was found that this delay was entirely attributable to the patient's relatives. The death-rate for the year was very low—viz., 5·6 per cent. on the average number resident; and the average weekly cost about 10s. 2d. per patient. Dr. Chapman in his report calls attention to a fact, which he thinks is often overlooked, in relation to excitement as an indication of the well-being of patients in asylums. He quotes a case of a patient who was admitted at Abergavenny suffering from troublesome, meddling, acute mania; this became chronic without change of symptoms, and for several years he remained excited and troublesome, and was then sent to another asylum. After a time he was brought to the Hereford establishment; he was then very quiet and inoffensive, but his health was much reduced—he had numerous scrofulous sores and swellings, and did not look likely to live long. By proper care his health ultimately became re-established, but, *pari passu*, all his old troublesome excitement returned, and he remains now in the same state. The excitement in this case is pronounced enough to give him at times quite a worn, exhausted look; but in the majority of cases of this nature it is not so severe. Another frequent form of these cases is the recurrent, when the patient improves in health and condition during the period of excitement, instead of, as usually occurs, falling off. The probable explanation, Dr. Chapman thinks, is, that the nervous system is usually in these cases unequal to supplying the force required by the nutritive processes, but becomes so when the condition of subacute excitement occurs. This is, he observes, almost certainly the explanation when the alternating conditions are of joyous, merry excitement, and of melancholia, in which last the influence of the nervous system on the organic life seems to be wanting, or even pernicious.

THE VACANT POST AT ST. THOMAS'S HOSPITAL.

For some weeks it has been known that Mr. Liebreich's withdrawal from the eye clinic at St. Thomas's Hospital was imminent, and at length his resignation is declared. The loss of so distinguished a specialist necessitates the choice as his successor of a man in the first rank of ophthalmology if St. Thomas's wishes to maintain its prestige. We would fain hope that it may not be again necessary to flee to Germany for an ophthalmic surgeon. We have heard the names of Messrs. Anderson, Critchett, McHardy, and Morton mentioned as probable candidates. These gentleman are all, doubtless, promising ophthalmic surgeons; but Mr. Edward Nettleship, whose name is also quoted, is something more. In the practical branch of his department Mr. Nettleship has also earned his laurels. His report for the Metropolitan Board, on Ophthalmia in Pauper Schools, to which subject he devoted an immensity of pains, has made him an authority in this important matter of public health. Whoever may be chosen, we hope, in the interests of the profession, that the former and present members of the staff may have a dominant voice in the selection.

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

We are glad to see that the Royal Institute of British Architects last year gave designs for a convalescent seaside hospital as the subject for their "Soane Scholarship." At a time when so much activity is being manifested in the founding and erection of hospitals, convalescent homes, and cottage hospitals, and in the extension of existing institutions, it is a matter of congratulation, from a medical point of view, that the Institute of Architects should encourage their younger members to perfect themselves in the planning of such buildings on scientific principles, by occasionally offering their best and most eagerly sought-for prizes for this class of work. The "Soane Scholarship," quite irrespective of its money worth, is a prize of considerable distinction, and may not inaptly be compared to our own "Jacksonian" Prize. Perhaps, in the present instance, the value of the work might have been enhanced if certain limits had been placed on the estimated cost, and if it had been definitely laid down that something more than mere design would be taken into consideration. We gather, however, that originality in design, with evidences of talent in this direction, are the points chiefly considered in awarding the prize. This is the more to be regretted, inasmuch as the plans sent in on approval could none of them, without great alteration, be actually adopted

by any committee who might be on the point of erecting such a hospital. The plans have been drawn up regardless of cost, not only of erection, but also of administration. We cannot quite see on what grounds the prize has been awarded to "Fortuna Sequatur" (Mr. H. M. Robinson). His plans are most undoubtedly highly finished, but there is nothing else very striking about them, least of all in the design of the building as a whole; while as regards the internal arrangements they are very faulty. The hospital (in accordance with one of the stipulations) is for sixty patients. For the most it is planned on the idea of a ground floor for day-room purposes, and an upper floor for sleeping-room purposes. There is nothing objectionable in the arrangement, except that it involves a much greater administrative cost; and in a convalescent hospital, especially at the seaside, the wards ought to be planned so as to be very easily overlooked by as few *employés* as possible. There are no water-closets on the upper floor, and only three each on the male and female side on the lower floor—obviously an insufficient number for sixty patients and the household which would be required to look after them. Then the whole building has a cramped look, with long and ill-lighted corridors; and the sleeping accommodation for nurses seems to have been almost entirely left out of consideration. Among the other plans, one by "Ozone" (Mr. E. E. Deane) is remarkable for its bold and original design. It represents the hospital as built on a rock, close to the sea. Of the design we say nothing, for it is far too grand and elaborate to make it a "possible" design for any committee intending to build. But the plan—somewhat unfinished—to our way of thinking is better and more "considered" than the prize drawing. It consists of two wards on both floors of fifteen beds each on either side of a central entrance, intended for males and females respectively, with suitable accommodation for medical officers, matron, and nurses—the latter shut off from the rest of the building. Though unsuccessful, the author of this plan is to be congratulated on the originality of his design, and not less on the well-considered plan of his hospital. A third plan, by "Virtuti innimica quies," took our fancy very much indeed. The design of the building is exceedingly pretty; and it has the recommendation, moreover, of being "possible" from a pecuniary point of view. There was not a very large competition; we did not see much more calling for comment.

CHARING-CROSS HOSPITAL.

CERTAIN of our contemporaries have been busying themselves of late as to what might be called the "family affairs" of Charing-cross Hospital. The good taste or judgment displayed in this is of doubtful quality—at all events, it would have been well to make sure of facts before dealing with the matter, as has been done. These facts, we believe, stand as follows:—In 1868 a new code of rules was adopted by the Hospital authorities, and among these was one to the effect that all physicians and surgeons to the Hospital should retire at the age of sixty—the rule not to be retrospective. Since the passing of that rule, the present Senior Surgeon, Mr. Hird, was, without question, reappointed for a period of five years, which term expired in February last. At that time, on the urgent representation of the whole medical and surgical staff, with one single exception, Mr. Hird was reappointed for a further period of three years. It has been said that much disappointment has been expressed on the part of the junior staff at this fresh appointment; but, as it happens, the junior staff on the occasion was represented by the single dissentient already referred to. *Hinc illæ lachrymæ*—or, to put it in English, "all this outcry in the papers"! The reasons which, we are told, influenced the staff in so acting were these:—Mr. Hird has for a good many years acted as Dean of the School, and has, as such, been its representative in dealing with the general body of governors. At the present time, when negotiations are actively going on for the enlargement of the school premises, and the acquisition of entirely new buildings for this purpose, it was felt that it would be a great misfortune to lose Mr. Hird's experience and unwearied services. Accordingly, the staff, with the above-noted solitary exception, considered it advisable to urge the appointment of Mr. Hird for a limited period, altogether independently of any doubt as to whether the rule applied to him—which, we believe, it does not.

NEW MODE OF OBSERVING THE VIBRATIONS OF THE VOCAL CORDS.

PROFESSOR OERTEL of Munich has succeeded, by the intermittent illumination of the larynx by means of a revolving mirror, in observing the isolated vibrations of the vocal cords, and in distinguishing small differences in their tension, and in the peculiarities attending paralysis and other alterations of their functions. The apparatus used seems to be similar in its principle to Foucault's mirror for determining the velocity of light. The brief announcement of his discovery contained in the *Centralblatt Med. Wiss.*, No. 5, 1878, has been followed by a second (*Centralblatt*, No. 6), in which he describes the different appearance of the cords in the production of chest and falsetto tones. In the former he finds that the ordinary view is correct, namely, that the vocal cords vibrate as a whole in their whole length and breadth. On the other hand, in singing falsetto the vocal cords are divided by longitudinal nodes running parallel to their edge into two or more vibrating segments, the number of these segments and of the nodal lines increasing with the pitch of the note.

PATHOLOGICAL SOCIETY OF DUBLIN.

AT the meeting of this Society on Saturday, March 23, Edward Hamilton, M.D., President, in the chair, Mr. Frank Thorp Porter exhibited a specimen of double ureters in a male subject aged about thirty years. The two ureters united into one trunk nearly an inch above the entrance into the bladder. The supernumerary ureter, surrounded by fat, came off at the upper part of the hilum of the kidney, while the other arose in the normal situation. The capsule of the kidney was loose. The ureter of the other kidney was quite normal. There was cirrhosis of the liver and chronic pneumonia in the same subject. Dr. Finny mentioned a case in which double ureters existed on both sides, all four vessels opening separately into the bladder. Dr. Bennett regarded double ureter as a common abnormality.

MEDICAL PARLIAMENTARY AFFAIRS.

Fort George.—In the House of Commons, on Thursday, complaints were made by two or three members of the bad quality of the water supplied to the troops at Fort George. Mr. Hardy promised that the matter should be inquired into, and rectified if the statement were correct.

Fever in Gibraltar.—On Friday, Sir M. H. Beach, replying to Mr. Goddard, said that he understood there was an unusual number of officers attacked with fever during the past summer at Gibraltar; but these cases were of a remittent character, and not typhoid as alleged. The principal medical officer of the garrison had reported that the fever was in no way traceable to local sanitary defects, but was of climatic origin, and attributable in great measure to the late and prolonged rainfall. Much had been done to improve the sanitary condition of the barracks, and he believed the arrangements have proved, on the whole, satisfactory. Further improvements will shortly be made, with a view to remedy existing defects.

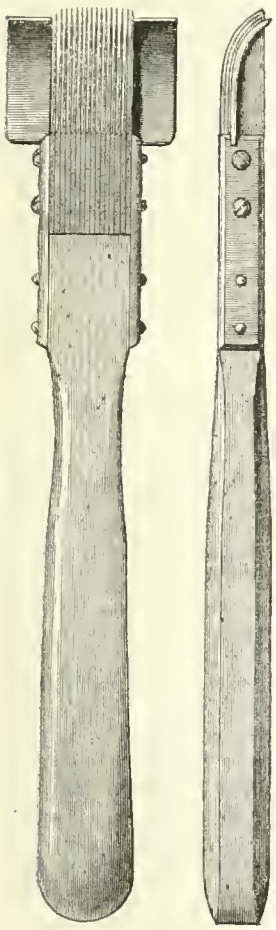
Vaccination in the Isle of Man.—Mr. Cross, replying to Mr. Hicks, said that the Vaccination Act had passed the Legislature of the Isle of Man, and is now awaiting the Royal assent. The Lieutenant-Governor under the Act will

appoint public vaccinators, who must in all cases be medical practitioners. This is the only special qualification. The public vaccinators appointed about a year ago will have their appointments revised as soon as compulsory vaccination becomes law. In making appointments, the Lieutenant-Governor will be guided in his selection by the rules which govern similar appointments in England.

THE MEDICAL SOCIETY OF LONDON.

At the meeting of the Medical Society on March 18 (Mr. Erasmus Wilson, President, in the chair), Dr. Balmanno Squire read a paper on two cases of port-wine-mark treated with a view to obliterating the mark without scar, illustrated by water-colour and pen-and-ink drawings.

The one case was that of a man aged thirty; the other that of a woman aged fifty-five. In both cases the port-wine-mark was confined to its commonest situation, namely, the right half of the face, occupying in each case the greater part of the front of the right half of the face. In neither of these cases did the patient continue under treatment sufficiently long to allow of the obliteration of the whole of the port-wine-mark, but in each case a considerable portion of the mark was eventually completely obliterated, and that without the production of any scar whatever. The means adopted was in both cases the same—that is to say, the scarification of the flat nævus by means of parallel incisions effected with a frozen scalpel, the skin also being frozen by means of the ether spray. The parallel incisions, carried as deep as the entire thickness of the skin proper, were spaced as close together as the sixteenth of an inch. As soon as these had (within three or four days) completely healed, a second set of parallel incisions was made, the direction of the second set of incisions being made obliquely to the direction of the first set, and so on with a series of operations. The direction of the parallel incisions was on each occasion successively somewhat veered. In this manner, after about ten sets had been made, the port-wine-mark had become permanently and considerably fainter, and yet without any trace remaining of the numerous incisions that had been made into it. Going on in this way, the portions of the mark operated on were eventually completely obliterated without scar or other trace of interference being left.



Dr. B. Squire exhibited water-colour drawings of the two cases thus operated on, and also pen-and-ink sketches of an instrument he had devised (made for him by Messrs. Weiss) for executing a series of incisions at one stroke. This instrument was like an ordinary scalpel, only that it had sixteen parallel blades instead of one. These blades were so thin, and placed together so closely, that eighteen of them measured only half an inch across. This instrument he had used with considerable success—both the instrument and the skin being frozen immediately before operating.

Dr. Squire also described an apparatus consisting of a number of parallel needles fixed in a plaster-of-Paris handle, so that the handle contained thirty-six needle points in the half-inch square. If these were heated red-hot and thrust into the skin they produced, as he had found, complete sloughing of the entire area of skin operated on. But if they were heated to only black heat, and their introduction into the skin was effected but momentarily, they then produced only a stippling of minute punctiform scars. However, his experience was, on the whole, vastly in favour of the multiple parallel linear scarifications made with chilled steel, first described, as compared with the multiple punctiform operation with black hot steel.

The President (Professor Wilson) said that the operation was obviously as yet only in its infancy, but that the process of linear scarification, as proposed by Mr. Squire, appeared to him to promise good results. Certainly no other satisfactory mode of dealing with port-wine-mark had as yet been proposed.

Dr. Morris stated that after perusing a pamphlet that Dr. B. Squire had written on the subject, he had attempted an operation on a port-wine-mark with the single scalpel, as at first advocated by Dr. Squire, but had found difficulty in executing the incisions with the requisite nicety. He had accordingly devised a multiple scarifier, which he exhibited (made for him by Mr. Hawksley). He had tried this instrument also on lupus erythematosus, and on cases of acne rosacea. His experience, so far as it had gone, confirmed the researches of Dr. Squire.

Mr. Wordsworth agreed with Dr. Squire in preferring a black heat to a red heat in operating by the needle process. In cases of port-wine-mark, he had for twenty years employed a solitary needle bearing a ball of steel around it, placed at about three-sixteenths of an inch from the point, so as to retain heat. This ball enabled a rapid series of punctures to be effected with the needle, without the needle losing its heat.

Mr. Davey had treated a case of port-wine-mark with some success on Mr. Wordsworth's plan.

Dr. B. Squire replied that in order to succeed in effecting neatly close parallel incisions, some practice in pencil or in pen-and-ink drawing was a considerable advantage, and that those practitioners who happened to have this kind of training would find but little difficulty in the matter. However, the multiple scarifier he had devised would effectually dispense with the necessity of that kind of accomplishment. He had tried multiple linear scarification in lupus erythematosus, but preferred the results he had obtained in that disease by erasion with a minute sharp steel spoon. The spoon in such cases had also been tried with good results by Professor Auspitz, and by Hebra junior. In the "telangiectasis" which often accompanies acne rosacea he had employed linear scarification, as proposed by himself, with better results than the multiple punctiform scarification recommended in such cases by Hebra senior. Professor Vidal (of Paris) had recently adopted Dr. Squire's method of linear scarification in cases of lupus vulgaris with apparently excellent results. Dr. Dubini (of Italy), and after him Professor Volkmann (of Halle) had proposed multiple punctiform scarification in cases of lupus vulgaris, but no one, so far as could be ascertained, had proposed the bolder method of linear scarification in lesions of the skin, and this was more uniform and more thorough in its effect. Moreover, scarification of any kind as applied to port-wine-mark, was, he believed, as yet untrodden ground.

Sisters of Charity in the French Hospitals.—The *Progrès Méd.* for March 16 gives an account of a discussion which took place between that rather ultra-Radical body, the Paris Municipal Council, and the Préfet of the Seine. The Council urged upon that functionary the desirability of employing lay nurses instead of sisters of charity in the Ménilmontant hospital, just about being opened, alleging that the *réligieuses* are bad nurses in consequence of the time they pass at their devotions, their proselytising action, and the pressure they exert on patients; their disposition to obey their own superiors rather than the hospital authorities; and the great difficulty the medical officers find in getting them dismissed, even when proved incompetent. The Préfet, acting upon the advice of the Assistance Publique, refused to sanction the change, and denied the accuracy of the charges made. It shows the difference between this country and France, in regard to unmarried women, that these last were said not to be obtainable as nurses—widows or women with the incumbrance of children, forming the only source of supply.

SANITARIANS AND SANITARIANS.

As excellent examples of "how to do it" and "how not to do it," we would commend to the study of sanitary boards the published proceedings of the Carlisle Sanitary Authorities, Urban and Rural. From the *Carlisle Journal* of March 5 we find that in the urban district sanitary matters seem to have received the prompt and energetic administration they demand, and that this course of action has been attended with the most encouraging results. Thus, though the mortality for the week under consideration happened to be unusually high, only two of the deaths were due to zymotic diseases; and it was stated that since 1874—the first year of legalised sanitary action—the annual mortality had been steadily reduced from 33 per 1000 to 23 per 1000 in 1877. Notwithstanding this gratifying result, the Urban Authority seems in no way inclined to relax its efforts, but anxious, on the contrary, to have the mortality still further reduced to as low a point as is attainable in "an ill-built and perhaps overcrowded town." But on turning to the report of the Rural Authority, given in the same newspaper, we find a very different state of matters. In this Board, if we may judge from their published proceedings, procrastination and inaction seem to be the orders of the day, even when such serious matters as outbreaks of scarlatina and typhoid fever are concerned. Thus, the inspector reported that there had been ten cases of scarlet fever in two houses having very defective sanitary arrangements, and that "he had supplied disinfectants, and written to the owner on the subject." Beyond this it appears that nothing was either done, or resolved to be done, in the way of having the sanitary condition of the houses improved, but the "matter was allowed to stand over" *sine die*. The inspector also reported that there had been five cases of typhoid fever in one house, and that after inspection of the premises he suspected that the disease was to be attributed to the condition of the water-supply. But the medical officer, while agreeing that "the water was the most apparent cause," most unaccountably "thought that the question might stand over for a month, as an analysis was hardly necessary yet, and they would see by next meeting whether the water is impure." That such a proposal should have emanated from such a source is almost as lamentable as the fact that it was agreed to. The Board next proceeded to consider what they were to do regarding certain wells confessedly polluted; but it was now the Clerk's turn to suggest that "they might wait till next meeting"—a suggestion which was too valuable not to be adopted. It would be interesting to have before us the comparative statistics of this—the Rural—Sanitary District. Such a masterly policy of inaction must have produced wonderful results.

Treatment of Varices by Alcohol.—Dr. Englisch, in a communication to the Vienna Doctoren-Collegium (*Wien. Med. Woch.*, January 12), strongly recommends the following procedure, by which the vein itself is as little as possible directly irritated. He raises it on the finger with a fold of skin, and passes the needle of a syringe behind it, throwing in a 5 per cent. solution of alcohol. This spreads around the vein, and induces a small swelling—the vein on close examination being found to contract at the same time. After a while it becomes somewhat larger again, but never regains its original size. Next day there is a considerable amount of infiltration, according to the individual's irritability, and in some cases suppuration occurs, but only around the vein. No ill effect ever resulted from these small abscesses, and in none of the cases was there a rise in temperature. With the hardening of the infiltration and the diminution in its volume the vein contracts in size, a furrow existing along its course from the first, and which persists to the last, when the vein has become converted into a solid cord. The extension of the coagulum is very different in different cases, depending upon the existence of large lateral branches. In most cases a single injection will not suffice, and Dr. Englisch usually employs three or four, or even six, for the two extremities, and has made as many as ten injections—most successful results following when the distended vein assumes a plexiform character. The procedure may be recommended for its simplicity and dangerlessness, and in the majority of cases it proves successful.

FROM ABROAD.

Medical Payments in Austria.

Dr. Kraus, the very active Editor of the *Allgemeine Wiener Medizinische Wochenschrift*, has set on foot a movement in Vienna for the prompt payment of medical men, which, as was to be expected, has become very popular with our fraternity there, since the public in that part of the world exhibits great backwardness of action on this point. The eventual object of the agitation is to obtain the payment of medical services at the moment of their being rendered, and that not only in the case of consulting practitioners, but of the entire mass of the profession. We might have left this proposal unnoticed until it approached somewhat nearer realisation had not the example of our own country, as noticed in a former number, been adduced as a triumphant reply to those who doubted the feasibility of the project. As this assertion has been reiterated still more strongly, we may as well assure our Vienna *confrères* that such ready-money payments are with us confined to the consultant class of practitioners, and even with some of them are not strictly enforced; but that the general practitioners with us, as with them, have often to wait a wearisome time for the discharge of their accounts, which sometimes are never paid at all; and that if by any contrivance of theirs they can devise a plan by which ready-money payments can be rendered practicable, we shall only be too ready to avail ourselves of it, according to them all the honours of the priority which has erroneously been attributed to ourselves. However, Dr. Kraus thinks he has made an important step forwards by getting the question brought before the medical societies and the Vienna Doctoren-Collegium. This latter body has, indeed, just made a report, which, while affirming the principle, provides for the delays which may retard its full execution. The following resolutions were unanimously agreed to:—

"1. The involuntary credit-giving on the part of the practitioner, by which the public takes what credit it chooses without any previous understanding with him, shall once for all be given up. 2. In general it will be for the interest both of the practitioner and the public that the medical charges shall be paid immediately. 3. In all those cases, however, in which exception to this rule is admitted, and credit is allowed, this must only be done by a preliminary agreement with the practitioner, and an exact determination of the period of payment."

These rules, Dr. Kraus observes, will meet all eventualities, and will do no violence to the freedom of action of the practitioner. The Vienna Doctoren-Collegium has taken the first step in a question which so nearly concerns the very existence of practitioners, and now it will depend upon their own *esprit de corps* whether they will carry out the resolutions in an honourable and fraternal manner. For his part, he states that he never imagined that this project would be at once naturalised—every practitioner forthwith receiving payment for his visits when they are made, or reckoning with certainty on receiving all outstanding payments within the month. "The struggle to obtain this boon, we are aware, has been a long one in other countries; but we also know that in England at the present time it is a *fait accompli* that anyone there calling in a practitioner has his fee in immediate readiness for him, and that credit-giving, or non-payment, are things unheard of." Perhaps in an early number of his journal Dr. Kraus will indicate the authority upon which he relies in making this statement, in order that the misconception upon which it is evidently founded may be cleared up.

Belladonna in Collapse.

Dr. Reinhard Weber draws attention (*Philadelphia Medical Times*, February 2) to the efficacy of the treatment of collapse by means of belladonna, particularly that form of it attending inflammation and other diseases of the abdomen. Without saying that it is efficacious in all cases of collapse, he believes it to be more effective in many cases than any of the stimuli ordinarily employed. His attention was first drawn to the subject by the fact of belladonna being stated to be antagonistic to digitalis. The first case in which he tried

its effects was that of a boy eight years of age, in whom violent febrile action was set up during the desquamative stage of a mild case of scarlatina. For this digitalis was exhibited for some days, and after forty-five grains in all had been taken in infusion, the child fell into a state of complete collapse. For this Dr. Weber prescribed—Ext. bellad. gr. ¼, acid. sulph. dil. ℥j., with syr. zingib. et aquæ q. s. ad. ℥ xij., giving a teaspoonful hourly. At the end of twelve hours the collapse had quite disappeared, and the case did well. The next case was that of a woman aged forty-one, who, after being treated for five days for gastro-enteritis, fell into a state of complete collapse. Alcoholic stimuli had been tried in vain, and the following mixture was ordered to be taken within twenty-four hours:—Ext. bellad. gr. j., tinct. opii gtt. xx., pot. chlor. ℥ ss., aq. menth. pip. ℥iij. The next day the patient was much better, and the medicine was continued in diminished doses with good effect for some days after. In a third case, a girl aged six years and a half was in the fourth week of rather severe typhoid fever, when she fell into a condition of extreme collapse. A quarter of a grain of belladonna was added to two ounces of quiniæ mixture which she was taking, and the whole administered within the next twelve hours. Complete restoration of power took place within a few hours.

As some may doubt, Dr. Weber observes, whether such small doses could exert a remedial effect on the system, he adds that all the patients complained of dryness of the throat, and in all the pupils were widely dilated. The cases now related are only some out of others that have occurred proving the utility of the remedy. In explanation of its action, he asks what can be the cause of collapse in affections of the abdominal organs, when, with the small pulse and cold surface, the thermometer in the rectum exhibits a higher temperature than normal, and the patient swallows ice to relieve the burning heat of the internal organs. He believes the most plausible explanation is the existence of a state of dilatation of the arteries and arterioles of the abdominal cavity caused by *anenergia* of the vaso-motor system of nerves. Referring to the effects of division of the splanchnic nerves, and to Claude Bernard's experiments on the cervical sympathetic as regards the production of collapse and the remedy of this by electricity, he states that he believes that belladonna also, contrary to what is supposed by most writers on materia medica, exerts a stimulant effect on the sunken energies of the vaso-motors—whence arises a diminution of the passive congestion of the abdominal vessels, and a corresponding fuller circulation of the periphery and the nervous centres. The theory which attributes to belladonna merely a paralysing agency cannot, he believes, be made to agree with his observations, nor with the long-known facts of the influence which it exerts on the secretions of the salivary, mammary, and sweat glands. He, however, only claims this stimulating influence of belladonna on the vaso-motor nerves for medium doses of the remedy, as a contrary effect might be produced by large and toxic doses—as is also seen with regard to digitalis, alcohol, etc. In prescribing belladonna and opium or morphia together he has never seen any marked diminution of the action of the belladonna, with the exception of that of its action on the pupil. "In conclusion, I would add that it does not appear to me improbable, although at present I have only theoretical reasons for my belief, that in future we shall find in belladonna one of our most valuable remedies for the treatment of cholera-collapse."

Fracture of the Shaft of the Humerus.

In a clinical lecture delivered at the Bellevue Hospital, Prof. Hamilton observed (*New York Med. Record*, February 2) that he confined his remarks strictly to fracture of the shaft of the bone. This is the fracture which is more frequently found ununited than any other, and the principle of its treatment differs from that of treating fracture of the shaft of the femur. In the latter our great object is to prevent shortening, to which there is, on account of the powerful muscles attached to the bone, a much greater tendency than in fracture of the humerus. Moreover, shortening is of far greater consequence in the femur, as it leads to more or less lameness. With regard to the humerus, a certain amount of shortening is of no consequence, and would only be perceived on measurement. Indeed, Prof. Hamilton is inclined to believe that the bone unites somewhat more completely and certainly when the fragments do overlap. The great indication is to keep the fragments quiet and in line, because of the tendency of these fractures to remain ununited—a to-and-fro movement between the fragments being almost always attended by non-union. This is not prevented when the limb is placed in an apparatus—such as an angular splint, for example—intended to secure immobility of the elbow-joint. The elbow soon becomes more or less anchylosed; but, in spite of the splint, the patient gives more or less motion to the hand and forearm every time he lies down or gets up, as he is constantly supporting the hand, sometimes higher and sometimes lower; and all these movements do not terminate at the elbow, but are transmitted through it to the upper end of the lower fragment, causing at this point a to-and-fro movement. The plan of dressing these fractures which Prof. Hamilton has employed for the last fifteen years effectually prevents such motion, and since he has adopted it he has never met with a case of non-union. A splint of leather, gutta-percha, felt, etc., is so constructed that it reaches from the top of the shoulder down to, without overlapping, the condyles of the humerus. It is made cup-shaped at the top so as to cover the point of the shoulder, so that it may not slide down. It should be moderately padded with cotton, and then covered with cloth, the main object of this covering being to furnish something to which the bandages may be sewed. This is all that is absolutely required; but a short splint well padded and covered is also placed on the inner surface of the arm, but merely to prevent the bandages cutting into the axilla and delicate skin on the under side of the arm. The top of the long splint rests against and over the head of the humerus, and is bound about the limb by successive turns of a roller. No bandage is applied to the forearm, for first it is useless, and next it risks obstructing the circulation, especially near the elbow-joint. It is also very liable to become disarranged, and proves a source of annoyance to the patient. The limb without it does not swell unless the bandage around the arm is applied too tight; and if the hand and forearm are inclined to become swollen, the patient should lie down for a few hours. No angular splint is applied, as it increases the stiffness of the joint; and the patient is desired to move the elbow-joint gently and lift the hand as he chooses. The chief reason for leaving the elbow free is in order to prevent non-union. The moment this joint becomes stiff, movement will occur at the seat of fracture—the upper end of the lower fragment receiving the motion transmitted to it from the forearm and hand through the stiffened elbow-joint.

"I have seen many cases in which non-union has taken place when the angular splint was used, but none in which the method I have now described was employed. I have also reported three cases in which union, being greatly delayed, has been speedily brought about by putting the whole arm and forearm in a straight splint, and permitting it to hang beside the body in the manner described in my Treatise on Fractures. Do not omit to cover both splints with cloth for this simple apparel will be sure to be displaced unless the bandages and splints are firmly stitched to each other. The bandage need not be carried higher than the margin of the axilla, because beyond that point it is impossible for it to get any hold upon the upper fragment. The splint, however, gets hold of the fragment unless the fracture is at the surgical neck or higher. I have omitted to say that, having secured the splints in place, bring the arm against the side of the body, and secure it to the body by two or three turns of a roller carried horizontally around the arm and the body. This should also be stitched to the splint. Let there be no pressure of the bandage in the axilla or at the bend of the elbow. The hand is then placed in a sling, but the patient is at liberty to take it out and move the elbow whenever he chooses. From day to day the splints must be examined, and if the arm shrinks and they become loose it is not necessary to open the dressings and renew them, but they can be tightened by over-stitching, taking in a fold of the bandage. This must be attended to faithfully."

Royal College of Surgeons.—The Council of this institution will hold an extraordinary meeting at the College on Monday next, for the consideration of the Duke of Richmond and Gordon's Bill for the amendment of the Medical Acts.

REVIEWS.

Diphtheritis und Tracheotomie. Eine Klinische Untersuchung von Dr. R. U. Kɛönlein in Berlin. *Von Langenbeck's Archiv*, Bd. xxi. Heft ii.

Diphtheria and Tracheotomy. A Clinical Study by Dr. R. U. Kɛönlein, Assistant-Surgeon at the Royal Klinik of Berlin.

The essay we have before us was at first a part of a report on the work of von Langenbeck's Clinic by the same author, but has been enlarged by the addition of the complete number of the cases of diphtheria treated in the Hospital from January 1, 1870, to July 31, 1876, and forms now a statistical monograph. From the circumstance alone that a very considerable number of cases—567 in all—have been considered, we must regard this report as highly valuable for the decision of a series of questions that have remained till now under consideration, because the conclusions drawn from such a large material by a merely statistical way can give us a far more accurate view on the final results of that long disputed, now highly appreciated, operation—viz., tracheotomy. Still it is true, as the author himself declares in the Introduction, that it would be going too far to generalise those conclusions too much, because they are drawn only from observations of the same endemic and the same hospital; and so it would seem quite possible to find different results in other localities, and especially in private practice.

An introductory tabular view shows that diphtheria has been endemic at Berlin for a long time, not easy to define; and that the number of cases treated in von Langenbeck's Clinic has remarkably increased since the year 1868. From the pathological point of view we learn that the number of cases suffering from simple croup of the larynx and the trachea is extremely insignificant compared with the number of cases of genuine diphtheria, where the pharynx and the tonsils, sometimes also the nose, were the first seats of the disease. Most of the cases when received at the Clinic were already in the stage of incipient asphyxia—a circumstance which marks out the general character of the cases as well as of the operative results. The general plan of treatment followed was to operate on every case as hopeless, as it might seem at first, where pulse and respiration had already ceased; but, on the other hand, to wait with the operation when laryngo-stenosis had not yet attained such a degree that danger was imminent. Still, the second category of cases was insignificant in number compared with the first.

From the tabular view of the 567 cases observed during six years and seven months, we learn the following results:—The general mortality sank from the year 1870 with 76·7 per cent., to 60·3 per cent. in the year 1876. The different seasons of the year did not mark any difference; the largest number of cases was observed in October, the smallest in June. Of all the patients only eight were adults; in childhood the frequency increases steadily till the third year, holds the same place till the end of the fourth year, and diminishes slowly till the fifteenth or sixteenth year. The general mortality shows a different curve. It reaches its highest point during the first year of age, diminishes steadily till the seventh or eighth year, and holds that point further on. In adults it is still lower. Of the whole number 504 were tracheotomised—that is 88·8 per cent., whereby the above-named general rule was strictly observed. Of 71 children two years old, only 1 was not operated on; of 34 seven years old, 9 cases were not operated on. Out of 90 cases of the first and second years of age, 85 were operated on. The general mortality of the 504 operation cases was 70·8 per cent.—that is, 357 died. The mortality sank from year to year. In 1870 it was 76·7 per cent. in 37 cases; in 1873, 57·6 per cent. in 74 cases; in 1876, 60·3 per cent. in 55 cases. The author cannot decide whether the better results of the later years depend on the modified intensity of the endemic, or on the ameliorated method of operating and after-treatment. There were also 11 recoveries in children of the first and second years; the youngest of them was seven months old. Although, for the cases operated on as for diphtheria in general, the mortality reaches its highest point in the first and second years, we see from the statement above that in some cases lives may still be saved by the operation, and that therefore it ought always to be performed also in that tender age where indication is given. The tabular statements show further that there does not exist any difference whatever between the two sexes as regards the occurrence and mortality of the disease. The increasing number of diphtheria cases received from year to year into the Hospital has told unfortunately also on its other inmates. During the whole period there were 28 cases amongst other patients, of whom 18 died. The frequency of such fatal events has rather increased during the later years. It is perhaps unnecessary to add that all possible means of prevention were unceasingly and anxiously followed by every surgeon of the Hospital.

The second part of the work consists chiefly of a more minute analysis of a certain portion of the diphtheria cases—viz., of those of which more detailed written reports were obtainable. There are some definite questions which are treated in a statistical manner, concerning the pathology of diphtheria, the mode of operation, and the after-treatment: 241 cases served as a basis for these observations. Of those cases, 164 (68 per cent.) died; 210 were operated on, of which 154 (73·3 per cent.) died; of the non-operated there were 10 deaths. From this we learn that the mortality shows no marked difference in those selected cases against the whole number above-mentioned. Out of these 241 cases, in 46 diphtheria of the larynx and the trachea existed alone: all were operated on, with 33 deaths. In the other 195 cases the disease had its original seat in the pharynx; in some also in the nose, whence it spread in 164 cases into the larynx: these were all operated on, with 121 deaths. In the remaining 31 cases respiration was free; there was no indication for operating: of these 10 died. From these statements we learn that the principal danger of the disease depends upon the affection of the larynx and the trachea; and that laryngo-stenosis takes the foremost place in the symptoms of the fearful disease. Even when the stenosis has been removed by the opening of the air-passages, it is an important point for prognosis, whether after the operation respiration be quite free or not, because the statistical tables show that in the latter case the mortality is higher by 25·2 per cent., and it is not necessary that this form of dyspnœa be caused by a membranous inflammation of the bronchial ramifications; it may depend solely on a simple catarrh. The expectoration of membranes cannot be considered as a favourable sign; the spitting of whole bronchial dendritic casts even proved a very ominous symptom, for in nearly every case which showed that phenomenon death ensued.

The period of the disease in which operation was performed has been stated already—it was the beginning of the blood-intoxication with carbonic acid; we have, therefore, nothing to state here of early operations and their results. But it has been shown that two cases have ended successfully where the operation was made in an advanced stage of asphyxia—a fact which proves clearly the advisability of tracheotomy also in securing hopeless cases.

The cause of death after operation was asphyxia in 100 of 154 cases. In 16 of the 54 remaining the canula was already removed: 12 of them died by exhaustion, 1 by nephritis with anuria, 2 by pneumonia, and 1 by sudden collapse. The exhaustion was caused partly by troubles of deglutition. The author further shows that those troubles do not arise chiefly by the secondary diphtheritic paralysis of the velum palati, but that they are caused by the diphtheritic inflammation of the mucous membrane itself, because they were very often observed in an early stage of the disease—generally before the eighth day after operation. The mucous membrane becomes hard and stiff by the diphtheritic process, hinders the muscular action, and prevents a sufficient occlusion of the larynx during the act of deglutition. Still, those troubles are not observed only in the cases operated on, and cannot, therefore, be the result of the opening of the larynx.

A further complication is diphtheria of the tracheotomy-wound, attaining very different degrees of intensity and extension. It can assume in some cases quite the character of hospital gangrene. Not very seldom a rubeola-like efflorescence on the skin was observed in those cases.

Before we enter on the mode of operation, it is to be noted that all cases were narcotised by chloroform, with the exception of those where beginning asphyxia was already present. In the year 1870 and the beginning of 1871 the operation was generally made after the inferior method; but from that time, without any exception, superior tracheotomy after

Bose's method took its place, which proved not nearly so difficult as the former practice, although enlarged thyroid glands are not very uncommon in Berlin.

Besides the operation (the principal remedy against laryngo-stenosis), other means were employed for relieving the diphtheritic process itself. After a prolonged series of experiments with different remedies, Aqua Chlori was preferred to other disinfectants and astringents. It was applied undiluted with the pencil on the velum and tonsils, diluted for inhalations into the trachea. This mode of treatment was generally followed from the year 1873. Diphtheria of the operation-wound was treated with energetic cauterisation, especially with the actual cautery. The use of the stomach-pump for feeding proved difficult and uncertain in cases of disturbed deglutition, because fits of vomiting ensued, and so a successful mode of nutrition could not be obtained.

The conclusions that we draw for ourselves from this abstract may be briefly stated as follows:—First, we have to thank the author for his careful and laborious statistical statements, which give a far clearer and more definite opinion on the pathology and the results of treatment of the disease than an otherwise elaborated essay. Secondly, when we are again convinced of the pernicious character of this terrible malady which threatens the tender age, we have to regard it as our duty not to shrink from combating it even with inadequate forces, but to view every successful case in which life has been saved by operation as a fresh encouragement to further strife.

Traité des Maladies de l'Urèthre. Par le Dr. Henri Picard. Paris: Baillière et fils. 1877.

A Treatise on the Diseases of the Urethra. By Dr. Henri Picard.

This is the second of the three volumes announced by Dr. Picard upon the diseases of the prostate, the urethra, and the bladder; and of which the first was reviewed in our columns not long since. The arrangement of the book is similar to that adopted in the first volume; and thus it opens with a chapter on the anatomy of the urethra. After speaking of the anatomical divisions of the canal, the author divides the urethra for surgical purposes into two parts—namely, that part in front of, and that behind, the triangular ligament: and he draws attention to the surgical importance of the median line in operations on the urethra. Some remarks on the physiology of the urethra are followed by a description of the catheters and bougies in common use, and the methods of introducing these.

Next in order is a chapter on the malformations of the part, and several kinds of operation for the improvement of hypospadias and epispadias are described and illustrated.

In the section on urethritis, the author states his opinion that the discharge of a chronic urethritis is not contagious unless it is purulent—an opinion with which we cannot agree, especially in view of syphilitic urethral discharges, which may certainly be of a non-purulent character.

After describing the common complications of urethritis and their treatment, the author enters upon the subject of urethral stricture, to which he devotes a large part of the volume. He divides strictures into two chief classes: inflammatory and cicatricial. But by the former he does not mean the simple inflammatory swelling, to which the name of inflammatory stricture has by some been given, but the organic stricture due to the effusion of inflammatory products into the submucous tissue of the urethra. The treatment appropriate to the different varieties of stricture is clearly explained and illustrated, and the author judiciously indicates that no one method is universally applicable.

Under the name of essential spasm of the urethra, the author describes an affection characterised by a frequently recurring difficulty of micturition, leading to a permanent contraction of the muscular fibres of the urethra, and then to a functional stricture, which eventually causes the usual serious and even fatal changes in the bladder and kidneys. At first the urine is natural, but as the disease advances it becomes purulent or bloody; finally, the patient usually dies with tubercles in the lungs. The symptoms are said to resemble in many respects those of stone, and, when milder measures fail to give relief, it is recommended that the bladder should be cut into after the manner of the median operation for stone—a proceeding which is mentioned as safe and effectual. In women, forcible dilatation of the urethra is substituted for the cutting operation.

We should like to have been told something of the pathological anatomy of this remarkable disease, which must, we should think, be exceedingly rare; indeed, without anatomical proof, we should be inclined to doubt the existence of such a muscular contraction apart from other organic changes. The symptoms seem very much like those of tubercular disease of the urinary mucous tract, of which the author speaks but briefly in a final chapter.

The book is well printed, but the illustrations are of unequal merit, and many of them—for example, those of calculi—might very well have been dispensed with.

GENERAL CORRESPONDENCE.

COLOURED EXUDATES.

Letter from Dr. Stephen Mackenzie.

[To the Editor of the Medical Times and Gazette.]

Sir,—In connexion with the very excellent article on Coloured Exudates, by Dr. Lauder Lindsay, in recent numbers of your journal, it may, perhaps, be of interest to the author of the paper and others to know that I have at the present time under my care, in the London Hospital, a patient who has a discharge from his legs which stains linen in a very peculiar manner. The case is one of chronic parenchymatous nephritis, attended with extreme anasarca and effusion into the serous cavities. To relieve the distension of the skin the legs were punctured, and much fluid drained away. It has been noticed on many occasions that the lint applied to his legs, and the sheets on which he lies, were stained in a most remarkable manner. The colour is sometimes bluish-green, sometimes pale green, sometimes green with a tinge of yellow. It has suggested to more than one observer that sulphate of copper was being applied. It was thought at first the pigmentation might be due to the action of the exuded serum on zinc or other metals applied as ointment; but the same phenomenon has been observed when clean dry lint has been wrapped round the limbs. The staining of the sheets has been so great as to necessitate the sister of the ward using only old ones for this patient's bed, for fear of spoiling her linen. I am sorry I cannot throw any light upon the nature of the pigment in question, but think the record of the occurrence may prove interesting. I am, &c., Stephen Mackenzie, M.D.

Finsbury-square, March 25.

DETECTION OF STONE IN THE BLADDER.

Letter from Mr. W. D. Napier.

[To the Editor of the Medical Times and Gazette.]

Sir,—Will you kindly permit me to point out what, to my mind, is an important inaccuracy in your report of Sir Henry Thompson's reply to certain observations which I made at the meeting of the Royal Medical and Chirurgical Society, on the 12th inst.? You state as follows:—"In reply to Mr. Napier, he said that stone in the bladder *could* be detected at an early stage by any intelligent medical man." I am under the impression that the words used were "*ought to be*"; and as they convey a very different meaning, I trust (knowing your great desire to be correct in all such matters) that you will excuse my troubling you with this letter.

It is too well known that, even in the hands of the greatest experts, the presence of stone in the bladder, although suspected, is often left undetected; and no better proof could be adduced that in the hands of general practitioners very many mistakes are made than the numerous large stones lately exhibited by Sir Henry Thompson.

I am, &c., W. Donald Napier.

22, George-street, Hanover-square, March 27.

German Pathological Chairs.—Professor Ponfick, of Göttingen, will fill the chair at Breslau vacant by Cohnheim's call to Leipzig, and Dr. Orth, first assistant in the Pathological Institute at Berlin, will succeed him at Göttingen.

REPORTS OF SOCIETIES.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

FRIDAY, MARCH 15.

Dr. STEVENSON, President, in the Chair.

A PRELIMINARY Council meeting having been held, Dr. Tripe's resolution was considered. He desired to know whether the Council are satisfied with the present plan of publishing the *Transactions*, and if not, what better plan should be adopted.

Mr. A. Haviland was proposed as an extra-metropolitan member; and Mr. F. M. Corner, Medical Officer of Health for Poplar, was elected as a metropolitan member.

After a short discussion, Dr. Tripe's resolution not being supported, was abandoned. There was a general feeling apparent that the arduous task of drawing up the annual report, giving a concise summary of all papers, had been very ably done by the Secretaries, and that any resolution, such as that proposed by Dr. Tripe, would impose an unnecessary and unjust burden upon the Honorary Secretaries, and would involve the employment of a shorthand writer.

The report of the Council was then read by Dr. VINEN, relative to the action proposed to be taken in connexion with the Metropolitan Buildings Act Amendment Bill. The Society agreed to support the Bill as now amended; and approved of by-laws being made by the Metropolitan Board of Works under the provisions of the Bill, such by-laws to be subject to confirmation by the Secretary of State, after due notice has been given in the newspapers, etc. Copies of this report were ordered to be forwarded to the Home Secretary and various public bodies.

Mr. LIDDLE commented upon a serious outbreak of small-pox in Whitechapel. Three cases had been reported to him as being attended by the parish doctor, information having been sent to him by the Roman Catholic priests visiting at the house. The epidemic occurred in a densely populated narrow court. A large number of children were congregated all about the dead bodies, as is usual among the Irish Roman Catholics. He regretted that proper measures for disinfection were not practicable, and that the medical officer had neglected to report the cases to him. It is the moral, if not the legal duty of a public officer, to assist the medical officer of health in the proper discharge of his duties. Mr. Liddle concluded by saying that unless he could get the medical officer in attendance to certify that the cases are suitable for removal he would not incur the responsibility of a possibly fatal issue.

Dr. DUDFIELD related a case in which he had enforced compliance with the Act, where he was satisfied that the disease was likely to spread in consequence of "insufficient lodging and accommodation." The father was summoned for non-compliance, and afterwards the mother. A fine of £5 or two months' imprisonment was the penalty enforced. The parents subsequently expressed themselves very grateful for the compulsory removal of the child to the hospital.

Dr. BAYLIS alluded to an epidemic prevailing at Tunbridge. At the present time about thirty or forty cases of small-pox were under observation. Sheds had been erected and the cases isolated. A trained nurse was brought from London, and besides exercising authority in the carrying out of hygienic measures, she was able to report the existence of other cases not known to the inspectors. In many cases by careful daily disinfection of clothes the bread-winner of the family is allowed to go to work.

A paper was then read by Mr. A. HAVILAND,

ON THE DISTRIBUTION OF CONTAGIOUS DISEASES FROM EPIDEMIC CENTRES.

He began by making some general remarks on the modes by which zymotic diseases are distributed. In typhus fever, as in small-pox, scarlatina, etc., the medical man should be extremely cautious lest he prove a carrier of disease to his family and patients. These cases are rare in the country, but whenever they occur all clothes which have had the chance of becoming tainted should be either burnt or disinfected by heat. Children with whooping-cough should be isolated as much as in scarlet fever; and this isolation in a proper temperature conduces much to the cure. Diphtheria is a disease that is happily rare in Northamptonshire, although, if all that is said of "sore throats" in fashionable life were true, we should begin to think that it was a most common complaint. The term "scarlatina" misleads the ignorant in all ranks of life: they too frequently think it an innocuous form of scarlet fever, that it is not contagious, and that it does not require medical aid; hence the first mild cases in an epidemic go about after a few days' illness, and are admitted into schools with the peeling process in full force. The worst forms of epidemics have been the result of disregarded cases in the first place. Feasts are frequently conducive to the distribution of contagious diseases, especially scarlet fever. They have their origin in the custom initiated by the Church, of celebrating the day of the saint who has been named as the patron of the church, and generally held on the Sunday after the saint's day. The gathering begins on the eve of the day, continues over the Sunday, and in the county of shoemakers lasts over St. Crispin's-day, Monday, and sometimes far into the week. The usual accompaniments of a fair are to be found in the village at these times. According to a "list of feasts," published in a local almanac, more than a hundred feast days are held every year in Northamptonshire. There are other gatherings besides feasts. In some parts gleaning is carried out to a great extent, and different parishes will often join and glean in concert, the gleaners being quite indifferent whether they have left at home, to the tender mercies of a child too young to glean, some of their family suffering from scarlet fever. "Thus it was we experienced," he said, "such a frightful outbreak of scarlet fever in the fourth quarter of 1876." These feasts are not now looked upon with favour by the clergy, and might, if not encouraged, gradually become obsolete. Whenever contagious diseases are prevalent a public proclamation of the fact should be made, with the name of the infected place legibly set forth, so that those coming from it might be tabooed during the festival. In 1874, when the epidemic of small-pox was raging at Birmingham, the great Onion Fair was held, and thousands came from all parts of England to attend it. Placards were at once posted throughout his area, warning intending visitors to the Fair of the risk they would run. "I had the satisfaction," he said, "of knowing that my action debarred hundreds from going to the Fair, and was thankful to find that the disease had not been imported from that epidemic centre." Until we have a system of sanitary police we shall be ever subject to disease-explosions after feasts, fairs, harvest, and other indiscriminate gatherings. We all can see what takes place abroad when the pilgrims congregate at Mecca and other places; but we little think that we are doing the same thing at home, although not in so gigantic a form. We are careful not to hold cattle-shows during the existence of disease, and certain districts, when infected, are prohibited from sending cattle to markets and fairs until they can show a clean bill of health. Something of a similar kind might be carried out during the prevalence of epidemics. Want of care on the part of the medical attendant in the examination of his patient, and in diagnosing correctly, is often attended with serious results, and frequently with much loss of valuable time to the medical officer of health. On examining into a supposed epidemic of small-pox—about eight cases—he found that chicken-pox was the cause of the alarm. In this, as in another case, the mildest form of the disease was found on an unvaccinated child. The modified form of small-pox may, and does too frequently, mislead. Medical men are too apt to fall in with the views of their patients, and give consent to the sending home of servants, who, during epidemic times, and living in epidemic centres, happen to fall ill, and thus promise to be burthens, instead of helps, in the household. E. C., aged sixteen, a servant, living in a school in one of the small-pox districts of London, fell ill, complaining of malaise and severe lumbar pain. She was sent home to her friends in the country. The medical man, perceiving the rash, did not recognise the true nature of the disease, but called it "blister-pox." The girl had four well-defined vaccine cicatrices on her left arm. Her mother, aged forty-two, who stated that she was vaccinated in infancy, but on whom no cicatrix was found, fell ill on July 14, and had confluent small-pox; she recovered. Her brother, aged fourteen, who was vaccinated in infancy by the medical gentleman in attendance, fell ill on July 13, and had confluent small-pox;

he recovered. The father, aged forty-four, fell ill on July 11 (thirteen days after the arrival of his daughter), and died on the 30th, and his death was certified as having been caused by "variola hæmorrhagica." In consequence of the disease being called "blister-pox," the cases were not reported to the sanitary authority until a month had elapsed after the importation of the first case of small-pox; consequently, no precautions were taken to prevent the spreading of the disease. E. B., aged fifty-two, a nurse, who was engaged to attend a lady during her approaching delivery, went to London and visited a district in which small-pox prevailed. She felt ill, and consulted a medical practitioner, who pronounced the case "measles"; she returned home, and died of confluent small-pox. Two men who assisted at her funeral both fell ill on the same day, ten days after the burial of the body at midnight. W. D., aged nineteen, one of the cases, distinctly remembered being vaccinated. He had confluent small-pox, and recovered. G. S., aged fifty-eight, was vaccinated when a boy at school. Here no trace of the operation could be discovered. He was severely ill, but recovered. A. A. W., aged twenty-three, vaccinated in infancy, returned home ill from an infected district near London, where she was in service, on February 3. She was considered to be "bilious." The eruption appeared on the 6th. She recovered. The only people at home were her father and mother, who had been revaccinated. The disease did not extend. Great difficulty is sometimes experienced, especially by young practitioners, in giving a definite opinion on some cases of small-pox, the rash of which has been modified by previous vaccination. A medical gentleman, of great experience and high standing, was consulted about a suspected case of small-pox, but he hesitated to pronounce the rash that of small-pox. Unfortunately for the man's family, much mischief followed. The man, W. P., aged twenty-seven, had been vaccinated in infancy, and revaccinated three or four months before the attack, but without effect. The sequel of this case was the death of the man's father, aged sixty-one, on August 19, from "variola maligna," and a narrow escape of his mother from confluent small-pox. His brother, who lodged in a neighbouring town, had on the first arrival of his brother from London contracted the disease, and gave it to those with whom he lodged. The public are generally alive to their interests, and are too frequently prone to lay blame on the medical man whenever there is a chance. It is, therefore, prudent for medical men not only to be careful in their persons as to changing their clothes and disinfecting themselves as much as possible after visiting a contagious case, but to instruct others who are in attendance how to avoid being carriers of infection. After narrating the case of a sailor who caught the infection of small-pox on his arrival in England, he said:—"Should it not be made imperative upon commanding officers to inquire whether a sea-port's bill of health is clean or not before he ventures to send adrift a shipload of able-bodied young men after a voyage of five months, with their passions pent up and their pockets full of money, into a plague-stricken place?" Too much caution cannot be taken by those who have the management of surgical homes, in keeping all parts of their premises free from contagion. A lady took her son to one of these institutions to have an operation performed. On the seventh day after the boy's arrival, and after the operation had been performed, scarlet fever declared itself. He had come from an untainted locality, and after his arrival did not go out except once in an open carriage, and then did not visit any house except Mr. Haviland's. Scarlet fever prevailed in the neighbourhood, and the room in which he slept had been occupied a week or so before by persons affected with sore throats. The author strongly urged upon the members the necessity of never relaxing in their endeavours to make it compulsory on the householder to declare the existence of contagious diseases in his house. Every endeavour should be made to keep up a supply of lymph from the cow. He urged the necessity of most carefully examining the cases that come before them; and of never allowing them to go forth with a chance of spreading disease.

In the debate following the reading of the paper,

Dr. Stevenson remarked that it was surprising how ignorant the public are of simple rules with regard to the spread of infectious diseases from epidemic centres. It was very important, the advice to medical men to use proper precautionary and disinfecting measures in going from patient to patient, and especially in attending confinements.

Dr. Heron commented upon the frequent spread of fever by monthly nurses giving gratis or other advice among the fever-stricken patients of the village where they live.

Mr. Liddle regretted that more allusion had not been made to the period of incubation, as this was most important in adopting measures for checking the spread of fever. The authorities of the fever hospital consider that the period of infection for small-pox dates from eleven days before the outbreak of fever, and fourteen days before the appearance of the eruption. It is important with reference to the distribution of disease, and precautionary measures required, to know that fourteen days of quarantine after exposure to infection a child may safely return to school.

Dr. Tripe remarked that the dates given by Mr. Haviland, and the period of ten to fourteen days, all show this to be about the period of incubation for imported cases. It is generally believed that cholera is not contagious, but he had attended cases in his district in which that disease had been proved to have spread from patients to those attending upon them. He remembered the case of a sailor who brought the disease from a foreign country, and the attendants contracted the disease.

Dr. Jacob complained of the frequent spread of small-pox by friends of patients being allowed admission to the hospital without proper disinfection. Several cases traceable to this cause have occurred in Surrey. The hospital authorities ought to enforce careful ablution of face and hands, and change of some of the garments. The difficulty of diagnosis, alluded to by Mr. Haviland, is remarkable. Cases have come under his notice in which there was difficulty in distinguishing between measles and small-pox. A medical man in attendance had reported an adult case of hæmorrhagic small-pox with a fatal issue. The children of the family all had well-defined measles. There being no small-pox about in the neighbourhood, it was inferred that the medical man must have made a wrong diagnosis. If all cases were promptly and authoritatively reported we should have no difficulty in checking the spread of epidemics.

Dr. Price Jones remarked upon the frequent spread of epidemics by children convalescent from fever going to evening parties. He narrated a case of a nurse-maid conveying some nourishment to a small-pox patient in a passing ambulance, developing small-pox five days after. He endorsed all that had been said by Dr. Tripe as to the contagiousness of cholera.

Dr. Shrimpton hoped that, as the means for checking the spread of epidemics became more understood, medical officers would insist upon the removal of all unnecessary articles of furniture, and would secure, as far as possible, efficient ventilation of the sick-chamber, so as to prevent concentration of the fever-poison.

Dr. Corfield was surprised to find that some of our general hospitals will knowingly admit cases of fever, and mix them with other patients, according to the old plan. When in the Paris hospitals he well remembered observing the spread of small-pox from bed to bed in consequence of associating fever patients with non-contagious cases.

Dr. Stevenson said it would be very desirable to have some infallible test for distinguishing between modified small-pox and chicken-pox. Some suggest the examination of the buccal mucous membrane as giving a diagnostic distinction between the two diseases.

THE PATHOLOGICAL SOCIETY.

Tuesday, March 19.

Charles Murchison, M.D., LL.D., F.R.S., President, in the Chair.

Lymphadenoma and Leucocythæmia.

Dr. Wilks opened the special exhibition of specimens of diseases of the lymphatic system, including lymphadenoma and leucocythæmia, by showing the specimens described by Dr. Hodgkin in his original paper on Lymphadenoma. Dr. Wilks said that, although the condition described by Dr. Hodgkin had been observed before, Dr. Hodgkin was the first to give a complete account of the disease. His paper was published in vol. xvii. of the *Medico-Chirurgical Transactions* in 1832; but it lay dead and buried there until Dr. Wilks unearthed it in 1859. The paper contained a short account of the

disease, along with the history of six cases. Five of these specimens were still preserved at Guy's Hospital; and these Dr. Wilks now exhibited. The first case was in a boy of nine, in 1827, at Guy's Hospital. The absorbent glands were described as much enlarged, as well as the glands around the aorta; while tubercles were found in the spleen, lungs, and liver, which in the last-named organ were stated to be white, semi-cartilaginous, and uneven on the surface. The spleen was described as containing many masses resembling suet. The second case was in a boy of ten years, in 1828. He suffered from enlargement of the glands of the neck, and post-mortem the cervical, bronchial, mediastinal, and other glands were found hypertrophied, while the spleen was four times its natural size, with a firm, opaque deposit. In the third case, a man of fifty was under Dr. Addison's care in 1829 for great enlargement of the glands of the neck and groin. These proved to be firm and white, as if hypertrophied; and a similar condition was found in the glands of the loins and mediastinum, while the spleen was greatly enlarged. The fourth case occurred in a man of fifty, in the year 1830, under Dr. Bright. He also had glandular swellings in the neck, groins, and other parts, and, after death, the mediastinal, lumbar, and iliac glands were all found to be affected, while the spleen was hypertrophied. Dr. Hodgkin, in his remarks on these cases, noticed that they all agreed in being instances of enlargement of glands round the large arteries, and in being primitive and not secondary enlargement. He said that the condition could scarcely be called inflammation, as it wanted the chief characters of inflammation; but seemed rather to consist in general enlargement, uniform throughout. Nor was it a new growth. With respect to the spleen, Dr. Hodgkin noted that it was diseased, and contained bodies resembling the enlarged glands. This too, he remarked, was probably a hypertrophy of normal structure in the spleen, which, although not demonstrated in man, had been observed in some of the lower animals. He further concluded that the splenic change was probably posterior in time to the change in the glands. Having quoted to this extent from Dr. Hodgkin's paper, Dr. Wilks added that it was clear that Hodgkin saw that he had here a new disease, and that it was not malignant or cancerous in its nature. At the end of his paper he had referred to a case of Carswell's which had been described by that pathologist as cerebriform cancer, but which was, according to Hodgkin, quite distinct from cancer. At a later period, Bright spoke of the change in the spleen as a form of malignant disease, though not true cancer. Having described malignant disease of the spleen, Bright added that it appeared in two forms—(1) as melanosis, and (2) as described by Hodgkin, and associated with disease of the absorbent glands, etc. . . . . Dr. Wilks proceeded to say that the first specimen of the disease brought to the Pathological Society was in 1853, by Dr. Markham, from St. Mary's Hospital. The subject was a man of thirty, and it was a good case of Hodgkin's disease. Malignant disease had been diagnosed during life, but nothing malignant could be found microscopically post-mortem. The specimens were examined again by Dr. Bristowe, who pronounced them to be neither malignant nor scrofulous. Dr. Wilks proceeded to say that Hodgkin's disease had in part a malignant character, and he hoped to hear the opinion of the members in the present discussion upon the relation of this disease to malignant growths. Several cases were on record where such glandular growths had made their way into the bronchi, etc. He had himself seen a case where the bones were similarly invaded. Again, there were the questions of the relation of lymphadenoma to tubercle, and its relation to lardaceous disease. He had seen two cases of lardaceous disease with enormous enlargement of the lymphatic glands. Further, with respect to the blood, he hoped to hear in this discussion whether the blood was considered to be affected in Hodgkin's disease, or not. Virchow had said, in his "Cellular Pathology," that in leucocythæmia the spleen and the lymphatic glands might be affected, and had distinguished two forms of leucocythæmia—the splenic and the lymphatic; adding further, that in the splenic form white corpuscles were found which were large and nucleated, as in the spleen; while in the lymphatic form they were smaller. This description of Virchow's was retained in books; and the general interpretation and belief seemed to be that there is a leucocythæmia in lymphadenoma. Yet Dr. Wilks had never met with well-marked affection of the blood in lymphadenoma. Indeed, Virchow had probably spoken of lymphatic leucocythæmia only, and not of lymphadenoma at all. Yet another question concerning leucocythæmia was its relation to suppuration. A year ago a patient had been under the care of Sir William Jenner with abscess and "leucocythæmia," and on the abscess being opened the "leucocythæmia" disappeared. Was this true leucocythæmia? In using the name, Dr. Wilks said he thought of cases where leucocytes constituted one-third to one-half of the globules in a microscopic field, not where a few only could be counted under the eye.

Dr. Greenfield exhibited microscopical specimens from cases of lymphadenoma and leucocythæmia; various preparations from cases of the same; and many drawings of the fresh post-mortem appearances. He commenced by giving a brief account of five cases of lymphadenoma, two cases of lymphoid growth, and one case of leucocythæmia. The first case was in a man of twenty-six under Dr. Murchison's care at St. Thomas's Hospital. Three years previously he had suffered from eczema; a lump had formed on the left side of the neck, had increased in size, and declined again; and lastly, a general enlargement of the glands of the neck had occurred, and had extended downwards. The course of the disease was not remarkable. The spleen was greatly enlarged; the temperature varied from 98° to 102°. Death was due to pressure on the recurrent laryngeal. Post-mortem the glands of the neck were found greatly enlarged; also those of the abdomen, etc. The spleen weighed fifty-one ounces, and was typically infiltrated. The second case was in a boy of twelve, under Dr. Ord. A swelling had commenced in the neck twelve months before. It had reached the size of a large tumour on admission, with others elsewhere. The temperature was very high and irregular, reaching even 105°: emaciation and asthenia proceeded to death. Post-mortem the cervical glands were large and nodular; and there were many subcutaneous nodules as far as the nipples. The mediastinal glands were large, as well as the thymus. The spleen was enlarged with nodules; and the liver and lungs presented similar appearances. The third case had been under the care of Dr. Wilson Fox, in University College Hospital, in 1871. It was in a man, and the disease had suddenly commenced six months previously as a gland in the neck. The right axilla and groins were successively invaded. The spleen was simply hypertrophied. The fourth case was in a man of sixty-four, under Mr. MacCormac's care. The glands of the groin were chiefly affected. Post-mortem the glands of the groin were enlarged, and the condition extended thence along the great vessels to the mediastinum; but the mesenteric glands were not affected. The left pleura was irregularly infiltrated. The spleen was very large, but not typically affected as in Hodgkin's disease. The fifth case was in a man of fifty-three, and began as a small hard lump under the left ear, whence it extended beneath the jaw, and down to the clavicle. Post-mortem the disease in the neck proved to be confined to the left side. A lymphadenomatous growth with a peculiar flaky appearance was found on the pleura and pericardium. The peritoneum had the appearance of inflammation. The spleen weighed six ounces, and was unaffected. Passing next to the general microscopical appearances of lymphadenoma, Dr. Greenfield said that, as regarded the glands, in all cases the condition was the same. While to the naked eye the glands were fused together, and sometimes soft or cerebriform, sometimes pigmented, sometimes caseous, they were still generally firm. Microscopically the change was characterised by indurative overgrowth. The retiform tissue was thickened; the small cells were wasted; bands of fibrous tissue were formed from the reticulum; and the true gland-tissue was lost. In places large multinucleated cells were present, adhering to the reticulum. With respect to the spleen, of eight cases of lymphadenoma, in one there was no affection of the spleen whatever; in two the spleen, though greatly enlarged, was uniform, from great increase of the splenic pulp, without induration of adenoid tissue. In the five other cases there was the typical growth. In three the nature of this had been difficult to determine, but the last two cases had served to show it. The masses of new growth were in some found like bands of tendon, but in others as adenoid tissue, beginning round the arterioles from the normal sheaths. Thence arborescent masses invaded the splenic pulp: the growth being exactly like lymphatic gland-tissue, but containing giant-cells, and tending to induration. In the liver the growth started in the portal

canals around the vessels, and thence surrounded the lobules, which rapidly degenerated and became caseous. The capillary network of the liver had, further, adherent to it cells which were undergoing fatty degeneration. Here vacuolation was seen, as in cancer. The liver cells then became shrivelled and persisted in this condition. Might not this vacuolation have something to do with the growth of the tumour? Masses of protoplasm could also be seen connected with the capillaries, which might have some relation to the new growth. Dr. Greenfield next described a case of leucocythæmia in a child of five years, under the care of Dr. Bristowe. Post-mortem, hæmorrhages were found in the substance of the heart, kidneys, etc. It was an important question how far the growths in leucocythæmia and lymphadenoma were identical. With respect to the blood in these diseases, Dr. Greenfield said that he had examined it in thirteen cases of lymphadenoma. In only one of these cases was there even a slight increase of the number of white corpuscles; in one there was a considerable increase. Yet he had found a greater excess in suppuration and pyæmia, and his observations therefore supported Dr. Wilks's statement. In two cases there had been seen microcytes when the temperature was high. Secondly, with respect to the temperature, was lymphadenoma an inflammatory change? Inflammation could not be defined; but in some cases of lymphadenoma there was considerable redness, swelling, and tenderness, with high temperature. In one case observed the pyrexia was irregular; in three it was highest at the last. Thirdly, what was the relation between leucocythæmia and lymphadenoma? In his cases of leucocythæmia the diseased areas in the organs presented mere extravasations of white corpuscles and fibrin.

Dr. Gowers brought forward two patients with lymphadenoma, and showed sections from cases of leucocythæmia and lymphadenoma. One patient was a man with a large growth, the size of a cocoa-nut, from the lower cervical glands, and considerable enlargement of glands on the other side of the neck and in the axillæ. The disease had lasted eighteen months. The blood contained about sixty white corpuscles per quarter-inch field. Under the use of phosphorus the red corpuscles had improved from 50 to 80 per cent., but the glands seemed unchanged. Another patient was a girl, from whom Mr. Heath, four years ago, removed some enlarged axillary glands, which commenced to enlarge ten years ago. During the last year other glands in the neck had enlarged. The anæmia was moderate in degree; the red corpuscles being 60 per cent. of the normal, with no excess of white. (Charts were exhibited showing the variations in the corpuscles in these cases.) In describing the microscopical sections, Dr. Gowers drew attention to several points in the pathology of the lymphatic diseases. A section of the spleen in Hodgkin's disease, with growths, showed much pigment in the compressed pulp and on the edges of the growths, but none in the new tissue. In the centre of many nodules a vessel could be traced; and in another spleen the perivascular position of the new growth was clearly traceable. These facts indicated the origin of the growths in the Malpighian follicles and around the arteries. Hodgkin had suspected this, and it confirmed Malpighi's idea that the follicles had a closer association with the lymphatic system than the splenic pulp. It had been pointed out that the splenic affection in lymphadenoma is not always the same. To ascertain the frequency with which the different morbid changes are met with, Dr. Gowers had analysed the details of ninety-seven recorded autopsies, and found that the spleen in fifty-nine (or 60 per cent.) contained new growths, in 20 per cent. it was simply enlarged without growths, and in 20 per cent. it was normal. The change in the spleen in leucocythæmia was commonly regarded as an hypertrophy of the splenic pulp. It had been, however, asserted that the change was really an overgrowth of the tissue of the follicles, and an invasion of the pulp, which atrophied. Certainly the follicles ceased to be recognisable, and there was an actual growth in the position of the splenic pulp. That the common view is probably correct was demonstrated, Dr. Gowers thought, by an examination of intermediate cases, in which, with a primary gland disease the spleen is enlarged as in leucocythæmia. The Malpighian follicles, however, did not disappear; they remained even enlarged, and always distinct from the splenic pulp. On an increase of the latter the enlargement of the organ evidently depended. A section illustrating this was shown, in which the Malpighian follicles had undergone lardaceous degeneration, from which the splenic pulp was free. Other sections illustrated the changes in the glands in lymphadenoma in different stages of their enlargement, showing the abundant cells of the early and softer stage, and the characters of the increase of fibrous stroma in the larger and harder stage, which led to a structure very different from the normal gland. Special attention was called to the tracts of vitreous appearance around the arteries. The glandular enlargement which sometimes occurs in splenic leucocythæmia had been lately regarded as the result merely of the accumulation within the glands of corpuscles brought to them by the blood. But if this explanation were true, the greater the excess of leucocytes in the blood, and the longer its duration, the more constantly should such affection of the glands occur. No such relation could be traced. Most of the cases of extreme leucocythæmia presented no glandular enlargement. The older view was therefore probably correct, that the glandular enlargement was due to a lymphoid growth. The same association of glandular growth and overgrowth of the splenic pulp was seen in the intermediate cases previously referred to. Sections were also shown, illustrating the growths in the liver in leucocythæmia and lymphadenoma, their interacinal position, the growth in the portal canals, and the stroma in the leucocythæmic growths. Dr. Gowers then discussed the relation between these lymphatic diseases, and especially the recent view which would unite them as varieties of one affection—the *diathèse lymphogène*. It was certain that between pernicious anæmia with marrow-change, splenic disease with marrow- or gland-growth, primary gland disease, and visceral lymphatic growths, intermediate and compound forms were met with, and that each might or might not be accompanied by an excess (slight or considerable) of leucocytes in the blood. But certain of these forms occurred with such frequency as to constitute types, and on the more salient distinctions between these the current distinctions were based. In order to ascertain how far these distinctions were confirmed by the less obvious conditions of origin, etc., Dr. Gowers had compared the details of a series of cases of splenic leucocythæmia and primary lymphatic gland disease—154 of the former, and 100 of the latter. He found that 63 per cent. of the former and 75 per cent. of the latter occurred in the male sex. The relation to age presented a more striking difference, and the percentage of each occurring in the several decades of life was as follows:—Under 10 years—splenic leucocythæmia, 3; gland disease, 16. Between 10 and 20 years—splenic leucocythæmia, 10; gland disease, 14. Between 20 and 30 years—splenic leucocythæmia, 22; gland disease, 20. Between 30 and 40 years—splenic leucocythæmia, 30; gland disease, 14. Between 40 and 50 years—splenic leucocythæmia, 22; gland disease, 5. Between 50 and 60 years—splenic leucocythæmia, 9; gland disease, 22. Between 60 and 70 years—splenic leucocythæmia, 4; gland disease, 7. Between 70 and 80 years—splenic leucocythæmia, 3; gland disease, 3. Another difference was the relation to intermittent fever: while only 4 per cent. of the cases of lymphadenoma prevented such a relation, no less than 25 per cent. (thirty-nine) of the cases of splenic leucocythæmia had either suffered from intermittent or had lived in an ague district. Another curious point of difference was, that the group of glands which was enlarged most frequently in splenic leucocythæmia was enlarged least frequently in primary gland disease—the mesenteric. In conclusion, Dr. Gowers remarked that the name "Hodgkin's disease," while convenient in some respects, had not obtained much currency, especially on the Continent, and even here lymphadenoma seemed to be more in use. But this was the name of the *growth*, and he asked whether a slight modification, "lymphadenosis," would not be a convenient designation for the general disease.

The President asked Dr. Gowers whether he had observed an increase of the white corpuscles of the blood in lymphadenoma.

Dr. Gowers replied that of the two living specimens one presented as many as sixty or seventy leucocytes in a field. Dr. Ward had mentioned a case of primary gland disease and normal spleen with 200 leucocytes in the field.

The Pharmaceutical Society.—The Council of this institution proposes holding a *conversazione* at the South Kensington Museum some time in May next.

MEDICAL NEWS.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 21 :—

Dickson, Hanmer, 26, Nelson-square.
Fuller, Ludham Henry, 73, Denbigh street, S.W.
Hughes, David Arthur, 42, Leamington-villas, W.
Marsh, Joseph Henry, Greenhithe, Kent.
Michell, Henry Slyman, Chelsea Dispensary, Sloane-square.

NAVAL, MILITARY, &c., APPOINTMENTS.

WAR OFFICE.—The undermentioned officers of Her Majesty's Indian Medical Service are granted a step of honorary rank on retirement. To be Surgeon-General :—Deputy Surgeon-General James Tyrell Carter Ross, Bengal Army. To be Deputy Surgeon-General :—Surgeon-Major Henry Francis Williams, M.D., Bengal Army ; Surgeon-Major George Flower Trimnell, Madras Army.

BIRTHS.

BELEMORE.—On March 19, at Citta Vecchia, Malta, the wife of Surgeon-Major Alfred John Belemore, M.R.C.S. Eng., of a daughter.

COGHILL.—On February 24, at Kandy, Ceylon, the wife of J. D. M. Coghill, M.D., Medical Inspector of the Coffee Districts, of a son.

JOHNSON.—On March 19, at 12, Albion-street, Hull, the wife of C. Hargitt Johnson, M.R.C.S., of a daughter.

WALLACE.—On March 18, at Cardiff, the wife of S. Wallace, M.D., of a son.

MARRIAGES.

COTTON—WILMOT.—On March 27, at Kensington, Holland John Cotton, M.D., of 8, Sloane-terrace, S.W., only surviving son of the late Charles Cotton, M.D., of King's Lynn, Norfolk, to Eliza Catherine, eldest daughter of Chester Eardley-Wilmot, of 76, Oxford-terrace, Hyde-park.

DEATHS.

BLACK, WILLIAM EDWAEN, Lieut. R.N., second surviving son of Patrick Black, M.D., of 11, Queen Anne-street, W., lost in H.M.'s *Eurydice*, off Dunnose, Isle of Wight, on March 24.

BOOKLESS, ELLEN MARIA, wife of James Pitcairn Bookless, M.D., at 12, Mansell-villas, Wimbledon, on March 20, aged 24 years.

BROWN, ROBERT, M.D., late Bombay Army, at Milford, Hants, on March 22, in his 76th year.

LANE, PERCY, eldest son of Edward W. Lane, M.D., at Sudbrook-park, Petersham, on March 24, aged 29.

MORSE, EDWARD, M.R.C.S.E., L.S.A., late of Upper Kennington-lane, on March 16, aged 64.

PHIBBS, HERBERT DALY, second son of Robert Featherstone Phibbs, L.R.C.P., M.R.C.S., at 59, Boundary-road, N.W., on March 19, aged ten months.

PITMAN, ROBERT, L.R.C.P., at Acacia House, Highgate-hill, N., on March 22.

ROBERTS, JOHN, M.R.C.P. Lond., formerly of 76, Grosvenor-street, at Cimiez, Nice, on March 23, aged 68.

TOOTELL, EDWARD, L.R.C.P. Edin., Surgeon to H.M.'s 30th Regt. N.I., at Mitree, Semde, India, on March 24, aged 28.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BOOTLE BOROUGH HOSPITAL.—House-Surgeon. Candidates must possess both a medical and a surgical qualification, and be duly registered. Applications, with copies of testimonials, to the Hon. Secretary, on or before April 10.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. Candidates must possess the diplomas of a Royal College of Surgeons and the Society of Apothecaries. Testimonials, marked "Eastern Dispensary," to Francis Savage, Esq., 10, Beaufort-buildings East, Bath, on or before April 16.

EAST LONDON HOSPITAL FOR CHILDREN, AND DISPENSARY FOR WOMEN, SHADWELL, E.—Resident Medical Officer. Candidates must be unmarried and fully qualified practitioners in medicine and surgery. Applications to the Secretary at the Hospital, on or before April 11.

MANCHESTER ROYAL INFIRMARY.—Resident Surgical Officer. Applicants must not be less than twenty-four years of age ; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 30.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer. Applicants must be not less than twenty-five years of age ; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 30.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer for the Fever Hospital at Monsall. Applicants must be not less than twenty-four years of age ; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 30.

MANCHESTER ROYAL INFIRMARY.—Resident Medical Officer of the Convalescent Hospital at Cheadle. Applicants must be not less than twenty-four years of age ; they must be registered and hold a medical and surgical qualification. Applications, with testimonials, to the Chairman of the Board, on or before March 30.

ROYAL FREE HOSPITAL, GRAY'S-INN-ROAD.—Senior House-Surgeon. Candidates must be possessed of a medical or surgical qualification from one or more of the Examining Boards of the United Kingdom, rendering them eligible for registration under the Medical Act. Testimonials to the Secretary, on or before April 3.

ROYAL FREE HOSPITAL, GRAY'S-INN-ROAD.—Junior Resident Medical Officer. Candidates must be possessed of a medical or surgical qualification from one of the Examining Boards of the United Kingdom. Testimonials to the Secretary, on or before April 3.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Alnwick Union.—Dr. Magill has resigned the Embleton District ; area 18,658 ; population 2776 ; salary £30 per annum.

Peterborough Union.—Mr. John de Liefde Temple has resigned the Crowland District ; area 21,175 ; population 4032 ; remuneration per case. Mr. R. A. Morrish has resigned the Castor District ; area 9102 ; population 1588 ; remuneration per case.

Warminster Union.—Mr. George G. Bothwell has resigned the Longbridge District ; area 10,842 ; population 2485 ; salary £100 per annum.

APPOINTMENTS.

Bodmin Union.—Wm. Pearse, M.R.C.S. Eng., L.S.A., to the St. Mabyn District.

Dewsbury Union.—John Shives, M.D., C.M. Aber., L.R.C.S. Edin., to the Liversedge District.

Portsea Island Union.—Arthur V. Ford, L.K. & Q.C.P. Ire., M.R.C.S. Eng., to the Kingston District.

Skirlaugh Union.—Frederic Hodson, M.R.C.S. Eng., L.S.A., to the Hornsea District.

INTERNATIONAL MEDICAL CONGRESS.—The next meeting of this Association will (according to the *Berliner Klin. Wochenschrift*, No. 9, 1878) take place at Amsterdam on September 8, 1879. As all communications with regard to the Congress are to be sent to the Committee (Secretary, Dr. Guye, Amsterdam) before June 1, 1878, it seems that there must be an error as to date in the announcement of our contemporary, and that for 1879 we should read 1878.

ROYAL RECOGNITION.—His recent visit to this country appears to have given the greatest satisfaction to his Imperial and Royal Highness the Crown Prince of Austria, who has caused letters to be written to the heads of the different institutions visited by him, amongst others to Professor Flower, F.R.S., the Conservator of the Museum of the Royal College of Surgeons, "expressive of his best thanks for the services rendered to his Imperial Highness during his visits to that institution."

APPLICATION OF ICE TO THE RECTUM IN NARCOSIS FROM CHLOROFORM.—According to Dr. Baillée, there is no more effectual remedy in narcosis produced by chloroform than the introduction of a piece of ice into the rectum. Moderate pressure overcomes the resistance of the sphincter, and immediately on the ice melting in the rectum a deep inspiration takes place, which is at once followed by the re-establishment of natural respiration and of the action of the heart. M. Baillée recommends the same means in the apparent death of new-born infants.—*Gaz. des Hop.*, March 23.

THE PARIS MEDICAL STUDENTS.—The *Gazette Hebdomadaire* (March 15), speaking officially, states that the number of Paris students, which we recently quoted from the *Lyon Médical*, has not been quite correctly given. In 1876 the students registered at the Faculty were 6444 in number ; but among these a certain number had been "inscribed" in 1870, and even in 1869, and had taken no further action for several years ; and on corresponding with the families of these students the Dean of the Faculty learned that some were dead and others had abandoned medical study. After the register was duly rectified it was found at the commencement of the year 1877-78 that the actual number of students was 4965. To this number have to be added 610 students who have registered since October last, making a total of 5575. From this there have to be deducted 553 students who have received their diplomas during this year, 15 who have been received as *officiers de santé*, 22 who have abandoned the study of medicine, 56 who have been authorised to change the Faculty for another, 2 who have been excluded, and 20 who have died during the year, making a total of 669, which, deducted from the 5575, leaves 4906. These numbers will be still further increased by the arrival in April of students from the secondary provincial schools in order to complete their studies in Paris.

CHLOROFORM IN OBSTETRICS.—Dr. Dumontpallier called the attention of his colleagues at the Hospital Medical Society to the great value of chloroform when used in small doses during the last stage of labour, in which, with the perineum excessively distended and almost ready to lacerate, the labour, owing to the exhausted state of the woman, yet makes no sensible progress. At this period the pains which she has endured become a cause of the arrest of labour and paralyse her forces. Small doses of chloroform diminish this "paralysing pain," and are soon followed by the termination of the labour.—*Gaz. des Hop.*, March 12.

H.M.S. "EURYDICE."—By the foundering of this fine vessel with nearly all on board, the profession has lost two distinguished members, whom the country can ill afford to spare with the present dearth of medical men entering the combatant service. They are Messrs. James Leech Whiting, M.R.C.S. Eng. 1856, holding the rank of Staff Surgeon; and Robert Murdock, full Surgeon, who had the following qualifications:—M.B. and C.M. Glasg., 1872; L.R.C.P. Edin. and L.M., 1871; L.R.C.S. and L.M. Edin., 1872; a member of the General Council of the University of Glasgow, late House-Surgeon to the Glasgow Lock Hospital, 1870; Clerk in the University Lying-in Hospital, 1870-71, etc. Dr. Black, Physician to St. Bartholomew's Hospital, has to mourn the loss of his accomplished son, Lieut. W. E. Black, of the *Eurydice*.

PARTIAL SPASM OF THE MUSCLES OF THE FACE.—Dr. Krishaber related to the Biological Society a case of cramp limited to a certain number of the muscles of the face. The subject of the case, a man aged forty, experiences the greatest difficulty in speaking and eating, for whenever he attempts to open the mouth he is seized with a spasmodic contraction of certain muscles of the face and neck, which continues as long as the mouth is open, and ceases as soon as it is shut. The muscles of both sides of the face are affected, with, perhaps, a predominance of those of the right side. The zygomatic muscles, the orbicularis palpebrarum, the muscles of the nose, and, indeed, all those of the upper part of the face, remain motionless, while the whole of the lower part exhibits frightful grimaces—the mouth itself forming the line of demarcation. The muscles of the tongue, of the root of the mouth, and the velum palati are unaffected. The patient is hardly able to nourish himself, and is condemned to absolute silence. Dr. Krishaber has lost sight of the patient, so that he does not know the result of the case.—*Gaz. des Hop.*, March 19.

MAGNETISM AND STATIC ELECTRICITY IN HYSTERICAL ANÆSTHESIA.—At a meeting of the Société de Biologie, M. Vigouroux gave an account of some experiments which he had made at the Salpétrière at the request of Prof. Charcot. The following are the principal results:—A bar of magnetised steel held at a distance of several millimetres from the anæsthetised part restored sensibility to it after a space of time that rarely exceeded ten minutes, and that whichever pole of the magnet was presented. When the magnetised bar was presented at its middle part no such result was obtained. The action of the poles was demonstrated both in anæsthesia of the skin and in that of the organs of sense. The effects observed bore the strongest analogy to those obtained by M. Burq's metallic applications. It seems therefore probable that the great vogue which magnets enjoyed in the last century will have to be restored in therapeutics, the indications for their employment being specified. M. Vigouroux also related two trials made upon the same patients with static electricity, from which it was found that, under the influence of moderate discharges, sensibility was restored and became generalised with a rapidity that is obtainable by no other means known to us at present.—*Gaz. des Hop.*, March 19.

DEAFNESS IN BRIGHT'S DISEASE.—In a paper in the *Gaz. Heb.*, January 23, Dr. Dieulafoy calls attention to the fact that deafness in various degrees is a much more frequent phenomenon in Bright's disease than the few allusions made to it by writers on this affection would lead us to suppose. Since he has paid attention to the subject, he has found various affections of the ear prevail (from complete deafness to mere impairment of the sense of hearing or noises in the ear) in fifteen out of thirty-seven cases of chronic or acute nephritis that have come under his notice. As to the forms of Bright's disease to which these troubles of audition chiefly belong, before this can be determined many more cases with autopsies will have to be observed; but, at all events, no form of the disease is exempt from such accompaniment, which may occur at any stage of the disease, although, while sometimes preceding other symptoms, it most frequently does so at an advanced period of it. Generally these disturbances of audition are temporary, lasting for days or weeks, when they may diminish or disappear, to reappear at a future time. In only one of the cases observed did the deafness become permanent. These disturbances of hearing may sometimes prove useful in determining a difficult diagnosis.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Creaking Wheel.—The places selected by Dr. J. W. Tripe, in his recent paper "On the Winter Climate of some English Seaside Health-Resorts," were—Scilly, Torquay, Penzance, Guernsey, Barnstaple, Ventnor, Llandudno, Ramsgate, and Hastings; and the climatic features of each were compared with those of London. The mean daily winter temperature of these seaside places, and especially of those situated on the coast of Devon and Scilly, is higher than at London.

Mr. Williams and a Tutor.—We are informed that the result of the recent Arts examinations at the College of Surgeons will be known to the candidates in about a fortnight's time. You must remember how many hundreds of papers have to be read by the various examiners.

Psychologist.—You will find a list of the asylums and their medical superintendents in the "Medical Directory." Perhaps, on applying to the Commissioners you may ascertain whether the patient is dead, in order to realise for the benefit of his family the large sum for which his life was assured, and for which you still continue to pay the premiums.

Mr. Harris.—The first primary or anatomical and physiological examination this year for the diploma of Member of the College of Surgeons will take place this day (Friday).

A Young "Vet."—It is a fallacy; a sporting paper stated that there must have been three "Eclipses," owned by as many museums. Professor Flower's investigations led him to believe that the skeleton so described was that of a very ordinary animal; he therefore banished it to the realms below, and replaced it by that of "Orlando," presented to the Museum by her Majesty a few years ago.

Baby-Farming and its Risks.—At a recent meeting of the Chelsea Board of Guardians, an elderly woman appeared before the Board, and asked them to take a child which had been left on her hands. She did not know where to find the mother, who had only paid 7s.—a week's money for the child's keep. "She had," she said, "taken care of other people's children some years back." The police, to whom she had been on the matter, referred her to the Board. The Guardians offered to take her and the child into the house, but she refused, as she did not wish to come into the workhouse, and took her departure, stating that she would go and complain to the police, and would, moreover, desert the child.

Public Parks, Newcastle-on-Tyne.—The Town Council have resolved to purchase eight acres and a half of ground at Elswick, and twenty-two acres and a half of the Heaton Estate, for the purposes of public parks at the West and East ends of the town respectively.

Not to be Silenced.—Yet another communication has been received by the Board of Guardians of Brighton from the local opponents of compulsory vaccination, but the Guardians have wisely determined not to renew the discussion on the question.

"Interested in the Case."—The Welsh fasting girl had not, it is stated, taken food for *sixteen weeks* previous to her removal to the Infirmary. Relief had been given to her mother some time by the Aberystwith Board of Guardians, who stopped it on receiving a medical opinion that the girl took food. Her name is Ann Morgan, and she is thirteen years of age.

Tobacco-growing in Germany.—From a return recently published it appears that in 1876, in the whole of the German Empire, 21,736 hectares were planted with tobacco, and that the total harvest was 31,562,746 kilogrammes, or rather more than 33,000 tons, of dried leaves. Baden produced the largest quantity, more tobacco being grown in that small duchy than in the whole kingdom of Prussia. The smallest quantity was that grown in Saxony.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Home Chronicler—Chicago Medical Journal and Examiner—Boot and Shoemaker—American Supplement to the Obstetrical Journal of Great Britain and Ireland—Pantiles Papers.

BOOKS AND PAMPHLETS RECEIVED—

Sussex County Lunatic Asylum Nineteenth Annual Report—J. Lane Notter, B.A., M.D., The Chemical Theory of Contagium compared with the Corpuscular Theory—James G. Beaney, F.R.C.S., Diseases of the Hip-joint; The History and Progress of Surgery—R. Douglas Powell, M.D. Lond., On Consumption and on Certain Diseases of the Lungs and Pleura—Cumberland and Westmoreland Lunatic Asylum Annual Report for 1877—H. Macnaughton Jones, M.D., A Practical Treatise on Aural Surgery—Richard C. Lepage, Papers on the Plant *Gynocardia odorata*, from which the Chaulmoogra Oil is obtained—William Johnston, M.D., F.G.S., Borough of Leicester: A Report on the Principal Zymotic Diseases during 1877.

COMMUNICATIONS have been received from—

Mr. R. W. Parkes, London; Dr. J. M. Bruce, London; Mr. John Chatto, London; Mr. W. E. Poole, London; Dr. Thos. Barlow, London; Mr. B. R. Wheatley, London; Mr. T. M. Stone, London; Dr. Whipham, London; Dr. Thin, London; Dr. F. Churchill, London; Dr. Brinsley Nicholson, Shepherd's-bush; The Honorary Secretary of the Society of Medical Officers of Health, London; Mr. Alfred Haviland, Northampton; The Registrar of Apothecaries' Hall, London; Dr. Hardwicke, Sheffield; Messrs. Hogarth, London; Dr. J. E. Pollock, London; Mr. Harris, London; The Honorary Secretary of the Harveian Society; Mr. R. V. Skinner, Winchelsea; Dr. Stephen Mackenzie, London; The Registrar-General, Scotland; The Secretary of the Royal Microscopical Society, London; The Secretary of the Royal Institution, London; Dr. A. Sturge, London; Mr. J. T. W. Bacot, Seaton; Dr. J. W. Moore, Dublin; The Secretary of the Royal Humane Society, London; The Medical Officer of Health, Hastings; Dr. John Williams, London; Dr. Sparks, Mentone.

APPOINTMENTS FOR THE WEEK.

March 30. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Rev. W. Houghton, "The Natural History of the Ancients."

April 1. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Mr. Squire, "A Case of Severe General Eczema, treated by Phosphorus alone" (living Specimen). Mr. Teevan, "On the Selection of an Operation for Stone in the Bladder."

Royal Institution 2 p.m. General Monthly Meeting.

2. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

Pathological Society, 8½ p.m. Adjourned Meeting to consider Disease of the Lymphatic System. Specimens will be exhibited by Dr. R. Jones, Dr. Whipham, Dr. Goodhart, Mr. Nunn, Dr. Hoggan, Dr. Coupland, and Mr. Porter, and will be on view at 8 p.m.

3. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Obstetrical Society, 8 p.m. Specimens: Dr. Cory—A Fœtus whose Head was Ruptured by means of the Forceps. Dr. Galabin—Cancerous Polypi removed during Pregnancy (with Microscopic Sections). Papers: Mr. Lawson Tait, "Two Cases of Repair of the Female Bladder and Urethra." Dr. Hickinbotham and Dr. Skinner, "Cases of Rupture of the Uterus."

Royal Microscopical Society, 8 p.m. Mr. J. W. Stephenson, "On a New Form of Object-Glass."

4. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Harveian Society, 8 p.m. Mr. Henry Morris's Report on Diseased Kidney. Dr. Griffith, "Congenital Displacement of Heart" (living Specimen). Mr. Teevan, "On the Importance and Means of effecting an Early Diagnosis of Stone in the Bladder."

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

5. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Mr. G. J. Romanes, "The Philosophy of the Beautiful."

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 23, 1878.

BIRTHS.

Births of Boys, 1401; Girls, 1320; Total, 2721.
Average of 10 corresponding years 1868-77, 2353·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	838	838	1676
Average of the ten years 1868-77	792·4	774·3	1566·7
Average corrected to increased population ...	...	...	1678
Deaths of people aged 80 and upwards ...	...	...	65

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	681359	9	4	4	1	10	...	2	...	...
North ...	751729	18	7	3	5	17	1	11	1	3
Central ...	334369	...	8	5	...	7	1	2	...	2
East	639111	1	8	2	2	38	...	3	1	5
South	967692	14	7	8	5	52	...	7	...	3
Total	3254260	42	34	22	13	124	2	25	2	13

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	30·036 in.
Mean temperature	43·3°
Highest point of thermometer	54·6°
Lowest point of thermometer	25·1°
Mean dew-point temperature	35·6°
General direction of wind	W. & N.W.
Whole amount of rain in the week	0·0 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 23, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Mar. 23.	Deaths Registered during the week ending Mar. 23.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.), Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2721	1676	54·6	25·1	43·3	6·28	0·00	0·00
Brighton	103923	44·1	87	49	56·6	27·0	43·0	6·11	0·00	0·00
Portsmouth ...	129461	28·9	98	45	57·0	29·0	42·5	5·83	0·00	0·00
Norwich	84620	11·3	58	36	55·5	30·0	43·4	6·33	0·06	0·15
Plymouth	73599	52·8	41	48	57·0	30·5	44·2	6·78	0·01	0·00
Bristol	206419	46·4	155	92	57·1	22·9	42·1	5·62	0·04	0·10
Wolverhampton ...	74240	21·9	65	3	52·4	22·9	40·6	4·78	0·00	0·00
Birmingham ...	383117	45·6	358	199	...	...	...	...	...	...
Leicester	121475	38·0	92	4	55·0	26·2	43·1	6·17	0·01	0·03
Nottingham ...	165267	16·6	99	81	57·4	24·0	43·1	6·17	0·00	0·00
Liverpool	532681	102·2	442	245	50·6	31·7	42·6	5·90	0·10	0·25
Manchester ...	360514	84·0	279	195	...	...	...	...	...	...
Salford	170251	32·9	137	62	54·4	22·9	41·6	5·34	0·02	0·05
Oldham	107366	23·0	95	45	...	...	...	...	...	...
Bradford	185088	25·6	121	8	56·6	24·2	43·8	6·56	0·00	0·00
Leeds	304948	14·1	248	131	57·0	28·0	43·9	6·61	0·03	0·08
Sheffield	289537	14·7	240	138	56·5	27·5	44·5	6·95	0·00	0·00
Hull	143129	39·4	103	51	57·0	26·0	44·2	6·78	0·03	0·08
Sunderland ...	112459	34·0	85	57	59·0	30·0	45·0	7·22	0·00	0·00
Newcastle-on-Tyne	144570	26·9	118	59	...	...	...	...	...	...
Edinburgh	222371	53·1	155	115	57·8	28·0	44·1	6·73	0·01	0·03
Glasgow	566940	94·0	434	319	55·2	30·7	45·0	7·22	0·27	0·69
Dublin	314666	31·2	+202	+193	...	...	...	...	...	...
Total of 23 Towns in United Kingdom	8373953	37·9	6394	3995	59·0	22·9	43·5	6·39	0·03	0·08

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 30·04 in. The highest reading was 30·47 in. at the beginning of the week, and the lowest 29·52 in. at the end of the week.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

† The returns from Dublin not having come to hand, averages of the numbers in recent weeks have been inserted in order to make up a total for the twenty-three towns.

ORIGINAL LECTURES.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

LOCALISATION OF CEREBRAL DISEASE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.

LECTURE II.

A.—LESIONS OF THE MOTOR REGIONS.

THE motor area, as determined by experiments on monkeys, includes the bases of the three frontal convolutions, with those bounding the fissure of Rolando—viz., the *ascending frontal*, or *anterior central* (Ecker); the *ascending parietal*, or *posterior central* (Ecker), with its superior continuation, termed the *postero-parietal* or *superior parietal* (Ecker) lobule; together with the internal aspect of the same, which by our French brethren is generally called the *paracentral* lobule. The homologous regions of the brain of the monkey and man are sufficiently evident not to require my taking up valuable time with any anatomical description. In this region are situated certain definable areas, stimulation of which by the electric current gives rise to certain definite movements on the opposite side—viz., of the leg and hand, facial, oral, and lingual muscles; and destruction of which causes paralysis of all those movements (*exc.*) if the entire region be destroyed; limited or dissociated paralysis, if individual areas only be destroyed—the paralysis in this case being confined to those movements which are excited by irritation of the same. This region is supplied by the middle cerebral or Sylvian artery by four or five branches, each of which nourishes a special area. The artery may be occluded in its main trunk or in its individual branches; and the arrangement is such, according to the researches of Duret and Heubner, that the arteries of the basal ganglia may still remain pervious though the cortical arteries are occluded by emboli. Hence it is that softening limited to the cortical grey matter and subjacent medulla may and does frequently occur, while the basal ganglia remain absolutely intact.

The lesions which invade this region we may divide into *destructive* and *irritative*, in accordance with their main symptomatic characters. But a complete practical separation is not always possible, inasmuch as lesions which result ultimately in total disintegration are not unfrequently associated at times with irritative or convulsive phenomena limited or more or less generalised—a combination which may be likened to that in *anæsthesia dolorosa*.

We have now a very considerable body of evidence to show that destructive lesions of this region invariably cause paralysis of voluntary motion; and that there is a differentiation in this part of the cortex of distinct centres, corresponding in situation to those experimentally established in the brain of the monkey, destructive lesions of which cause limited or dissociated paralysis of their respective movements or muscular combinations. It is not maintained, however, that in all cases of purely cortical paralysis anatomical lesions are demonstrable in these centres; but I am unable, after much investigation, to find any satisfactory evidence of the occurrence of a destructive lesion here *not* associated with motor paralysis. I have met with occasional statements or hypotheses as to what may or must have been, but no proof of such a lesion having actually existed without paralysis.

Truly, Samt(a) has recorded a case in which a cyst was found on the cortex in the motor zone; but as Charcot and Pitres remark,(b) the actual destruction of the grey matter was not proved, since we know that tumours may press aside, without destroying, the tissue on which they rest. Let the subject, however, be investigated anew, with all the most modern methods, and with the utmost possible scrutiny. When a clear case of destructive lesion of the cortex in this region without motor paralysis is forthcoming, it will be time to cast aside the immense body of positive experimental and clinical evidence which we possess in favour of the thesis enunciated.

(a) *Archiv für Psychiatrie*, 1874. (b) *Revue Mensuelle*, 1877.

The experimental evidence in the case of monkeys is of the following nature:—The brain is exposed. The application of that which is universally recognised as an excitant of nerves and nerve-centres to a certain spot is followed by a definite movement. All other conditions remaining the same, this spot is destroyed by the cautery (universally recognised as a destroyer of animal tissues), and immediately we see paralysis of the muscles formerly thrown into action by the electrical stimulus. I am describing no hypothetical experiment, but one actually performed and frequently varied. If motor function is ascribed to a nerve because on irritation the muscle contracts, and on section the muscle is paralysed, I cannot see why motor function should not be predicated of the cortical centre, seeing that the phenomena are essentially the same.

Brown-Séquard, however, thinks that, in all cases of paralysis from cortical lesion, there is some intermediate link or *tertium quid* intervening between the antecedent and the consequent: a kind of inhibitory influence exerted by the lesion on some centre or centres which are accredited with the functions that are lost. It would, I think, be easy by parity of reasoning—and I say it with all due respect to the distinguished author of this theory—to make a complete *reductio ad absurdum* of the whole of experimental physiology. We should never be entitled to establish relationship between organ and function, but be condemned to a perpetual search after some *tertium quid*, which, like an *ignis fatuus*, would for ever elude our grasp.

It is generally considered that explanation is satisfied when we assimilate one fact or set of facts to another familiar fact or set of facts; and, if we are entitled to call a nerve motor because motion ceases when it is cut, so, it seems to me, we may call a part of the brain motor if a similar result invariably follow on its destruction.

I. *Destructive Lesions of the Motor Area.*

I will first direct your attention to destructive lesions of the motor area, and under this head consider (1) general and (2) partial lesions.

1. *General or Extensive Lesions.*—The type of general lesion of the cortical area in the monkey is paralysis of voluntary motion without affection of sensation on the opposite side of the body, and possessing all those features which characterise ordinary cerebral paralysis (*hémiplégie centrale vulgaire*)—viz., hemiplegia which, though at first absolute, gradually subsides into a condition in which there is complete paralysis of all the most volitional movements, while associated, alternating, or bilateral movements are more or less spared. Hence the hand is more paralysed than the arm, the arm more than the leg, and the lower facial movements than the upper; while the muscles of the trunk are scarcely, if at all, affected.

In a drawing exhibited is a representation of the extent of a lesion of the brain of the monkey causing complete hemiplegia of the opposite side. This was a case of encephalitis resulting from exposure, in which the phenomena in the early inflammatory stage were localised spasms on the opposite side, which gradually became general, followed by complete paralysis and flaccidity, without loss of sensation, when softening was complete.

The next figure is a representation of a lesion causing paralysis of the arm and leg of the opposite side;(c) and a third represents a lesion in a region stimulation of which caused supination and flexion of the forearm. The result was paralysis of voluntary motion limited to this movement. These will suffice to indicate the difference between general and partial lesions of the cortex under circumstances free from all complication. The lesions of disease, however, are, as a rule, rarely so simple. I have already indicated the forms of disease which can scarcely be admitted as relevant in relation to the question of localisation, and I would further add that considerable caution requires to be exercised in reference to traumatic lesions. These are most valuable in a negative point of view, as, for instance, in the case of the parietal lobes; but, when accompanied by positive symptoms, it is necessary that lesions of the base of the brain, which Duret shows may result from concussion, and are apt to complicate the symptomatology of the local injury, should be shown to be absent.

(c) Also temporary blindness of opposite eye, which will be explained in connexion with lesions of the angular gyrus.

Apart from traumatic lesions, the cases of cortical disease which I proceed to quote clearly establish the fact that lesions in that part of the *human* brain which corresponds to the area termed motor in the brain of the monkey produce paralysis of voluntary motion on the opposite side of the body: a hemiplegia like that resulting from destructive lesion of the corpus striatum, or more particularly of the anterior part of the internal capsule (*hémiplégie centrale vulgaire*). This paralysis is frequently associated with rigidity or convulsive spasms in the paralysed parts, particularly in the early stage; and, if destruction of the cortical substance be complete, the paralysis is of permanent duration, and sooner or later is followed by late rigidity and secondary sclerosis of the motor tracts. This degeneration is traceable in the medullary fibres, crus cerebri, pons, and pyramid of the medulla oblongata on the side of the lesion; and thence mainly on the opposite side of the spinal end of the posterior part of the lateral column (*faisceaux encéph. externes ou croisés*, Bouchard; *faisceaux latéraux*, Charcot; *Pyramiden Seitenstrangbahnen*, Flechsig); while a corresponding band of secondary degeneration frequently exists on the internal aspect of the anterior column of the same side as the lesion (*faisceaux encéph. directes ou internes*, Bouchard; *faisceaux de Türck*, Charcot; *Pyramiden Vordrestrangbahnen*, Flechsig). These are the tracts which recent researches, to which I have before alluded, have shown to be the continuations of the pyramidal strands; and the fact of the direct continuity of this degeneration with that commencing under the cortex proves, in accordance with Waller's and Türck's researches, the direct motor signification of the cortical regions to which these fibres are traced.

I have already mentioned the experiments of Albertoni and Michieli, and those of Franck and Pitres, showing that secondary degeneration occurs in the medullary fibres of the centrum ovale after destruction of the cortex in dogs; and I may also quote the experiments of Vulpian,(d) and those of Carville and Duret, establishing the occurrence of secondary degeneration in the spinal cord after removal of the limb-centres—sigmoid gyrus in this animal.

A case is reported by Gliky(e) of unilateral convulsions of the left side followed by complete hemiplegia without loss of sensation, in which, after death, a caseous degeneration was found involving the *ascending frontal* and bases of the *three frontal* convolutions, the *ascending parietal* and *postero-parietal* lobule, and the corresponding internal aspect of this region, or *paracentral* lobule.

Lepine(f) has recorded a case of right hemiplegia, without affection of sensation, of six years' duration, caused by yellow softening of the *ascending parietal* convolution in its whole extent, with partial affection of the *ascending frontal*, posterior digitations of the island of Reil, and anterior part of the *superior and inferior parietal* lobule of the left hemisphere. The ganglia were intact. Secondary degeneration was traced in the left side of the pons and left pyramid.(g)

In a case communicated by M. Brun to MM. Charcot and Pitres,(h) left hemiplegia without aphasia had existed for four years, with late rigidity of the arm, and in a slighter degree of the leg. Yellow softening (*plaque jaune*) was found in the lower two-thirds of the *ascending frontal*, lower half of the *ascending parietal*, the posterior three-fourths of the *second and third frontal*, and the whole of the convolutions of the island of Reil in the right hemisphere. The ganglia were intact. No examination, hower, was made in reference to secondary sclerosis in this case.

Another case is given by the same authors(i) of right hemiplegia, with aphasia, of one year's duration, and accompanied by late rigidity of both limbs, more particularly of the arm. A patch of yellow softening was found involving the whole of the *ascending frontal* and base of the *third frontal* convolution, the whole of the *ascending parietal*, together with the inferior parietal lobule and two posterior digitations of the island of Reil in the left hemisphere. The ganglia were normal. Secondary degeneration was evident in the crus, pons, and pyramid on the same side; but the cord was not examined.

Trousseau quotes a case which occurred in the *clinique* of M. Charcot,(k) in which secondary degeneration was traced in the crus, pons, and pyramid of the same side as the lesion, and in the opposite side of the spinal cord; the lesion being, softening of the *ascending frontal*, the *three frontal convolutions*, and of the island of Reil in the right hemisphere. The case was one of left hemiplegia of three months' duration; death occurring from pneumonia.

These cases, out of many on record,(l) are suffieient to show that, from purely cortical lesions, permanent paralysis may result; that, in consequence of such lesions, secondary degeneration takes place in the motor tracts, with its accompaniment, late rigidity.

In the cases I have quoted there has been more or less complete hemiplegia. In some of these the lesion has invaded the whole of the motor area, and it only. In others, the lesion of the motor area, though extensive, has not been anatomically co-extensive with this area; and in most there has also been affection of parts not considered as belonging to the motor area. Clinical cases in which a lesion should be extensive enough to involve the whole motor area, and it alone, must naturally be considered as quite exceptional. But it is not at all diffieult, by a proeess of exclusion, to eliminate those regions, a lesion of which does not cause paralysis or secondary degeneration; and it may be stated provisionally (of which proofs will be adduced subsequently) that it is ouly in cases of lesion of the motor area, as above defined, that secondary degeneration occurs, and only in these that paralysis is invariably the result.

I will return to the fact of complete hemiplegia, with comparatively restricted lesions of the motor area.

But before doing so I would call your attention to the researches of M. Pitres, who, in his recent work,(m) has collected a large body of evidenee to show that what is true of the lesions of the cortical substance holds also in respeet to lesions in corresponding parts of the centrum ovale—a term which he extends to the whole of the medullary substance intervening between the cortex and the basal ganglia. In all future observations and pathological records it would be advisable to follow M. Pitres' system of nomenclature of the divisions of the centrum ovale. (See Plate I in M. Pitres' work.) A vertical section of the hemisphere at right angles to the long axis in the prefrontal region gives the *prefrontal section*. The next section, earried two centimetres in advance of the fissure of Rolando, passes through the bases of the three frontal convolutions, and forms the *pediculo-frontal section*, divided into a *superior*, *middle*, and *inferior pediculo-frontal fasciculus*, corresponding with the respective frontal convolutions. The next seetion is the *frontal*, formed by dividing the hemisphere parallel to the fissure of Rolando through the ascending frontal convolution. Here also there are three divisions—the *superior*, *middle*, and *inferior frontal faseiculi*. (In this section the sphenoidal region is partly shown.) Next is the *parietal section*, carried in a similar manner through the ascending parietal convolutions. Three segments are also seen here—viz., the *superior*, *middle*, and *inferior parietal faseiculi*. Next is the *pediculo-parietal section*, made by dividing the hemisphere three eentimetres (1·18 inches) posterior to the fissure of Rolando, and cutting the superior and inferior parietal lobules. Here we distinguish a corresponding *superior* and *inferior pediculo-parietal fasciculus*. Below is the *sphenoidal fasciculus*. Section of the occipital lobe gives the *occipital seetion*, in whieh no separate fascieuli are differentiated.

Now, it is only in certain of the medullary fascieuli, so marked out, that lesions cause paralysis of motion and degeneration of the motor tracts. These regions are included in the pediculo-frontal, frontal, and parietal sections, or, generally, in the *fronto-parietal area*. Lesions here have exactly the same effect as lesions of the corresponding cortical region, according as they are destructive or irritative, or according as they are limited or general. And M. Pitres has brought forward evidence of a very satisfac-

(d) *Archiv de Physiologie*, 1876.
(e) *Deutsches Archiv für Klin. Medicin*, December, 1875.
(f) "Localisations dans les Maladies Cérébrales." Thèse d'Agrégation, 1875.
(g) A mistake occurs in the account given of this case, which has been copied by MM. Charcot and Pitres (*op. cit.*, page 123), the atrophy being described as situated on the *right* of the pons instead of the left. This is corrected by M. Lepine's own hand in the copy which I possess.
(h) *Op. cit.*, page 121.
(i) *Op. cit.*, page 121 *et seq.*

(k) Charcot and Pitres, *op. cit.*, page 123.
(l) The reader is referred to the works, among others, of Cotard ("Atrophie Partielle de Cerveau," 1868), and Landouzy ("Convulsions et Paralysies liées aux Meningo-Encéphalites Fronto-Parietales," 1876) for many similar cases.
(m) "Lesions du Centre Ovale." Paris, 1877.

tory kind to show (page 100 *et seq.*) that the early rigidity and muscular spasms, which so frequently accompany hemiplegia with effusion into the lateral ventricles, are essentially due to irritation of the fronto-parietal fasciculi of the centrum ovale.

As to the occurrence of hemiplegia with recent hæmorrhage into the fronto-parietal region of the centrum ovale, without direct affection of the cortex or basal ganglia, I might quote many cases; but, though the explanation is, through other facts, rendered simple enough, they may be objected to as evidence of paralysis from direct lesion of this area. For it might be said, and not without reason, that the paralysis was due to indirect affection, by pressure, etc., of the motor ganglia and tracts.

It will be better, therefore, to restrict ourselves to cases in which this element of suddenness or of pressure is entirely absent, *i.e.*, cases in which there was mere softening or solution of continuity of the medullary fibres.

Hodgson(n) has related a case of right hemiplegia with aphasia, followed several months after the seizure with late rigidity of the right arm. Death occurred from chronic bronchitis more than a year after the attack. In the centrum ovale of the left hemisphere was a cavity nearly empty, one inch and a quarter long, situated external to the lateral ventricle and between its anterior horn and the island of Reil. The rest of the brain, except the part immediately around the cavity (which was yellowish), was normal.

A similar case of right hemiplegia, but without aphasia, was recently brought before the Société Anatomique(o) by Landouzy. In this case there was late rigidity and atrophy of the paralysed limbs. A slough formed in the sacrum, and death resulted six months after the attack. The lesion was a lacuna or cicatrix resulting from a hæmorrhagic effusion, situated in the centrum ovale, and extending from the base of the first frontal to the postero-parietal lobule. The form was irregularly triangular, the widest part situated posteriorly. Secondary degeneration was visible in the left crus and right side of the spinal cord, but the exact extent of the degeneration had not been minutely examined at the time the record was made.

For other similar instances, I would refer to M. Pitres' above-mentioned work.

II. *Partial Lesions of the Motor Area.*

1. With hemiplegia. It would seem that, in order to cause more or less complete hemiplegia of the opposite side, it is not absolutely necessary that the anatomical lesions should be co-extensive with the whole motor area. I have already given one or two instances in which the lesion, though extensive, did not involve the whole of this region; to these I add one or two instances of hemiplegia in which the lesion was still more limited anatomically than in those already mentioned. But the area of anatomically demonstrated lesion is not necessarily the area of functional disturbance; and it is this element of uncertainty which, as I have before indicated, renders conclusions as to exact localisation, from a purely clinical point of view, always more or less doubtful.

There is, of course, no difficulty in accounting for complete hemiplegia in connexion with very limited lesions of a *sudden* character in the motor area, such as hæmorrhagic extravasation or a traumatic lesion. In time, however, the symptoms generally disappear, with the exception of those attributable to the part immediately destroyed or irritated. But there are on record a few cases in which, though the lesions were of a more chronic nature and apparently anatomically circumscribed, a more extensive paralysis has existed than can be accounted for by the amount of cortex actually destroyed.

MM. Charcot and Pitres(p) give a case of right hemiplegia, without aphasia, but with facial paresis and late rigidity of the limbs. The lesion was situated in the lower two-thirds of the ascending parietal convolution of the left hemisphere. Secondary sclerosis existed in the motor tracts.

In another,(q) of right hemiplegia, without aphasia, and rigidity of the limbs (the paralysis alternating with unilateral convulsions), the chief lesion occupied the left para-central lobule, which was softened and atrophied. The lesion also involved the anterior third of the quadrilateral lobule and the upper extremity of the ascending frontal convolution. In this case there were also other indications of degeneration in different parts of the hemispheres. Secondary degeneration of the motor tracts existed.

A similar case has been also reported by Pitres.(r)

The first of these cases is the most difficult to account for, if the lesion were actually confined to the region indicated. The other two are more in accordance with the usual results of lesion situated at the upper extremity of the fissure of Rolando.

2. *Partial Lesions and Monoplegia.*—I will now proceed to lay before you some of the more carefully recorded clinical cases of limited lesions of the cortex with correspondingly limited paralysis or monoplegia of the movements governed by these parts respectively; and I hope to be able to show you that the situation of the various motor centres in the human brain closely corresponds with the position I have assigned to them on grounds of experiment and anatomical homology. But I would repeat that the observations on record are not yet sufficiently numerous to establish by themselves, apart from the precise facts of physiological experiment, the exact situation and limits of these centres. With these facts, however, the case is altogether altered.

a. Unilateral Oculo-motor Monoplegia.—At the base of the first frontal, and extending partly into the second frontal convolution, in the brain of the monkey, there is an area irritation of which causes elevation of the eyelids, dilatation of the pupil, conjugate deviation of the eyes, and turning of the head to the opposite side. I have placed these various reactions in the order in which they occur with slight and longer-continued stimulation respectively. In the faintest form of stimulation, elevation of the eyelids is the only effect observable. Whether individual centres, incapable of sharp demarcation from each other for each of the movements indicated, exist here, has not been determined experimentally.

There are, however, clinical cases on record tending to show that there must be a distinct centre for the levator palpebræ superioris, inasmuch as paralysis may occur, limited to this muscle, without affecting the other muscles supplied by the third nerve—an occurrence difficult to explain by peripheral affection of this nerve. Some such cases have been observed in connexion with disease of the cortex, and attempts have been made, but not, I think, successful or in accordance with experimental lesions, to localise this centre in the angular gyrus.(s) If such a centre really exist, I should be inclined to look for it in the region of which I am speaking. Still, there are difficulties in the way; for affections of this region are not uncommon, and paralysis of the levator palpebræ superioris, without other oculo-motor paralysis, is not so, or at least has not been often observed. Hence, if the centre of this movement exist here, its escape from paralysis needs explanation. Whether this can be found in the intimate bilateral association of the oculo-motor nuclei or not, is a question on which, as we have so little to go on, I forbear at present to speculate further.

In the case, however, of the bilateral and antagonistic movements of the head and eyes, it would be natural to look for lateral distortion should the centre in one hemisphere be suddenly removed; and the distortion would be towards the side of lesion, owing to the unantagonised action of the centre which remains. This affords a sufficiently satisfactory explanation of the conjugate deviation of the head and eyes observed in the early stages of hemiplegia, whether of cortical or ganglionic origin.

Certain facts, however, exist tending to show that this lateral movement of the eyes may be paralysed singly, or thrown into spasm singly, constituting what may be termed unilateral oculo-motor monoplegia or monospasm. This, even in the absence of a necropsy, would strongly point to cortical lesion, or lesion of the medullary fibres between the centre and the corpus striatum. It is only in such conditions that dissociated paralysis or spasm finds a satisfactory explanation.

This form of paralysis or spasm is by no means common—I find only three cases on record—and the actual post-mortem evidence is still more scanty. Two such cases have been recorded by Priestley Smith.(t) In one of these cases the eyes were directed to the right, and the patient, though

(n) *Lancet*, 1866, vol. i., page 397.
(o) October, 1877. *Progrès Médicale*, December 29, 1877.
(p) *Revue Mensuelle*, 1877, page 191.
(q) *Ibid.*, 1877, page 193.

(r) *Le Progrès Médicale*, September 19, 1876.
(s) Landouzy, "Blépharoptose Cérébrale"; *Archives Générales de Medecine*, August, 1877.
(t) "Bilateral Deviations of the Eye"; *Birmingham Medical Review*, 1875.

he possessed the convergent movements and power of accommodation, could not move his eyes to the left. In the second, the eyes were also turned to the right, and inability to look to the left was also observed, as in the other.

Priestley Smith thinks that these cases are to be explained by either irritation of the opposite or destructive lesion on the same side of the centre I am describing. In this he is followed by Hughlings-Jackson,(u) and with these views I have to express myself as being in complete accordance. So far, they are mainly speculative, as recovery took place in both cases.

The following case, however, related by Chouppe,(v) which is quoted by Landouzy,(x) supports this view by post-mortem evidence. This was a case of a lad, aged nineteen, who showed symptoms of tubercular meningitis, in which, in addition to pain, vomiting, etc., the most remarkable symptom was a rotation of the head and eyes to the right. This could be overcome with moderate effort, but the head and eyes returned to their position when left to themselves. No other paralysis or contraction existed elsewhere. After death, a patch of disease, free from granulations and quite superficial, of the size of a franc-piece, was found on the "superior part of the middle frontal convolution" in the left hemisphere. Other lesions were found in the superior and lateral part of the sphenoidal lobe of the right hemisphere, but, as will be subsequently shown, these cannot be regarded as much complicating the case. There was no other cerebral lesion. The exact situation of the lesion in the left hemisphere is not indicated more precisely than in the words quoted; but they may, I think, be taken in support of the theory that these special symptoms were due to tractative lesion of that which corresponds with the oculo-motor centre in the brain of the monkey.

b. Crural Monoplegia.—As there seems to be some misapprehension abroad in reference to the centres of movement of the hinder extremity, let me just call your attention to the facts of experiment. Irritation of the *postero-parietal* or *superior parietal lobule*, causes flexion of the foot on the ankle, occasionally combined with flexion of the thigh on the pelvis, and extension forwards of the leg as in the act of walking.

On the other hand, in my experiments on monkeys, stimulation of the region which includes the upper extremity of the ascending frontal, as well as part of the ascending parietal, gave rise to more complex movements, the result of which was to bring the foot towards the middle line of the trunk, as if the animal were to scratch its abdomen or lay hold of something in this position. The area near it gave rise to movements of the tail. Below it certain movements of the arm—viz., adduction and retraction—were excited.

It is a question by no means easy to answer *à priori*, how far the movements of the human leg can be compared with those of the leg-arm and foot-hand of the monkey; or what is the representative in man of the centre for the tail, which, in the New World monkeys, plays the part of a hand. We must, therefore, be cautious in drawing conclusions as to the exact position of the arm- and leg-centres in man from considerations merely of anatomical homology. And that is reason for exact and careful analysis of the movements which are affected, or more particularly affected, in any given case of crural monoplegia of cortical origin, for on this may depend the exact regional diagnosis.

Clinical evidence in favour of a distinct centre or centres for the leg, clearly differentiated from those of the arm, is not as yet very extensive. We have many cases on record in which the leg and arm have been paralysed together—brachio-crural monoplegia—an association easily accounted for by the close relation of the leg- and arm-centres to each other. Still, there are some cases in which the leg *only* has been paralysed; and in others, in which leg and arm have been ultimately conjointly affected, the paralysis has shown itself *first* in the leg. This latter fact has an important bearing on the question of a distinct leg-centre, and its exact situation. A few cases are on record of paralysis occurring in one or both legs from injury to the vertex in the parietal region; but we cannot exercise too much caution in the inferences we draw as to the seat of lesion in such cases. The researches of Duret(y) have shown that local and general spinal paralyses may result from bulbar and spinal lesions owing to sudden displacement downwards through the aqueduct of Sylvius of the cerebro-spinal fluid in consequence of blows on the head. A case in which, from the symptoms, this was evidently the mode of causation is related by Guthrie.(z) A soldier at Waterloo was struck by a shot which caused depressed fracture of both parietal bones. On his recovering consciousness, he was found paralysed in both legs, and benumbed from the loins downwards. He recovered on being trephined ten days afterwards. It cannot be doubted that the paralysis in this case was spinal paraplegia, and easily accounted for in the manner demonstrated by Duret.

In some other cases, however, the lesion may have been cerebral; the fact of the paralysis being crossed would suggest this view. Hitzig(a) quotes from Löffler the following among others. A Danish corporal was struck by a shot at the *superior and posterior extremity of the left parietal bone*, close to the sagittal suture (overlying the postero-parietal lobule). The right leg was immediately paralysed. The right arm became affected on the seventh day. On trephining, recovery took place—the arm first, and then the leg. This may fairly be taken as a cortical lesion, as the subsequent affection of the arm is in accordance with extension of softening to neighbouring centres—a feature so characteristic of cortical lesions. Another case of fracture of the "summit of the right parietal bone" by a shot was followed by paralysis of the left leg.

As cases of disease of the cortex with crural monoplegia, the following two (though they are not altogether precise) may be taken, quoted from Landouzy.(b) One is reported by Becquerel, of paralysis limited to the left leg. The lesion in this case is described as being situated "at the upper part of the right hemisphere," consisting of granulations and adhesions. Slight affections of the pia mater and subjacent cortex were, however, also observed in the left hemisphere. The second is recorded by Rendu. This was a case of paralysis of the right leg followed by paresis of the right arm, which gradually increased. In the *parietal convolutions* of the left hemisphere, *close to the longitudinal fissure*, was a zone of exudation and interstitial hæmorrhages, affecting both the cortex and medullary substance to a considerable depth, but not extending to the basal ganglia. In the parietal convolution (exact portion not stated) was found a caseous nodule of the size of a nut. It is, however, to be noted that the cerebral membranes generally in both hemispheres indicated signs of tuberculous meningitis. Hence the case is not quite free from complication.

I may here mention a case which, though one of tumour, has a considerable value in reference to the question before us. The particulars were privately communicated to me by Dr. Haddon, of Manchester, and the question arose during life as to the exact locality of the tumour, and the advisability of trephining. Though the diagnosis proved absolutely correct, the operation, for other reasons, was not performed. The patient began first to have tingling in the left leg, followed by paresis of this limb, gradually increasing, and continuing restricted to the left leg; then the left arm became weak. After occasional attacks of rigidity and twitching, the arm and leg became both completely paralysed. Shortly before death, signs of weakness showed themselves also in the right leg. After death, a tumour, three inches in diameter, was found growing from the dura mater, and pressing perpendicularly downwards on the region included in the upper extremity of the ascending frontal, ascending parietal, and postero-parietal convolutions. The tumour had grown downwards as far as the floor of the lateral ventricle, compressing the brain-substance in its course. It also impinged on the other hemisphere. The point of origin of this tumour, and the mode of growth, warrant the conclusion that the paresis of the left leg, which was the first and for a long time the only motor symptom, was due to the affection of the cortex in the region where experiments in the monkey would lead us to localise the leg-centres.

I will mention, lastly, two cases reported by Bourneville, which, though not uncomplicated cases of crural monoplegia, yet deserve to be taken in consideration with the others.

(u) "Ophthalmology in relation to General Medicine"; *Lancet*, May 12, page 676.
(v) *Bulletin de la Société Anatomique*, 1871, page 380.
(x) *Op. cit.*, page 160.
(y) "Traumatisme Cérébraux." Thèse (unpublished), 1878.
(z) Quoted by Wilks, *Guy's Hospital Reports*, 1866, page 51.
(a) "Untersuchungen über das Gehirn," 1874.
(b) *Op. cit.*, page 211-12.

They might also be referred to as instances of partial hemiplegic epilepsy. The first of these(c) is quoted by Charcot and Pitres. This was the case of a girl, aged eighteen, who had been affected with infantile hemiplegia of the left side at the age of four. She was subject to epileptic attacks, beginning in the left leg, which was paralysed. There was no facial paralysis. After death, a patch of degeneration was found in the right hemisphere, occupying the upper half of the ascending frontal, the bases of the first and second frontal, the anterior part of the postero-parietal lobule, and the whole of the internal aspect of these regions. Secondary degeneration of the motor tracts of the spinal cord existed. The second case was a similar one of infantile hemiplegia, followed by partial epilepsy; the spasms being limited to the right leg, but gradually invading the right arm and the right side of the face. The position of the lesion (one centimetre in extent), diagnosed during life, was the upper extremity of the ascending frontal and parietal convolutions, and the internal surface corresponding, or paracentral lobule. This region was the seat of softening. No other lesion existed. In this case also secondary degeneration was found in the right half of the spinal cord, in the postero-lateral column.

These cases, I think, suffice to prove that the lesions which have been described in connexion with crural monoplegia very closely agree with the position of the centres for the movements of the leg in monkeys. In the absence of other cases of lesion serving to determine the exact position and extent of the leg-centre, M. Bourdon(d) has endeavoured to arrive at this by another method. The method he adopts is to examine the brain in cases of amputation or arrested development of the lower extremity, with the expectation of finding atrophy of the corresponding centre, in accordance with Luys' views. Whether these expectations are altogether justifiable may be questioned.

But, theoretical considerations apart, the practical difficulties in the way of a satisfactory solution of this problem are very great, and I do not think that, up to the present at least, they have been disposed of successfully. An important communication on this subject was recently presented to the Société de Biologie (January 5, 1878) by M. Féré, well known for his valuable researches in cerebral typography. M. Féré shows that neither the method of ascertaining the existence of atrophy, by comparing the relative size of homologous convolutions in each hemisphere, nor that founded on the advance or recession of the fissure of Rolando, round which the motor centres are grouped, is reliable; inasmuch as in the perfectly normal brain there are great variations and want of symmetry in the convolutions and fissures in the two hemispheres, and there is no absolutely constant relation between the position of the fissure of Rolando and a certain cranial region, or in its position in the one hemisphere as compared with the other. Hence the necessity of receiving all statements with regard to atrophy with extreme caution, unless substantiated by a thorough microscopical investigation of the parts said to be so affected.

With these considerations, I will now give the results of M. Bourdon's analysis of cases of amputation. In one of amputation of the thigh, thirty-five years before death, atrophy was said to exist at the upper extremity of the ascending frontal, at its junction with first frontal convolution of the opposite hemisphere. In a second, of amputation of the thigh, fifty-two years before death, atrophy was said to exist in exactly the same situation. In a third, of amputation of the thigh, twenty-one years before death, a linear depression was found interrupting the continuity of the second frontal convolution in the opposite hemispheres.

To these cases, which M. Bourdon quotes from M. Luys, a fourth is added, observed by M. Landouzy. This was a case of arrested development of the right leg at the age of eighteen months, death occurring at the age of forty-five. The left hemisphere was smaller than the right, and the fissures of Rolando were unsymmetrical. The left ascending parietal convolution appeared somewhat smaller than the same convolution in the right hemisphere. There was also asymmetry of the pons and medulla, the left being the smaller.

None of these cases appear to have been investigated microscopically. If we regard them as satisfactory—which I think we are scarcely entitled to do—we do not find any more exact correspondence as regards the situation of the leg-centre than in the cases of lesion already mentioned. I think, however, that though the exact limits are not defined, the evidence points to a position closely in harmony with that defined in the brain of a monkey; and that the conclusion formed by M. Lucas-Championnière is well justified—viz., that to expose the leg-centre it is necessary to apply the crown of the trephine over the upper extremity of the fissure of Rolando.

(c) *Gazette Médicale de Paris*, December, 1876.

(d) "Recherches Cliniques sur les Centres Moteurs des Membres." Paris, 1877.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

THE EFFECTS OF FORCED INSPIRATION ON THE PULSE IN SOME FORMS OF HEART DISEASE

(PLEURO-PERICARDIAC ADHESION).

By J. PEARSON IRVINE, B.A., B.Sc., M.D. Lond.,
Assistant-Physician to Charing-cross Hospital, etc.

(*Concluded from page* 276.)

In considering the explanation of the phenomena met with in these cases, it should be remembered that under ordinary circumstances there is a more rapid filling of auricles, and hence of ventricles, during inspiration, and that the pulse in consequence becomes more frequent: there is a slight relative increase of rate and force of the pulse during inspiration, and slight relative decrease during expiration (Bristowe). It is clear that if these conditions are reversed, even in moderate degree, we have somethiug morbid to deal with, the explanation of which is well worthy of search; especially if pulse-depression with inspiration (ordinary or forced) may aid us in diagnosing such an obscure cardiac condition as that of pericardial and pleuritic adhesions. The effects of forced inspiration have not been considered by those who have tried to explain the pulse of inspiratory depression ("pulsus paradoxus," "pulsus inspiratione intermittens"), the latest account of which is to be found in Bauer's article in "Ziemssen's Cyclopædia." This writer thinks it may be due to—(1) mechanical obstruction in the aorta or the origins of the subclavians; (2) to cardiac changes, accompanied by diminution in the heart's power; and (3) to the obstruction to the entrance of air into the lungs. He thinks the last likely, because "inspiratory suction diminishes the arterial wave," and because the peculiar pulse has been met with in bronchial obstruction. But the second only of the explanations applies to the cases I have reported, and it is too vague to be satisfactory, for over and over again we meet with cardiac disease with decided diminution in the heart's power, without unusual change in the pulse in inspiration. As regards the first explanation, I have examined several cases where the aorta was compressed by mediastinal tumours, and where no change could be detected in the pulse with inspiration. Kussmaul and Griesinger ascribed the pulse to narrowing of the aorta—to a chronic mediastinitis—resulting in fibrous connexions between the lungs and the vessel, with such consequent dragging on the latter in inspiration that its calibre was diminished. Post-mortem examination revealed such connexions in one case, and it is clear that the explanation given deserves every consideration. But narrowing of the aorta, except by tumours, is one of the rarest things met with post-mortem, and even narrowing by tumours is not very common. And when the vessel is so narrowed, and the bronchi compressed at the same time, inspiratory depression is not, to say the least, an invariable phenomenon. In one case, observed for nearly six months, the aorta and one bronchus were greatly impeded by a scirrhous tumour of the mediastinum; and yet, in spite of the co-existence of two conditions on which reliance is placed to explain pulse-depression, no such depression could be detected. In this case it was interesting to notice post-mortem that though the cancerous nodules had invaded the parietal pericardium, there were no pericardial adhesions and no effusion, and therefore nothing to interfere with the action of the heart. Thus a further explanation of the pulse-depression is demanded. Traube refused to believe that it was due to

narrowing of the aorta or to pericardial effusion alone, or to mere weakening of the heart-muscle, no matter of what degree. He thinks that in the usual condition of the pericardium no inspiration, however deep, can cause tension sufficient to set up resistance to the contraction of the ventricles; but when we have a decided thickening of the parietal pericardium and marked heart-weakness the case is different. It is conceivable under such circumstances that the adherent pericardium might be put on the stretch by inspiration sufficiently to check ventricular contraction, and to cause in consequence depression of the pulse. This explanation receives strong support from the effects of forced inspiration; it is clear that the latter would act powerfully under like conditions, and cause such impediment to the ventricle that the pulse might disappear at the wrist.

In all the cases which I have recorded the following physical signs were met with:—The apex-beat was raised or retained in its natural position, and was indistinctly definable, and receded with systole, such recession being part of a decided undulatory movement—in some cases more decided than in others—over the cardiac area to the left of the sternum; respiration-movements were almost null over the heart—they certainly did not diminish the area of cardiac dulness, which was abnormally increased, especially towards the base. These are the conditions particularly met with in pericardial adhesions associated with pleuritic adhesions in front of the heart. Thus, on the authority of the best writers on heart disease it might have been assumed that pleuro-pericardiac adhesions existed in these cases. Traube's case helps to justify these assumptions. He attributes the pulse-depression in part to pleuro-pericardial adhesions, but does not allude to what the effect would be, if not only the parietal pericardium and the lung were adherent, but the parietal and visceral pericardia were also adherent. It seems clear that in such a condition lung-traction must act with great force, especially if the heart-muscle be at the same time greatly weakened. And in all the cases which I have reported the heart-muscle was undoubtedly weakened, and though there was possibly "inspissation" of unabsorbed effusions in the pericardium, this had little to do with the "pulsus paradoxus." In short, where the heart-muscle is weak, it seems likely that if there be adherent pericardium and pleuro-pericardial adhesions, the "pulsus paradoxus" will be met with.

These explanations are, it is plain, not a contradiction of those given by Kussmaul and Griesinger, but simply their further application; and it is not by any means certain that the original explanation of these writers is not true for some cases. In discussing the subject I have endeavoured to bear in mind that it demands far more inquiry than has yet been given to it, before it can be satisfactorily settled; and had not light been thrown on the cases I have given by the investigations of such able clinicians as I have quoted, less weight would have been attached to them, unsupported as they are by post-mortem examination, and necessarily incomplete because not observed continuously from the beginning to the end.

One of the cases which I have reported shows that pericardial effusion is not the sole cause of pulse-depression in inspiration. In Case 3, which was watched, off and on, from the beginning almost of the pericardial disease, no depression was at first noticed, but it afterwards became very marked, and with it were developed many of the physical signs which have been met with in cases of adhesion of parietal and visceral pericardia and the pleura. And since writing the greater part of this paper, another case has come under my notice, very similar to the one alluded to. In it a pulse-tracing was taken, which showed the great depression and "slowing" caused by deep inspiration, and also the slighter depression of ordinary inspiration. The patient was in the hospital, and we had, therefore, excellent opportunities of watching his disease.

Case 5.—A boy, aged sixteen, was under my care, in the absence of my friend and colleague Dr. Silver, in August, 1877. He was admitted into Charing-cross Hospital in July, having suffered from an attack (probably repeated attacks) of rheumatism. At the time of admission, however, he had no cardiac bruit, but shortly afterwards he had another attack of rheumatism, during which a systolic murmur became audible—very loud towards the left base, and heard, though less distinctly, on the right side. This murmur became gradually less distinct, disappearing with other signs of pericarditis, and in the beginning of August it could be detected only over the sternum and over the adjacent fourth cartilages. A faint systolic murmur could be heard at the apex. At this time the cardiac dulness was increased transversely at the base, but did not reach superficially higher than the third cartilages. Deep inspiration somewhat increased the dulness on the left side. The cardiac impulse was not marked; it was "fluttering," and accompanied by recession of the interspaces towards the left base. The apex-beat was too diffuse and too appreciable, inside and adjacent to the nipple. The radial pulse was moderately full and tense during ordinary breathing, the patient being recumbent, and no change could be detected in quiet inspiration; but the moment a deep breath was taken there occurred a depression of the pulse, and during a long, steady breath the latter seemed almost to disappear from beneath the finger—the pulse became immediately slower—it hesitated, so to speak, and gave one the notion of a ventricle labouring to empty itself, rather than of a intermitting ventricle. Stethoscopic examination yielde accordant results, for the sounds of the heart during force inspiration became indistinct—became lowered, in fact, like the pulse; and of this both Mr. Steedman (the resident medical officer) and I repeatedly satisfied ourselves.

This boy was subject to great dyspnœa on ordinary exertion, and his general state had become extremely unsatisfactory—he was anæmic and emaciated; and yet the evidences of cardiac disease were not very decided. But it was clear that he had, during his last rheumatic attack, contracted pericarditis (if not in previous attacks); and to such pericarditis the physical signs met with were probably due. These signs indicated, or at least suggested, adherent pericardium. They were accompanied by dyspnœa on little exertion, and the "pulsus paradoxus" on forced inspiration. Thus the case seems to be a marked example of the association of this pulse with pleuro-pericardiac adhesions. It indicates also that such adhesions are not the sole cause of the depression of the pulse, and that it is likely, as Traube has maintained, that weakening of the heart-muscle—for example, by myocarditis or by effusions into the pericardium—has a great share in bringing about such depression. The patient discharged himself suddenly; had the opportunity been given, it would have been interesting to note whether, as the heart regained muscular power—diminished by the rheumatic attacks—the "pulsus paradoxus" disappeared wholly or in part.

The diagnosis of the conditions dwelt upon is evidently valuable in regard to treatment. The cases show clearly how advantageous rest, as in other cardiac diseases, must be, but they show also that rest must have a special value immediately after the termination of an attack of rheumatism accompanied by pericarditis, with possible pleuritis from extension, because by it mechanical irritation from increased cardiac action may be avoided, and quiet of the angry tissues be so far secured that adhesions of dangerous nature avoided—resolution rather than adhesion occurring; and thus a condition of things which, after adhesions have formed, no amount of rest can cure. If the diagnosis of the exact cardiac state in the above reports be correct, the cases point out how quickly these adhesions are contracted where the patient persists in pursuing his occupation, and also how especially valuable complete rest must be immediately after a rheumatic attack accompanied by pericarditis, the physical signs of which persist in one shape or another, though all the symptoms except those due to sequential anæmia have disappeared. I venture to think that while there is an increase of dulness about the origins of the large vessels, rest should be insisted on, and the patient carefully watched. And it is clear that if adhesions are set up in spite of every care, the condition, if it be possible to diagnose it, claims, above all others, rest as the chief therapeutic agent, because the least exertion, by causing a deeper inspiration than usual, can interfere with the heart's contraction, and thus with the circulation and the general nutrition. It is needless to point out that in such conditions digitalis must be of special service; and given in some of these cases it had an excellent effect, even where rest was not rigidly adopted. I do not dwell on other items of treatment, but would simply add that even in cases of severe pericardial adhesions a proper appreciation of the pathological conditions will enable us to secure for our patients an alleviation of their sufferings.

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ON THE ALLEGED PRESENCE OF SULPHOCYANIDES IN THE URINE.

By J. L. W. THUDICHUM, M.D.

THE *Medical Times and Gazette* of December 22, 1877, page 676, gives a notice of some recent publications on this subject, which concludes with these remarks:—"Dr. Thudichum has endeavoured to prove that Gscheidlen's method of extracting sulphocyanogen from the urine in combination with lead (Pflüger's *Archiv*, xiv., s. 401) is faulty; but it appears, from Gscheidlen's reply to his criticism, that Thudichum did not observe the necessary caution in repeating the former's experiments, and that there is no reason to doubt their accuracy."

In my paper in Pflüger's *Archiv*, xv. (1877), 12, entitled "On Acetic Acid, Formic Acid, and supposed Sulphurous and Nitrous Acid from Human Urine," I do not endeavour to prove that Gscheidlen's proceeding for extracting sulphocyanic acid from the urine in combination with lead is faulty; but I prove, in a manner which is quite incontrovertible, that Gscheidlen's alleged result of his proceedings is impossible. Gscheidlen assumed that sulphocyanide of lead was insoluble even in boiling water. I prove, on the contrary, that sulphocyanide of lead is soluble in water; that 1000 parts of water of 15° C. hold three parts of sulphocyanide of lead in solution; and that boiling water dissolves a much large quantity of sulphocyanide, which is deposited in crystals unchanged on cooling. I prove that a cold saturated solution of sulphocyanide of lead, evaporated to half its bulk, deposits large crystals, which, by elementary analysis of all their constituents, are shown to be pure sulphocyanide of lead.

	Theory of $Pb(CNS)_2$.	Found.
C . . .	7·43	7·46
N . . .	8·66	8·64
Pb . . .	64·08	63·96
S . . .	19·83	19·94
	100·00	100·00

It follows from this, with certainty, that sulphocyanide of lead could be obtained from urine by Gscheidlen's proceeding only in case each litre of cold urine extract contained more than three grammes of the salt. In case the extract were hot, a deposit of lead sulphocyanide could only be obtained if a much larger quantity were present.

But Gscheidlen obtained his alleged sulphocyanide of lead by heating on the water-bath an extract previously treated with lead acetate—the assumed insolubility of the sulphocyanide notwithstanding, and filtered from the precipitate; the slight deposit obtained on heating he now exhausted with boiling water, and assumed the insoluble residue, amounting to 0·1381 gramme from fourteen litres of urine, to be pure sulphocyanide.

Of course this insoluble residue could not be sulphocyanide in any case. It was so small in quantity that one fallacious test with nitric acid absorbed the whole of it. No diagnostic test was applied to it, and no elementary analysis of it was made. This is quite as it should be. An impossible case cannot be proved.

In my second paper concerning this subject (Pflüger's *Archiv*, xv., 1877, 52) I give an account of experiments undertaken to find out, if possible, what sort of compound Gscheidlen could have obtained by his lead process. I show that, however varied the experiment was made, however carefully all precipitates and liquids were examined, no sulphocyanide was obtained; so that it could also not have been formed during the proceeding.

The experiments pointed towards the sulphur compound in urine which has engaged the attention of a number of observers, amongst them Ronalds, Griffiths, Schönbein, and others. But this is immaterial to the present issue.

In his reply, Gscheidlen takes refuge behind Liebig, whose statements regarding lead sulphocyanide he misunderstands and misinterprets, in the same manner as do the authors of handbooks in different languages which he quotes in his support.

Of the sulphocyanide of lead crystals Liebig says:—"They are hardly soluble in cold water, but lose their lustre by continued washing; after boiling with water the liquid has an acid reaction, and there remains a yellow powder, which is quite insoluble in water."

There is only one error in this account—namely, that the yellow powder was quite insoluble; it is soluble with difficulty only, *i.e.*, slowly, in boiling water.

The foregoing statement of Liebig has been misinterpreted by many chemical authors who have mentioned the subject, to this effect: "Sulphocyanide of lead is insoluble in water; when boiled with water it decomposes, yielding a liquid which has an acid reaction, and leaving a yellow insoluble powder of unknown composition." (See, for example, Gmelin's Handbook, Cavendish Society edit., viii., 1853, 88.) Liebig's crystals obtained by precipitation (he analysed them unboiled; not the yellow powder which remained after boiling, as Gscheidlen erroneously supposes) had the same composition as mine obtained by crystallisation from a cold saturated solution after concentration. Liebig's crystals were by no means insoluble in water, as they lost their lustre by prolonged washing—a sure sign of surface corrosion by solution. The decomposition or resolution into heterogeneous products of the crystals of sulphocyanide of lead by boiling water is a fiction of the authors of handbooks merely; it is not stated by Liebig, and it is not a fact.

I have never said that the urine did not contain any sulphocyanic acid; I have only said, and still maintain, that nobody has ever proved this acid to be there. Whoever wants to furnish this proof so as not to be liable to error and subject to doubt, must (1) isolate sulphocyanic acid in substance, distil it at least once, and combine it with bases in a crystallised form; (2) subject one of these compounds to elementary analysis, and prove the presence in the necessary proportion of all the elements; (3) prove that acid and salts yield the characteristic reactions.

Those who perceive any importance in this question will perhaps connect it with the chemistry of the saliva on the one, and that of the organic sulphur compound in the urine (already alluded to) on the other hand. The saliva gives the red reaction for sulphocyanide with ferric chloride; it also gives the blue reaction with iodic acid and boiled starch, which, as I have shown in this research, also belongs to sulphocyanic acid. The secretion of the nose also contains sulphocyanic acid.

What, then, is more likely than that the urine should contain the sulphocyanic acid swallowed with the saliva? Leared (*Proceedings of the Royal Society*, xvi., 1870, 18) has indeed made it probable long before this, and has also endeavoured to trace it in its course through the blood. But his opinion is only supported by colour-reactions, and not by any of the cardinal proofs which I have above declared to be indispensable.

Mere colour-reactions can decide nothing in the case of so complicated a liquid as the urine. Several compounds contained in it mock all the colour-tests of sulphocyanic acid—urochrome and uropittine, the ferric test; uric acid, the iodate and starch test; a fixed organic sulphur-compound yields hydrothion with zinc and hydrochloric acid. The mere presence of sulphur in any precipitate is also no sign of the presence of sulphocyanide in it, for a fixed organic sulphur-compound combines with lead, exchanges the lead for sodic carbonate, and decomposes in this solution on being heated, at least partly; a fixed organic sulphur compound is precipitated from urine by phosphomolybdic acid, exchanges this for caustic baryta, and, on evaporation of this solution, yields under decomposition free sulphur and sulphite of barium—a sulphuretted organic alkaloid containing sulphur in two forms!

Gscheidlen's "sulphocyanide of lead from human urine" is one of a large tribe of fallacies which disfigure and corrupt the physiology of the present day. The handbooks and journals of physiology in this country, in France, and in Germany literally teem with false data, assumed to be facts, and therefore not altogether improperly termed false facts by one of the greatest English philosophers. Of these "false facts" I have already pointed out, in mere self-defence against such imputations as those above quoted, a great number, in articles which have been published in Pflüger's *Archiv*, Liebig's *Annalen*, the *Journal of the Chemical Society*, the *Chemical News*, the *Moniteur Scientifique*, and the *American Chemist*. Another extensive weeding will soon be published, and the medical profession will then be in a position to judge for themselves whether or not physiology, more particularly chemical physiology, in doctrine

and research is, as I maintain it is, bound to undergo a reform. In conclusion, two further circumstances in support of my opinion regarding sulphocyanide in urine may be mentioned. Gorup-Besanez searched for it unsuccessfully already several years ago, and does not believe it to be present in human urine. Then the experiment of Gscheidlen upon a dog, "whose salivary secretions had all been prevented from entering the digestive tract by means of external fistulæ," and whose urine, having previously yielded some reactions for sulphocyanide, after the establishment of the fistulæ ceased to do so, should be considered by the light of the statement of Hoppe-Seyler ("Physiol. Chem.," ii., 1878, 186), that he had never found sulphocyanogen in the saliva of dogs.

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REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GUY'S HOSPITAL.

RUPTURED QUADRICEPS EXTENSOR TENDON.

(Under the care of Mr. BRYANT.)
[Reported by Mr. G. F. Dixon.]

Henry C., an engineer's labourer, aged forty-two, of good personal and family history, was admitted into the Job ward on the 28th March, 1877, under Mr. Bryant's care. Five weeks previously he was walking on the side of the railway, and, it being dark, he caught his foot in a rut and fell forwards against a log of wood, finally rolling over into a coal hole, about ten feet deep. He was unable to get up without help; but with some assistance walked home, the distance being a mile. The fall took a good deal of skin off the shin of his right leg, and pain came at the same time in his right knee. He was ordered by a medical man to poultice the knee with hops and bran, which relieved him of pain but did him no good. When admitted, the patient was a big, healthy-looking man; the leg lay straight and seemed normal in size, with the exception of a swelling over the inner condyle, which gave little or no pain on pressure except when bent, and a hollow above the patella extending one-third up the thigh, and a ridge on the outer side, which seemed to be the sheath of the tendon of the muscle. In the upper two-thirds of the thigh there is a large swelling about seven inches long and an inch and a half broad, this being clearly the rectus muscle, which had retracted after its rupture at its lower end. The knee seemed very stiff and there was no movement, being easier when fully extended and straight; but there was a little pain all down the outer side from the great trochanter to the external condyle.

April 2.—The patient was much the same.

20th.—The man left the hospital. The space had not filled up much since he came in, and Mr. Bryant thought it never would; but he walked decidedly better. In walking he turned the foot out a little and did not bend the knee much. His general health all through had been excellent.

MIDDLESEX HOSPITAL.

DISLOCATION OF STERNAL END OF CLAVICLE.

[Notes by Mr. E. A. Fardon, Junior House-Surgeon.]

The following case is of some interest as being apparently an almost spontaneous dislocation of the clavicle.

Eliza R., aged twenty, a dressmaker, a well-developed, healthy woman, applied as an out-patient at the Middlesex Hospital on February 11. She stated that as long ago as last summer she noticed that she was gradually becoming unable to use her right arm so well as she had been, particularly in lifting and carrying heavy weights, and that this inability increased so as to occasion her considerable fear lest she might at some time lose the use of this arm altogether. She had no local pain or tenderness, and it was not till the following Christmas that she noticed some slight swelling at the sternal end of this clavicle. The swelling gradually increased until the above date (February 11), when she suddenly felt what she described as "a little jerk" in the region of the swelling. When this happened she was engaged in sewing a piece of ordinary work; it was not accompanied by any particular pain, but there was a marked increase in the inability to use her arm.

On examination, the sternal end of the right clavicle was found to be dislocated forwards and resting on the front of the sternum. There was no effusion, and, as far as could be ascertained, no inflammatory condition of the joint or evidence of any joint-disease, neither was there any tumour behind the joint. There was no difficulty at all in reducing the dislocation, and its reduction gave the patient no pain. By bring the arm forwards across the chest, and bandaging it so that the hand rested in front of the opposite shoulder, the displaced bone easily retained its proper position. It was kept so bandaged for about three weeks, no swelling, pain, or any contusion of the soft parts about the joint exhibiting themselves. At the end of this time any ordinary movement of the arm could be indulged in without displacing the bone, but as a matter of precaution it was thought advisable to provide the patient with a pad so constructed as to exert a moderate downward and backward pressure over the joint. This pad was connected, by means of a steel spring passing under the opposite axilla, with another oval pad placed over the spine between the shoulders. She is now able to follow her occupation without inconvenience, and states that she has quite recovered the use of her arm.

BRISTOL ROYAL INFIRMARY.

TWO CASES OF SUICIDAL FRACTURE OF THE SKULL.

(Under the care of Mr. STEELE.)
[Reported by J. Greig Smith, M.A., M.B., House-Surgeon.]

Case 1.—H. S., aged forty-four, a shoemaker, was admitted with a very severe compound depressed fracture of the vertex of the skull—self-inflicted with a hammer. For some time previously the patient had been suffering from great depression of spirits, and had, on several occasions, threatened to take away his own life. On the day of admission, having been left alone for a short time, he placed himself in front of a looking-glass, and struck repeated blows on the top of his head with a shoemaker's hammer weighing nearly three pounds. When discovered he was lying on the floor grasping the head of the hammer, the broken handle lying near him.

On admission he was stupefied, but not comatose. Over an area three inches in diameter the scalp was entirely removed, and for a full inch beyond the soft parts left were pounded to a pulp. In the centre of this area was a depression of the skull exactly two inches in diameter, and three-quarters of an inch in depth. The depressed fragments were much comminuted, and there was considerable splintering of the surrounding undepressed bone. The pericranium was removed to the same extent as the scalp, and the dura mater was found, on the fragments being removed, to have been stripped from the inside of the skull for an inch and a half all round. The depressed pieces of bone having been carefully picked out, the pulpified tissues removed, and the hair shaved, the wound was cleansed with carbolic acid lotion, and the ordinary antiseptic dressing applied. Some sloughs which appeared in a few days were taken away, and the tissues soaked in strong chloride of zinc lotion. After this, under the antiseptic dressing, the wound progressed in the most favourable manner for a fortnight. Granulations formed on the dura mater, and filled up the cavity between it and the bone; and on the outside a zone of granulations was rapidly closing in over the denuded external table. The patient took his food well, and slept well; his temperature, with the exception of a single leap to 105°, continued nearly normal; his pulse never exceeded 120, and was always steady and strong; he was perfectly conscious throughout; and, altogether, it appeared that he would make a good recovery.

On the twentieth day after admission he was suddenly seized with a violent attack of dyspnœa, and died in a few minutes.

At the post-mortem, pale clots were found in the right auricle and ventricle, and a large branch of one pulmonary artery was completely blocked. The brain in the proximity of the wound was strikingly free from marks of inflammation or softening. In fact, beyond a slight increase of subarachnoid fluid, and some flattening of the convolutions, there was nothing abnormal to be seen.

(Under the care of Mr. DOWSON.)

Case 2.—C. C., a decrepit old man of seventy-three, was admitted with extensive lacerated and contused wounds of the scalp, and some slight fractures of the external table of the calvarium, self-inflicted by means of a soda-water bottle. He had succeeded in pounding away the soft parts on the vertex over an area of about two square inches, when the bottle broke. He persevered with the fragments, however, till they became too small to hold; and when he was discovered he was endeavouring with both hands to peel his scalp down over his ears. So persistent and determined were his attempts to do so that for a week after admission his hands had to be constantly confined. There was some sloughing of the soft parts, and a few patches of necrosis of the bone; but the wound on the whole did well. He lived three weeks, death being caused by broncho-pneumonia, from which he was suffering on admission. Two years previously he had endeavoured to commit suicide by cutting his throat.

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Medical Times and Gazette.

SATURDAY, APRIL 6, 1878.

THE NEW MEDICAL BILL.

In our concluding remarks, last week, upon the subject of the New Medical Bill and Conjoint Examining Boards, we promised to return to the consideration of the proposal which it contains for securing uniformity of qualification by giving the whole control of the licensing bodies, as regards the course of education and the character and conduct of the examinations, to the General Medical Council. We suggested that it might not be desirable thus to annihilate the independence of the several licensing bodies, or to entrust the General Medical Council, constituted as it is at present, with so great a power. When we come now to examine the condition to which the licensing bodies would be reduced if this clause were to become law, we find that, as far as their licensing power is concerned, they would be deprived of all independence, and would be reduced to mere bodies of local examiners, with nothing to recommend them but their number—the very evils which the Bill is intended to remedy. On the other hand, the General Medical Council would determine and regulate the subjects, standard, and method of conducting the examinations. They would publish certain regulations respectiug the requisite certificates, the subjects, and the extent and difficulty of the tests, both theoretical and practical. But inasmuch as, after all, such regulations could be made but general, and would be open to the most different interpretations, especially as regards the practical subjects, it would be necessary for the Council to appoint inspectors to visit, and to visit constantly, the various Bodies. We cannot conceive any arrangement that would be likely to prove more unpleasant to professors and examiners than the presence of such an official inspector amongst them, examining in his turn the examiners. Let anyone read the evidence in the report of the Scotch University Commission, and learn how some of the professors view even the present mild form of visitation by members of the Council. Reverend Scotch professors are not likely to tolerate with good grace visitations from "clever" young inspectors—for such they must be, inasmuch as older men, if competent, would have found more lucrative employment. The condition of the examining bodies under such an arrangement as this would indeed be the reverse of independence, for the only appeal that is provided for them against the action of the Medical Council is to the Privy Council, or rather to a quorum, which may consist of two members of that body. The questiou here naturally suggests itself whether the Privy Council is competent to undertake such a duty. We know that the only professional persons amongst them are clergymen and lawyers, whose decisions are never very satisfactory to the parties concerned. Whether they would be more acceptable to our profession, when it has no representatives whatever on this learned body, is more than doubtful. The licensing bodies will find in this proposed despotism such peril to their freedom that they will certainly one and all oppose the Bill.

It may be said, however, that the licensing bodies would, even under such control, virtually regulate their examinations after all, inasmuch as the General Medical Council is composed of representatives of these bodies. But this representation is for such a purpose neither sufficient nor fair. The University of Edinburgh, for example, which is represented by half a vote, has infinitely greater interests at stake in questions relating to medical education than has the Apothecaries' Hall in Ireland, and yet the latter has the advantage of an entire representative. In the same way, the University of Durham, whose units correspond to the hundreds of members of the College of Surgeons, have an equal share in the representation. The proposed control, therefore, of the licensing authorities by the Medical Council would not be a simple transference or shifting of power to a truly representative body. For the same reason, as well as for others which are sufficiently obvious, the responsibility of complete control is too great for the Council to undertake. And, beyond this, we cannot see how the Council, if they accepted such control, could perform the duties which it would involve. If the Council had nothing else to do they might fail, from the inherent difficulty of the task. But the present duties of the Council are more than they can well fulfil; and the control of the examining bodies is only one of several new burthens which the Government proposes to impose upon them. If the General Medical Council were constituted a new State Department, we might reasonably expect them to manage medical education and registration, as these duties are provided for by the new Bill. But the Council is composed of twenty-four members of our profession, who are already so distinguished for their labours, either in the interests of the profession generally, or of the authority which they represent, that they can hardly spare time for the brief

annual session. It is only insuring total and complete failure to pass an Act which will multiply the examining bodies; put them under the control of a Council which cannot possibly fulfil its duties by them; and by interference and inspection give continual occasion for mutual misunderstanding and collision.

If we turn next to the clauses of the Bill that relate to women, we find them so obscure and enigmatical that they could scarcely fail to become subjects for legal discussion and elaborate judgments. But the general interpretation of the women-clauses seems to be as follows:—First, that the licensing bodies are permitted to admit women to their examinations without necessarily granting them, if successful, a voice in their government. Secondly, that the bodies may create new qualifications to give to women as well as to men. Thirdly, that boards formed by the co-operation of bodies are compelled to admit women to their examinations; and that successful female candidates, as well as men, may claim some diploma from any one of the co-operative bodies. Fourthly, that women may not be compelled, if they object to do so, to pass the same examinations as men, without any distinction on the ground of sex. Fifthly, that diplomas so obtained by women entitle them to be registered in the list of qualified practitioners. We do not hesitate to say that these proposals will find acceptance neither with the profession nor with the public nor with women themselves; and that they would destroy, if they became law, what little chance there might be left of co-operation amongst the licensing bodies. The profession would not tolerate that the names of persons who had passed an emasculated examination should appear amongst their own on the Register. The public would reasonably complain that they had no guarantee of the qualifications of women-practitioners in the very departments of medicine in which they might desire to consult them. The women would find themselves admitted to the profession under conditions of inequality with men, which the leaders among them in this movement have always rejected with scorn. As for the Conjoint Scheme under such an arrangement, the English co-operating bodies, for example, would have three courses open for them, to choose which they would follow. They would either, first, have to admit women to their ordinary degrees and qualifications; or, secondly, to create new diplomas for women; or, thirdly, to withdraw from the Conjoint Board. There can be no question which of the three courses the great universities and the medical corporations would adopt. Thus the women-clauses in the Bill, besides the confusion and obscurity which characterise them and the dissatisfaction which they would certainly raise in all quarters, would of themselves destroy the principal object which the Bill is intended to secure, namely, uniformity of qualification by co-operation. If, instead of the plan proposed in the Bill, co-operation were made compulsory, women might be admitted, either under this or under a regulation by the Medical Council, to a special examination suited for their sex, and the names of successful candidates might be placed on a special register.

We have already said that the penal clause of the Bill is satisfactory, but it cannot redeem an otherwise impracticable measure. If passed, it might be expected to protect both the public and the profession against quacks and other pretenders. But, indeed, in this respect the profession requires rather to be protected against itself. One of the most crying abuses amongst us is the employment of unqualified assistants to an enormous extent, with an incalculable loss to the public, to medicine, and to medical education.

There are still in the Bill points connected with the lunacy laws, with dentists, and with midwives, which may claim our attention on another occasion.

COMPULSORY VACCINATION.

The House of Commons decided by a very large majority, on Wednesday, against the second reading of Mr. Pease's Vaccination Law (Penalty) Bill. Mr. Pease and his supporters can hardly have hoped to succeed, for they do not oppose vaccination, nor even compulsory vaccination, but only desire that those who refuse to obey the law shall be able for the sum of twenty shillings to purchase a legal right to go on breaking the law with impunity. Mr. Pease is himself a believer in vaccination, and has been vaccinated three or four times. He said that he had himself broken the law four or five times by refusing to have his children vaccinated according to law; but it appeared from his further statement on this point that he had done no such thing. "In accordance with the advice of those to whom he referred the question of the vaccination of his children, their vaccination was deferred, but all his children had been since vaccinated." It is well known that the law expressly provides that the vaccination of any child may be deferred on medical certificate that delay is advisable. But though Mr. Pease holds even that vaccination should be compulsory—"he had no fault to find with the vaccination laws"—he thinks that when a resisting parent has been once fined in the full sum of twenty shillings, or twice in any smaller amount, for refusing to have a child vaccinated, compulsion should then cease with respect to that child. The penalty or penalties paid shall have purchased for the parent the right to leave that child unprotected against small-pox. The reasoning of Mr. Pease's supporters was, if possible, weaker than his own. Sir Thomas Chambers allowed that vaccination is a great preventive of small-pox, but could not see any good in compulsory vaccination. Mr. Mantz thought it a pity to give ignorant and silly people opportunities of making martyrs of themselves. Mr. Gladstone of course supported the second reading of the Bill; it was already known, through one of his innumerable post-cards, that "his mind is open on the subject of vaccination"; but his chief objection to the present state of things was that the law was not the same for England, Scotland, and Ireland. In Ireland only one penalty can be enforced; and it is doubtful whether a second can be enforced in Scotland. The Scotch and Irish are not so well protected against small-pox as the English are; therefore the protection afforded by the English law should be lowered to the level of that afforded by the laws in Scotland and Ireland! Mr. Forster's argument simply was, that if anyone opposes the law for what he is pleased to call conscience's sake, the law must give way after a decent resistance.

It was easy to refute such arguments as these. There was no question of the value of vaccination, and no need therefore to prove again that vaccination is preventive of small-pox. The fact that that has been proved by an overwhelming mass of evidence is almost universally admitted: and it follows that the unvaccinated child is in constant danger of having to pay the penalty of grievous disfigurement, of loss of sight, or of death itself; and, moreover, of becoming a source of danger to others. The question then was, shall a parent be permitted to purchase the liberty of leaving his child to run such risks, and to suffer, very possibly, such penalties? The child has no option in the matter; and the law therefore intervenes for its protection, and legislates for the child, and for society at large, rather than for the careless, or foolish, or "conscientious" parent. The proposed change in the law would leave the parent, who incurs no danger to health or life by refusing obedience to the law, at liberty to disobey with impunity after a small penalty, but would leave the helpless child still liable to penalties infinitely more terrible, against the enforcement of

which there is no appeal, and from the liability to which there is no safety save through vaccination. Colonel Mure, in speaking against the Bill, declared that he was no lover of cumulative penalties, but that in this matter he saw no means of escaping from them in some form or other. If Mr. Pease's Bill passed we should still have cumulative penalties, but they would come in the shape of disease. And Dr. Lyon Playfair characterised the Bill as one which would legalise the sale of indulgences to commit a breach of the law. The law declares that exposure to death from small-pox is a penalty which it will not allow a child to suffer. But disease takes no account of accumulated penalties incurred by the parent who refuses to obey the law. As our contemporary the *Times* observes—"For no number of recorded convictions will the Destroying Angel pass over the house of the unvaccinated"; and the result is the same whatever may have been the motive of the neglect; therefore, neglect to have a child vaccinated is a breach of parental duty which nothing should be permitted to condone. The House of Commons, happily, takes this view of the matter, and rejected Mr. Pease's Bill by 271 votes against 82.

We do not think, however, that the vaccination laws do not need amendment. We hold, as is well known, that amendment is demanded in two directions. First, provision should be made for vaccination with animal instead of humanised lymph when the use of the latter is objected to; and then, when the parent, after one or more convictions, still refuses to let his child be protected, the legal authorities should take the matter out of his hands, and have his child vaccinated with pure animal lymph, in spite of his opposition.

INFECTED MILK: THE DANGERS OF OUR MILK-SUPPLY.

Amid the alarming frequency of epidemics of typhoid and other zymotic diseases among our town populations, in which milk has been proved, or strongly suspected, to have been the medium of contagion, the publication of an instructive report on the recent outbreak of typhoid in the West-end of Glasgow calls for more than a passing notice. In this report Dr. Russell, the Medical Officer of Health for Glasgow, details the evidence whereby the epidemic in question was conclusively shown to have originated in a contaminated milk-supply; and to his report he has added, in the form of a memorandum, a discussion of the whole question of the dissemination of zymotic diseases by means of milk. Both the report and the memorandum bring out in the strongest light the dangers to which our city populations are liable through the sanitary defects of many of the country dairy farms.

The Glasgow epidemic began in the first week of January of this year. Starting with a suspicion of the medium of contagion, Dr. Russell first traced the milk-supply of the infected households back to the particular dairy whence the supply was drawn from one city dairy to another, and finally succeeded in discovering the real source of all the mischief at a dairy-farm some distance in the country, where there had been several successive cases of typhoid fever. On visiting this farm, placed in "a most picturesque situation at a bend of the Avon," Dr. Russell found that there were still two typhoid patients in the house, that the same persons were acting both as nurses and as dairymaids, and that great carelessness was being exercised in the disposal of the typhoid excreta. Any further despatch of milk from this hot-bed of disease was at once interdicted; but although this was effected within eight days after the first cases were reported in Glasgow, the epidemic was found to have attacked as many as 170 individuals, each one of whom is known to have partaken of the contaminated milk. One distinct area of infection was among the students of the University, whose refreshment-room in the College buildings was supplied with this particular milk. In this way, as far as can be known, sixteen students contracted typhoid, in three cases with a fatal result—a high percentage of mortality, happily not maintained throughout the epidemic.

Now, here was an outbreak, as far as can be seen, entirely due to the existence of disease at a distant country farm. That such a result is possible from such a cause is serious enough, but when we further know that it is not a very unusual occurrence at the present day, the whole matter assumes an aspect which demands the keenest attention. And that our town epidemics have originated in the way indicated, even more frequently than is generally supposed, will appear from the following considerations. In almost all cases where infection has been clearly traced to the milk-supply, the consumers of the milk have for the most part belonged to the upper and middle classes, to whom it is delivered regularly, and in large quantities, daily, from the same milk agents—circumstances which render the investigation of the matter a comparatively easy process. But, as Dr. Russell points out, the majority of our townspeople are supplied through the further agency of small shops distributed through the various streets, where the milk is retailed over the counter to purchasers of small quantities, who buy at uncertain times, and wherever it may happen to be convenient. In these circumstances it is evident how disastrous the consequences of an infected milk-supply might be, without its being possible to trace the evil to its proper source. In this way we can not only account for the absence of proof in many outbreaks, where there have been the strongest suspicions of the milk-supply, but we also find an explanation of the fact observed in most milk epidemics, that along with the nucleus of cases clearly traced to milk-infection there are also, in the poorer districts of the same locality, a number of cases whose causation cannot be satisfactorily established.

But Dr. Russell adduces new and direct evidence of the dangers to which communities are liable through the medium in question. It is well known that all our larger towns derive by far the greater portion of their milk, in the first instance at least, from dairy-farms situated often at great distances in the country—a community like Glasgow, and still more one of the size of London and its suburbs, deriving its supply from a very wide area. As the result of personal inspection of the dairy-farms in this area, as appertaining to Glasgow, conducted by himself and his assistants, Dr. Russell reports:—"From local inspections recently made, embracing about 100 farms taken at random, I can safely assert that few of those farms are without some obvious source of risk of contamination of the milk which they despatch, in the event of disease of a communicable character being present in the household; and while some are well managed, and even satisfactory as to drainage and water-supply, in very many, if not the majority, all the circumstances exist which led to such disastrous effects in the case of this epidemic, excepting the actual presence of disease. Given the source of specific infection, the same results may follow at any time in the hands of the agents who daily distribute the milk from these farms."

Now, the difficulty here is, that these farms are under the jurisdiction, not of the urban authorities within whose bounds the great mischief is done, but of the rural sanitary authorities, whose inadequacy and incompetency for practical sanitation Dr. Russell has good reason to lament; and he asks the very pertinent question: "Are the local authorities of Glasgow and other large towns to wait until this national defect (the want of a working sanitary organisation in country districts) is rectified by legislation, and

meanwhile, for an apparently indefinite length of time, expose the masses of population, whose health is in their keeping, to the risk of repeated invasions of infectious disease from the landward districts; or can something not be done by special legislation to obtain some power of self-protection?" Surely the inhabitants of our larger towns have in their midst sources of disease sufficiently numerous and powerful, without this constant liability to the importation of disease from the surrounding country districts! Of the insufficiency of the existing organisation to cope with the matter no better proof could be furnished than that advanced by Dr. Russell. It appears that in 1875 each local authority received a circular enjoining them, *inter alia*, to inquire from time to time into the existence of contagious or infectious diseases at dairies, and to report the same "to any other local authority within whose district milk from the infected premises may be distributed or sold." Yet it is a remarkable fact that, although milk is distributed daily in Glasgow from hundreds of farms, the circular referred to has not led their respective local authorities to give notice of a single case of infectious disease during these three years. Towns are left to discover such for themselves, by the disease directly imported therefrom into their own communities.

In view, then, of this utter inefficiency of the rural sanitary authorities, Dr. Russell urges that urban authorities should in self-defence be invested with powers in some way securing their own protection from this source of disease. What is clearly wanted is a provision whereby it could not be possible that milk be despatched from any farm whose sanitary arrangements had become defective or where infectious disease had made its appearance. The most advanced local legislative powers in existence, specially directed to the control of milk-infection, stop short at the very point where their extension is most required. The utmost they allow an urban authority to do, is to stop the importation of infected milk when once "it is probable that contagious or infectious disease is being spread, or is likely to be spread," thereby, but they confer no power to anticipate and prevent such an occurrence. But, as Dr. Russell remarks, it is one of the gravest features of a milk epidemic, that before suspicion is aroused in the minds of even the most observant and watchful of urban authorities, the mischief has been done. It is, therefore, very far from sufficient that a contaminated supply may be stopped; it should be impossible or illegal that a suspected supply be sold at all. To secure the latter object Dr. Russell urges upon town authorities the necessity of acquiring powers for prohibiting the sale within their jurisdiction of milk from any farm whose occupant could not produce satisfactory evidence that it was then in a proper sanitary condition in respect of water-supply, drainage, absence of contagious disease, etc. In this way the burden of the proof would be thrown upon any farmer who desired to open up or continue trade relations with a town, and the arrangements and surroundings of the dairy would thereby become liable to the inspection of the town authorities in the likely event of the local authority's failing to do its duty in the matter. But whatever measures may be proposed in the interests of our town populations in this important relation, the great object to be attained is a permanent guarantee that the dairy-farms are maintained in the most satisfactory sanitary condition, and that whenever, from any cause, that condition is departed from, their milk-supply shall be promptly interdicted.

Though we have thus dwelt at some length on what seems to us to be at once the most important and the most difficult feature of the milk question, we do not forget that at any stage of its course, from the dairy-farm to the consumer, milk may become, more readily than almost any other article of diet, subject to contamination. The happy homes of England, whence in the poorer town districts milk is distributed, are something to be seen. They go far to account for the persistence and spread of epidemic diseases in such quarters of our great cities.

THE WEEK.

TOPICS OF THE DAY.

The annual meeting of the Poplar Hospital, East India-road, Poplar, was held last week at that institution under the presidency of Mr. Samuel Gurney. The present building, which was opened as a Hospital in 1855, is now totally inadequate to meet the numerous demands for accommodation, and a fund is being raised for providing new premises, for which purpose bequests and special donations are being set aside. Being situated in close proximity to the Docks, the Hospital devotes especial care to accident cases, which, on account of the dangerous nature of the operations here carried on, are often of a very severe character. The report, which was read, showed that during the past year 4881 persons had been treated, 468 of whom were admitted as in-patients. Within the last five years the total number of cases relieved was 21,732, and the number of cases received during the year under notice was 196 in excess of the heaviest of the four preceding years, whilst the number of deaths that occurred was only 25. The total income for the year amounted to £2833, and the expenditure to £3111, the deficiency being made up by retrenching on the Hospital Extension Fund.

The Volunteer Ambulance Department, which already numbers nearly 400 officers and men belonging to the different metropolitan corps, has made rapid and excellent progress under the efficient teaching of Surgeon-Major Staples, of the Army Medical Department. The services of this officer were placed at the disposal of the Volunteers with the sanction of the War Office authorities, and at a recent inspection of the class, Surgeon-General Munro, who has taken such an active part in perfecting all the details relating to sick-bearers and ambulances for the regular forces, expressed his satisfaction at the proficiency exhibited, and stated that in his opinion the services of the Volunteer Ambulance Department could be at once utilised if required.

The recent announcement that the Earl of Beaconsfield had recommended a grant from the Royal Bounty Fund of £100 to the Universal Beneficent Society, to be applied for the benefit of the Viscountess Kingsland, one of the Society's pensioners, has caused many questions and remarks. This title, which is an Irish one, became extinct on the death of the sixth Viscount in 1833; but it is not generally known that his widow, the lady in question, is a daughter of the late Dr. Willis, who practised in London for many years. The Viscountess was rescued from a state of great poverty by the Beneficent Society about two years ago, and the grant now made is a very seasonable one.

The deaths from small-pox in London, which had been 34 and 53 in the two preceding weeks, were 42 for the week ending 23rd ult.; of these 28 occurred in the Metropolitan Asylum Hospitals, and 2 in the Highgate Small-pox Hospital, the remaining 12 being returned from private dwelling-houses. Of the deceased small-pox patients, 5 had resided in Chelsea, 3 in St. Pancras, 3 in Islington, 4 in Hackney, 6 in Lambeth, and 3 in Wandsworth. Of these 42 fatal cases of small-pox, 18 were certified as unvaccinated, and 14 as vaccinated; in the remaining 10 cases the medical certificates did not give the necessary information as to vaccination. The number of small-pox patients in the Metropolitan Asylum Hospitals, which in the two previous weeks had been 667 and 638, were, in the week

under notice, 642; the number of new cases admitted during that week was 128, against numbers declining from 173 to 119 in the four previous weeks. The Highgate Small-pox Hospital contained 51 patients on the 23rd ult., against 61 and 59 on the two preceding Saturdays.

The North Wales branch of the British Medical Association at a recent meeting discussed the much-vexed question of the necessity for the use of stimulants in the treatment of disease. Dr. Eyton Jones, of Wrexham, bore testimony to the success which had followed the use of stimulants in many cases of pneumonia treated by him. On the other hand, Dr. Turnerwell communicated a case in which a complete cure had been effected in forty-eight hours without the use of stimulants. Mr. Roberts explained that he never prescribed stimulants, and in his varied and extensive practice he had rarely lost a case. Mr. Jones, of Dolgelly, was an advocate of the use of stimulants, and, as a proof that they were not injurious, stated that during the last twenty-one years he had scarcely lost a single case. The termination of the discussion left the question in much the same state in which it was approached.

Our contemporary *Nature* says:—"It was stated at the last meeting of the Royal Dublin Society that a new explosive agent has been discovered by Professor Emerson Reynolds, in the Laboratory of Trinity College, Dublin. It is a mixture of 75 per cent. of chlorate of potassium with 25 per cent. of a body called sulphurea. It is a white powder, which is very easily prepared by the mixture of the materials in the above-named proportions. The new powder can be ignited at a rather lower temperature than ordinary gunpowder, while the effects it produces are even more remarkable than those caused by the usual mixture. Dr. Reynolds states that his powder leaves only 45 per cent. of solid residue, whereas common gunpowder leaves about 57 per cent. It has been used with success in small cannon, but its discoverer considered that its chief use would be for blasting, for shells, for torpedoes, and for similar purposes. Dr. Reynolds pointed out that one of the advantages this powder possesses is that it can be produced at a moment's notice by a comparatively rough mixture of the materials, which can be stored and carried without risk so long as they are separate. The sulphurea, the chief component of the new explosive, was discovered by Dr. Reynolds about ten years ago, and could be easily procured in large quantities from a product of gas manufacture which is at present wasted."

It would appear that the Stafford House Committee have determined to bring their operations to a conclusion. At a meeting held last week it was decided to send instructions to Mr. Barrington Kennett to begin the reduction of the establishments which have been the sources of great benefits to the sick and wounded soldiers in Turkey, and to make arrangements for the transfer of such of them as can be conveniently handed over to the Red Crescent and other organisations engaged in the same benevolent work.

At a meeting of the Ashborne Rural Sanitary Authority, recently held, the Medical Officer of Health reported that an outbreak of scarlatina had occurred at Middleton-by-Wirksworth. It was stated that the child first attacked had, a few days previously, put on, and when taken ill was wearing, a pair of socks which had been worn by a child whilst suffering from scarlatina two years or more ago, and which had been laid by from that time. The Medical Officer of Health for the Pately-bridge Rural Sanitary District, in reporting an epidemic of scarlatina (the origin of which was obscure) at a place called Stean, referred, as one of the probable causes of the outbreak, to the fact that the person at whose house scarlatina first became developed had purchased at a sale by auction a feather bed from a house where it was well known that two persons at least had died from scarlatina in 1870. The bed had never been disinfected, though there was ground for suspecting that on it one of the individuals had died. Small-pox has been imported into Feltham by a domestic servant from London, who came to her home by train in the ordinary way while suffering from the disease. Such cases as these, the *Sanitary Record* says, are by far too common, and it is to be wished that sanitary authorities would more rigorously exercise the powers which they possess under the Public Health Act, in prosecuting persons who are responsible for the exposure of cases of infectious disease.

Saturday last was appointed for the sixth Hospital Saturday collection in Birmingham, and the total sum realised was £2141, being £84 in excess of last year's appeal. The increase is attributed to the adoption of the system of small weekly contributions by the workpeople at various establishments. This amount contrasts most favourably with the sum obtained at the last Hospital Saturday collection in London (£5786), and shows one of two things—either the working-classes of Birmingham are much more cordial in their support of the hospitals of the town, or the organisation of the promoters of the scheme is infinitely superior to that of the metropolitan body.

One of those unfortunate mistakes in the identification of bodies which occasionally happen is reported from Ireland. Two paupers having died in the Galway Workhouse, the relatives claimed the body of one, and the other corpse, being unclaimed, was handed over to the medical school connected with the Queen's College. In removing the remains at night the wrong body was taken, and was dissected before the blunder was discovered. The relatives came to bury the body of their kinsman, but only some portions remained, which were placed in a coffin and given to them. On the way to the grave the lightness of the coffin aroused suspicion, and the lid having been removed the truth became apparent. The daughter of the deceased, in a frenzy of excitement, took the remains in her apron and flung them at the Workhouse gate. A great deal of indignation has been aroused by the circumstance, and the authorities have promised that a full inquiry shall be instituted.

RECOVERY FROM POISONING BY CYANIDE OF POTASSIUM. Dr. Mueller-Warnek, of Kiel (*Berl. Klin. Wochenschrift*, No. 5, 1878), reports a case of severe poisoning by cyanide of potassium, which ended in recovery, and which is interesting in several respects. The patient, aged twenty-four, a photographer, crossed in love, drank a small tumblerful of a solution of one part cyanide in fifty water, a quantity equivalent to thirty or thirty-six grains of the salt, after which he quickly fell to the ground unconscious. He was admitted into the hospital within an hour of his attempt at suicide, in the asphyxial stage of hydrocyanic poisoning, after having spontaneously vomited once. He was first treated with a subcutaneous injection of two grammes of sulphuric ether, and his stomach was repeatedly washed out with the stomach-pump until the water which returned was completely free from any smell of hydrocyanic acid. Several litres of water were necessary to accomplish this. In spite, however, of these measures, as well as of the subcutaneous injection of 2·0 grammes of ether, in which 0·2 gramme of camphor was dissolved, the symptoms of œdema of the lung and general collapse steadily increased, and it was necessary to have recourse to artificial respiration. Dr. Warnek now had the patient, as a last resource, immersed in a warm bath, and poured iced water on his head and neck from a

can at a height of several feet. The effect produced was remarkable: the breathing rapidly improved, the pulse became regular and gained in strength, and at the end of an hour the patient, after a second injection with camphorated ether, was wrapped in blankets and put to bed. An hour afterwards all symptoms of œdema of the lungs had disappeared, and at seven o'clock in the evening the patient had entirely recovered his consciousness, and remembered what he had done. Three days afterwards he complained of occipital and gastric pains, and of a feeling of general weakness, and his speech was noticed to be difficult and stuttering. On the fifth day he was able to leave his bed, but, curiously enough, he was unable to stand or walk without assistance. In standing his legs trembled violently, so that he staggered from side to side, and would have fallen if not supported. In walking, if held by both arms, he could just advance by very short and trembling steps, slowly putting out one leg in front of the other, the whole character of his movements strongly reminding the observer of some of the severe forms of lateral and insular sclerosis of the spinal cord. This abnormal condition of the lower extremities disappeared more rapidly than the disturbances of speech, which persisted for more than two months. Dr. Warnek points out that the muscles would be directly affected by the poisonous action of the cyanide on their motor centres as well as on their proper substance, and indirectly by an alteration in the blood supplying those centres and the substance of the muscles, owing to its chemical combination with hydrocyanic acid. The more permanent disturbances of speech are more difficult to account for satisfactorily; but the introduction of other poisons into the human body is occasionally followed by perversion of one or other motor functions. The ordinary fatal dose of cyanide of potassium is said to be from two to four and a half grains (Husemann, Guy), but it is probable that at least thirty grains were swallowed in the case before us, or rather that the quantity of liquid swallowed would have contained an equivalent to thirty grains if the solution, which had been made some time, had retained its original strength (one in fifty). Probably, however, this strength had been reduced by a decomposition of a portion of the cyanide into innocuous compounds, such as formiate of potash and ammonia; and the fact that the poison was taken on a full stomach, so that its absorption was retarded, and that a good deal of it was expelled by vomiting soon after ingestion, may explain why the patient's life was prolonged until medical aid could be procured. In any case, Dr. Warnek believes he must have died if left to himself.

REPORT ON FRIENDLY SOCIETIES.

THE reports of the Chief Registrar of Friendly Societies, Industrial and Provident Societies, and Trade Unions, for the year ending December 31, 1876, recently published, present few features of general interest. During the year the forms for quinquennial returns of sickness and mortality were issued, and the total number of returns received for the three kingdoms was 10,008, the largest number ever received. The Report admits, however, that out of these a large number will be found to be practically of little value in consequence of being imperfectly or incorrectly drawn up; and it may be added that very few of the returns from societies having more than 1000 members, purporting to be drawn up on the principle recommended by the Actuarial Commission, of grouping the members according to years of birth, can be said to be trustworthy—indeed, the greater portion are *primâ facie* inaccurate. The most common error appears to have been to put down particulars of those only who had died or received sick pay in the five years, although express instructions to the contrary were placed at the top of the sheets—viz., "list of all the members who have been assured for sick pay during the five years, whether they have been sick or not; and where they have been sick, the duration of sickness experienced by each." One of the most important matters as to which information is required is the duration of attacks of sickness, because in nearly all societies the full sickness allowance only lasts for a certain length of time, and then, in the event of the member being still sick, the amount of the allowance is reduced; and full details are required to calculate the effect of such sickness upon the society's financial position. The matter is further complicated by the fact that some societies issue the sickness allowance for terms of less than a complete week; some counting seven days to the week, and others only six. Whether the present quinquennial returns will furnish any trustworthy information cannot be stated, the Registrar observes, until they have been submitted to a very careful examination.

With reference to the law regarding the insurance of children's lives, the Registrar remarks that, notwithstanding the provisions of the Friendly Societies' Amendment Act of 1876, a certain amount of agitation has continued to be kept up on the ground of the registrar's certificate of death being made compulsory. An idea appears to have been entertained by many of the registrars of deaths, in consequence of the general authority given to the Registrar of Friendly Societies to prosecute for penalties under the Act, that it is sufficient for them to inform him that a breach of the law in respect to certificates of death has been committed, for him to take up the matter at once and prosecute. But inasmuch as Sub-section 2 of Section 14 of the Act of 1875—by which the taking out of a registrar's certificate for death at all ages is rendered compulsory upon registered societies—was inserted only at the instance of the Registrar-General, and for the protection of the interests of the registrars of death, the Chief Registrar would not feel himself justified in applying for the sanction of the Treasury to prosecutions which would virtually be instituted solely in defence of those interests which the parties themselves are fully competent to protect, under the provision allowing any person aggrieved to sue; and the same applies in cases arising under the 28th Section, so long as the offence consists only in the omission to take out a certificate for a payment on the death of a child under ten years of age. It may be otherwise in cases where the statutory limits are exceeded so as to involve a presumption of danger to infantile life. But in all such cases it would be for the Chief Registrar to consider whether the circumstances were such as to call for an official prosecution. Very few instances have come to notice in which over-insurance of children's lives has taken place since the Act of 1875 came into force, but nevertheless one large industrial assurance company is stated to be systematically violating the law by instructing its collectors to pay without receipt and without inquiry all sums assured. The liability of unregistered societies to the penalties of Section 28 for irregular payments on the deaths of children has thrown some light on one of the most obscure portions of the friendly society system—viz., the prevalence of unregistered societies. In the town of Stockport the Chief Registrar has been informed by the secretary to one of these that there are upwards of forty unregistered burial clubs in the place, and he has been supplied with a printed list of twenty-seven, numbering together 53,317 members. It is clear, therefore, from this, that an enormous number of these unregistered societies must exist in the manufacturing counties, which have hitherto defied investigation, and which may easily escape the notice of the registrars of death. It need hardly be pointed out that if the practice of insuring burial benefits is a danger to infant life, such

danger must be greatest in unregistered societies; and the fact that most of them are alleged still to disobey the law, in paying money on the death of children without a registrar's certificate, only heightens such danger; moreover, considering that registry is gratuitous, it seems extraordinary that these societies still persist in remaining unregistered.

THE ROYAL COLLEGES OF PHYSICIANS AND OF SURGEONS AND THE MEDICAL BILL.

At a special meeting of the Council of the Royal College of Surgeons, held on Monday last, the Medical Bill brought forward by the Duke of Richmond and Gordon was taken into consideration, and after considerable discussion a carefully worded minute, embodying the objections of the Council to the Bill, was agreed to. It was then resolved that the Duke of Richmond should be requested to receive, as soon as might be convenient to his Grace, a deputation from the Council to present the paper and to urge upon his consideration the objections set forth in it. On Tuesday, the 2nd inst., the Bill was considered at a special meeting of the Fellows of the Royal College of Physicians, when it was decided that the Duke of Richmond be asked to receive a deputation, consisting of the President and some of the Fellows, from that College also, on the subject of the Bill. We believe that the College did not at all fully or minutely consider the Bill, and did not pass any resolution setting forth the objectionable points in it; but were content, for the present, with empowering the deputation to press strongly upon the Duke's attention those parts of the Bill to which the College feel most bound to object, and to urge the necessity of their modification or withdrawal. One of these parts is, of course, the deprival of the power that the College possesses, and always has possessed, of giving a qualification in surgery as well as in medicine; another, the absolute powers proposed to be given to the General Medical Council to regulate all the examinations for qualifications, to determine the standard for passing, to settle the curriculum, etc.; another, the despotic authority of the Privy Council, and of *any two* members of it, over the Medical Council and all the medical authorities; and others, the clauses relating to the invention of a new and limited-liability sort of medical diploma, and to the examination of women-candidates being ruled according to their own wishes; and the apparent confusion in the clauses respecting the granting diplomas to women. The deputation will report to the College the result of their interview with the Duke of Richmond, and the College will probably then consider whether it will be necessary to petition the Legislature against the Bill. At the same meeting permission was granted to Dr. Willis to publish in his Life of Harvey, now nearly completed, a letter, in the possession of the College, written by Harvey to his friend Dr. Baldwin Hamey. A communication was read from the Secretaries of the "Harvey Tercentenary Memorial Fund," soliciting the assistance of the College in providing funds for a proposed statue of Harvey; and Dr. Quain gave notice that at the next College meeting he would move that a grant be made for this purpose from the College funds.

THE PHYSIOLOGICAL ACTION OF SALTS OF COPPER.

According to Burq and Ducom (*Archiv de Physiol. Norm. et Path.*, 1877), the effects of copper on the organism are by no means so poisonous as generally supposed. They gave as much as eight grammes of powdered metallic copper, and four grammes of oxide and suboxide of copper, to dogs in a single dose without any harm ensuing except vomiting and a little diarrhœa in a few cases, and they also gave daily doses of the same drugs ranging from half a gramme to four grammes during a period of four weeks with identical results. The drugs were mixed with the animals' food, and some of the dogs even increased in weight during the experiments. Other dogs were fed for a long time with food to which a small quantity of vinegar had been added, and which had been kept for twenty-four hours in copper vessels, on the interior of which there was an abundant deposit of verdigris. With the exception of some aversion to their food after the experiment had been carried on for some time, the animals appeared perfectly well. A third series of experiments was made with various soluble salts of copper (sulphate, acetate, ammonio-chloride) mixed, as before, with the food. Doses up to one gramme per diem were well tolerated, but larger doses caused rather severe vomiting an hour or two after. If large doses were continued for many days, most of the dogs refused their food, or else they suffered from diarrhœa, and, although eating as much food as before, quickly emaciated and died. In all these experiments copper could be detected post-mortem in the liver, spleen, and kidneys. Similar experiments to the above have been described in the same *Archives* by Gallippe. He found that by beginning with one-fifth of a gramme of the sulphate, neutral acetate, lactate, and citrate of copper, as much as a gramme and three-quarters could at last be given per diem without any apparent injury to the animal, or even the occurrence of vomiting and diarrhœa. The comparative inocuousness of copper salts when ingested by the stomach is difficult to explain satisfactorily, for Harnaek (*Archiv für Exp. Path.*, iii.) found that the subcutaneous injection of one-fortieth of a gramme of oxide of copper, or the injection of an equal quantity into the veins, produced in dogs complete loss of irritability of the striped muscles, and in some cases convulsions. Possibly, when mixed with the food, the copper salts are so gradually absorbed that only a small quantity of the poison is circulating at one time, that which was previously absorbed being partly eliminated by the kidneys, and partly stored up out of harm's way in the liver and spleen. Probably also some portion of the copper passes out unabsorbed in the fæces.

BLOEMFONTEIN.

The following details about the capital of the Orange Free State, to which we briefly alluded last week (page 312), are derived from Mr. Anthony Trollope's new work, "South Africa," and are, on the whole, not of an encouraging nature. As far as climate goes, Bloemfontein is, he thinks, very fortunate. The climate is dry and temperate, without great heat, "perhaps more equally so through the entire year than at any other known place." This said, we have said nearly all. The country is dusty, ugly, and very unattractive; and Mr. Trollope scarcely saw a blade of grass or a tree for a hundred miles on either side of the town. The latter lies isolated in a plain; the journey to it can only be taken by coach from Fort Elizabeth on the coast, 400 miles away, and involves six days' travelling of thirteen hours a day, part of it over mountains, and along a very rough road. Even when the railway has been opened for some distance from Fort Elizabeth, it will probably be some years before the coaching work can be done in less than five days. The town consists of four main streets running parallel to each other, with perhaps that number of cross streets, and a large oblong square in the centre. The houses are, as a rule, one-storeyed. The water-supply is said to be unfailing, but food and all the necessaries of life are dear, the chief supplies being drawn from Fort Elizabeth. Butter costs 5s. 6d. per lb. Fuel is scarce and dear, but, happily, is little needed except for cooking purposes. There is no telegraphic communication at present with the coast. The coach journey up costs £18 per head, and

2s. 6d. per lb. is charged for all luggage except a small bag. Accommodation is difficult to find on first arriving, but there are some good hotels. Mr. Trollope doubts whether, owing to the fatigue of the journey, feeble persons should ever be sent there, though he thinks that "the air of the place when reached is in the highest degree fit for weak lungs." One remark of Mr. Trollope's, which even a medical observer who takes the trouble to inquire about certain climates in distant lands must in part at least agree with, is worth repeating here. "It seems," he says, "to the ignorant as though the doctors were ever seeking in increased distance that relief for their patients which they cannot find in increased skill." A hard saying, no doubt, but worth thinking over.

PRACTICAL PHYSIOLOGY IN DUBLIN.

THE recent action of the Board of Trinity College, Dublin, and of the Professors of the School of Physic in Ireland, in declining to acquiesce in the recommendation of the University Council that certain places in the University should be registered under the "Cruelty to Animals" Act (39 and 40 Vict., chap. 77), inflicted a sufficiently severe injury on the study of practical physiology in Dublin—against which resolution, by the way, a petition is being largely signed. But within the past few days another blow has been struck at the scientific study of medicine, and on this occasion by the Council of the Royal College of Surgeons in Ireland. The facts are the following:—In accordance with a by-law of the College, three winter six-months courses of lectures on physiology and on surgery are required of candidates for the licence of the College. On more than one occasion candidates have been allowed to substitute a short course of practical or operative surgery for one of the winter courses, *malgré* the existence of the by-law. Recently an application was made by Dr. R. J. Harvey, Registrar of the Carmichael School of Medicine, that some of the students of that School in presenting themselves for examination for the licence of the College might be allowed—even as a matter of "special grace"—to substitute a course of practical physiology for one of the winter courses of lectures in physiology. The application was favourably entertained by the Inspection Committee of the College, who recommended that it should be acceded to by the Council. The latter body, however, refused the request, and by doing so disfranchised the certificate in practical physiology of a teaching institution which is not content with resting on the traditions of the "Dublin School" of Medicine.

THE HEALTH OF BIRMINGHAM.

THE health statistics for the town of Birmingham during the last quarter of the year 1877 compare somewhat unfavourably with those of the corresponding quarter of the previous year. The deaths registered during the period were 2284, equivalent to an annual death-rate of 24·21 per 1000 of the population. The death-rates in the fourth quarters of 1873, 1874, 1875, and 1876 were respectively 26·95, 28·10, 24·42, and 19·81. Dr. Alfred Hill, the Medical Officer of Health, states that this increase in the death-rate on the fourth quarter of the previous year is owing to the greater fatality, when compared with the corresponding period of last year, of diseases of the respiratory organs, and to the excessive mortality from both measles and whooping-cough. Whooping-cough was responsible for 125 deaths, as compared with only 26 in the fourth quarter of 1876, and 55 in the similar period of 1875; and measles occasioned 84 deaths, against 30 in the last quarter of 1876. Only three cases of small-pox were brought under the notice of Dr. Hill. They all occurred in the same house, and one terminated fatally. The house, he adds, was old, small, and dirty, and the external arrangements of the premises were anything but satisfactory. The knowledge of the existence of this disease only reached Dr. Hill accidentally, and he is of opinion that if early information had been obtained of the first case, the two others might almost certainly have been prevented, and a valuable life probably saved.

CHAULMOOGRA OIL (OLEUM GYNOCARDIÆ).

CHAULMOOGRA OIL is a remedy which has been employed for centuries by the natives of India in the cure of leprosy and other forms of skin disease. It is a fixed oil procured by expression from the seeds of the *Gynocardia odorata*, which are now officinal in the Indian Pharmacopœia (*Gynocardiæ semina*). Mr. R. C. Lepage, late of Calcutta, has collected in pamphlet form all that is known regarding both the plant and the oil. The use of the latter was first brought under the notice of the profession in 1854 by Dr. Mouat, of the Bengal Medical Service, who had employed it with considerable success in a few cases of leprosy, scrofula, and constitutional syphilis. But though others have found the remedy of service in these and allied affections, its more general employment has been retarded by the persistent adulteration of the oil by the natives of India. Dr. Dymock, of Bombay, however, has recently discovered means for detecting its adulteration, so that it is believed it can now be procured in a state of purity, and it is expected that the remedy will be found of real service in the above-mentioned diseases, and others of a similar nature. The dose of the oil, which is somewhat unpleasant in flavour and smell, is from five to six drops gradually increased. It is best given after meals, and may be taken in milk, glycerine, or cod-liver oil. The seeds, coarsely powdered, may be given in the form of pills of five or six grains. In skin diseases the oil should also be applied externally, or the unguentum gynocardiæ (I.P.), which is prepared by beating the seeds to a paste along with simple ointment.

THE TREATMENT OF ULCERS.

ACCORDING to Dr. Mandelbaum of Odessa (*Berl. Klin. Wochenschrift*, No. 10, 1878), all ulcers of the leg and elsewhere, whatever their character, age, and extent, can be cured by the following method. If they are very deep, with much loss of tissue and with undermined, uneven, callous edges, they are first to be scraped away until healthy tissue is reached, with the modification of Volkmann's spoon as suggested by Hebra; they are then to be covered for several days with a thick layer of iodoform until fresh granulations spring up (as they are certain to do), and until the base of the ulcer has reached the level of the surrounding skin. When this point in the healing process is reached, the ulcer is to be strapped daily with equal parts of mercurial and soap plaster of rather soft consistence, and carefully and evenly applied. Shallow ulcers which are only covered with a thick layer of pus require no preliminary scraping, and can be at once treated with iodoform, and later on strapped as above described.

A HAY FEVER ASSOCIATION.

UNDER this title there exists at Bethlehem, New Hampshire, U.S.A., a sort of club consisting of a number of individuals mutually interested in avoiding the annoyance and other evil effects of hay fever. Bethlehem is 1450 feet above the level of the sea, and is one of the few places in America where hay fever does not occur, and persons subject to it remain free if they arrive there early enough, *i.e.*, before August 20, and remain until cool weather sets in, about October 1. During this period, therefore, the members of the Association can enjoy one another's society, and exchange congratulations on their immunity from sneezing.

THE ARMY MEDICAL SERVICE.

In the controversy which is at present taking place on the unsatisfactory condition of the Army Medical Department, it seems to be generally admitted that the unification system introduced by the last Warrant must be allowed to stand, whatever modifications may eventually be adopted. The Secretary of State for War, in introducing the Army Estimates for the year 1878-79, expressed himself decidedly on this point, and the authorities are working assiduously to perfect the system as it now stands. Two army circulars bearing on the subject have been issued recently, one revising the regulations for the Army Hospital Corps, and the other propounding amended regulations relating to station-hospitals. The latter is too long to give *in extenso*, but it lays down that in future station-hospitals will be open for the reception and treatment of sick for all corps in garrison, including the auxiliary forces, marines, or seamen of the Royal Navy. These hospitals, though subject to the authority of the commanding officer, are to be under the control and superintendence of the principal medical officer of the district, the appointments of the medical officers attached to them being in the hands of the Director-General. Minute instructions are given for the proper distribution of all duties, and the bulk of the unprofessional work is very properly removed from medical officers, who are thus left with more time to devote to their patients. The station-hospital system is undoubtedly the most advantageous for the service, and it rests with Mr. Hardy to propound some scheme which shall unite increased efficiency with sufficient inducements to draw good men to the Army Medical Department.

The following letter has been addressed, in the name of the Secretary for War, to the different licensing bodies and medical schools in Ireland:—

"Sir,—I am directed by Mr. Secretary Hardy to acquaint you that it has been brought to his notice that a great unwillingness to compete for commissions in the Army Medical Department has for some time existed on the part of medical students, and this notwithstanding that many measures for the improvement of the Department have been introduced by Mr. Hardy and his predecessors.

"Mr. Hardy is most anxious to place the Department in such a condition as to attract the best candidates in the profession, and with this object in view he will be much obliged if you will favour him unreservedly with the opinion of the [university, college, or school] as to the specific causes which produce the existing difficulty in obtaining candidates for the Department.

"I am, Sir, your obedient servant,

"RALPH THOMPSON."

MEDICAL PARLIAMENTARY AFFAIRS.

Army Medical Officers.—In the House of Lords, on Thursday, March 28, Lord Ellenborough asked whether it was intended to revert to the practice of marking deserters; and also to that of gazetting medical officers to regiments, in lieu of the more recent practice of gazetting to the medical staff of the Army at large only, in view of obtaining a larger number of candidates for examination as surgeons. Much dissatisfaction had been expressed by the surgeons at the abolition of the regimental system. Viscount Bury explained that at the present time there were 900 medical officers in the army, and only eight vacancies for such appointments. There had not been sufficient experience of the new system of a unified medical staff for the whole Army to warrant the remark that the system had failed. In a short time he thought it would become popular. The health of the Army was extremely good, from which it might be inferred that the medical officers were able to perform their duty, and did it well.

The Moycullen Dispensary.—Mr. Lowther, in reply to Major Nolan, in the House of Commons, said that an inquiry relative to the charges of the Dispensary Committee against their medical officer had been promised. A sworn inquiry was held respecting one of these charges; with respect to the other charge there was no need to go through the same formalities.

Vaccination.—Mr. Pease, on Wednesday, April 3, moved the second reading of a Bill with the avowed object of limiting the penalty to be imposed upon parents for refusing to have their children vaccinated. Mr. Sclater-Booth said that great excitement had been occasioned by popular clamour upon the subject of vaccination, but it had now greatly subsided. He assumed that the mind of the House and of the people of the country was quite settled as to the advantages to be derived from the protection afforded by vaccination. If the Bill were to become law, there would be a danger lest the penalties to be imposed would be provided by the Anti-Vaccination Society, and thus the law be evaded. He had carefully considered the subject, and would be glad of an efficient method of limiting penalties if it could be done consistently with the carrying out of the vaccination laws. The Local Government Board ought not to be made a court of appeal, but the guardians and magistrates should be entrusted with discretionary powers. In only thirty-three or thirty-four cases had more than three prosecutions been instituted during the past four years, although upwards of 3,000,000 vaccinations had been performed in that time. Mr. Pease admitted that he had no fault to find with the vaccination laws, but he thought the time had come for limiting the number of prosecutions for those who conscientiously objected to the vaccination of their children. In Ireland only one penalty could be enforced, and in Scotland probably only two penalties could be imposed. Mr. Lush regarded vaccination as one of the most remarkable discoveries that had ever been made. The number of persons whose faces were seamed and scarred with small-pox was continually decreasing. He commented upon the extravagant expression of Mr. Pease when he spoke of "the wholesale sacrifice of life caused by vaccination." The accident of vaccination being performed at the time that erysipelas was prevalent had caused many people to form an erroneous view of the results of vaccination. The remedy he proposed was to afford legislative facilities for increasing the number of those authorised to vaccinate children in their own homes, and to pay the vaccinators more liberally. Mr. Forster said that the number of persons objecting to the practice of vaccination was very small indeed. While approving of compulsory vaccination, he thought that some limitation of the cumulative penalties might be adopted without endangering the spirit of the Act. Sir J. McKenna said that there would be no redress for society against obstinate opponents of vaccination if Mr. Pease's Bill were to become law. In Ireland there was no organised resistance to a beneficent law as was found in England. Lord R. Churchill said that the result of passing the Bill would be, that everyone who could pay 20s. need not vaccinate any member of his family. Mr. Pell commented upon the exposure of children to the risk of such a disease as small-pox when they were unable to protect their own interests. Dr. Playfair characterised the Bill as one which would legalise the sale of indulgences to commit a breach of the law. Colonel Mure said the effect of the Bill becoming law would be that there would still be accumulative penalties in the shape of disease. On a division, the Bill was lost by a majority of 189.

STRAPPING IN PLEURISY.—Strapping the affected side in acute pleurisy, recommended by Dr. Gleason (*Medical Times and Gazette*, March 16, page 297), has, after a trial in Philadelphia, been long since adopted there as a regular practice. It seems unaccountable that it should not have been noticed in the text-books, since it is, as Dr. Gleason avers, a valuable means of treatment, affording marked relief to the patient and evidently conducing to early convalescence. It was first employed, twelve years since, by Prof. Biddle, of Jefferson College, in a case of empyema, giving great relief, and for nearly six years he has largely and advantageously used it in all stages of pleurisy. He has mentioned the practice with approval in the last three editions of his Materia Medica. In severe cases he carries the adhesive strips completely round the thorax, so as to control the movements of the walls of the chest, and compel the patient to carry on respiration by the diaphragm and abdominal muscles. The strapping is not meant to exclude any other means of treatment, but merely to serve as an adjunct.—*Boston Med. and Surg. Jour.*, February 28.

PNEUMONIA AND EPIDEMIC DISEASES.

At the meeting of the Epidemiological Society in January last, Dr. John Murray, President, in the chair, Dr. Squire, in a paper which he read "On the Relation of Pneumonia to Epidemic Diseases," stated that pneumonia is not specially a disease of cold weather or of cold climates. Like phthisis, it occurs with greater proportional frequency among dense populations; but, unlike phthisis, the mortality is not evenly distributed throughout the year. Nor does the seasonal mortality from pneumonia correspond with that from bronchitis, which increases in cold times and places, but follows a course very similar to that for some epidemic diseases. In northern towns many cases of broncho-pneumonia in the very old and very young are included in the pneumonia returns, and cause them to appear higher in the winter than in the spring. Latterly, with more precision in diagnosis, we find fewer cases returned as pneumonia, and the seasonal differences become more marked. The proportion in which the deaths from each of these causes occur in the four quarters of the year may be given as:—Bronchitis, 44·, 21·, 9·, 26·; pneumonia, 30·, 31·, 18·, 21·—the great increase in the mortality from bronchitis being in January, that from pneumonia occurring at the end of the first quarter, and always in the spring. Among epidemic diseases, small-pox and whooping-cough are found invariably to have their greatest fatality in the spring. Scarlet fever as invariably increases at the end of summer, and is most fatal in the autumn. Measles has both a summer and winter recrudescence. Enteric fever is an autumn epidemic, and not coincident with pneumonia. It was with typhus, and not with enteric or typhoid fever, that W. Ziemssen associated pneumonia; both decreased in London on the enforcement of the Common Lodging-House Act. Typhus may prevail without pneumonia, and pneumonia without typhus. The diseases which correspond more nearly with pneumonia are—puerperal fever, erysipelas, quinsy, croup, and diphtheria. The pneumonia consequent on the latter disease, and so frequently fatal after measles and whooping-cough, has no appreciable influence on the pneumonia returns; moreover, it is always of the catarrhal or secondary kind, and should be considered as part of the disease it complicates. Acute primary lobar pneumonia is, according to the author's experience, by no means rare in young children, and part of the large infant mortality in pneumonia is from this cause. He points out a marked difference between the acute primary pneumonia and the secondary or catarrhal form in the temperature-chart of the two diseases; that for the latter is characterised by three, four, or more days of moderate fever leading to a height of 103°, rarely to 104°, and never long maintained at the higher point, but subsiding gradually after secretion is established. This chart of catarrhal or secondary pneumonia is at once recognised by its central peak. That for true pneumonia commences with a temperature of 103°, even on the first day of chill, and before the local signs of the disease are distinct. The temperature then suddenly rises to 104° or 105°, and is steadily maintained at or near this height, with no marked evening exacerbation, for six or seven days, and then descends by two steps to the normal, the first descent preceding any marked change in the lung. This typical temperature-course is found equally in sthenic or asthenic cases, whether produced by foul air or by chill; in children of from one to five years old, as well as in adults. Because of this marked course of pneumonia it is not necessary to assume that a specific poison is concerned. The definite duration of pneumonia, the cessation of the general febrile disturbance before the subsidence of the local mischief, and the tendency of that to disappear after the febrile stage is over, are all found in diseases not necessarily brought about by an infecting germ. Nor is the difficulty of producing pneumonia by direct irritation, as in the experiments of Heidenhain, a sufficient reason for such assumption. The changes noted in the lung by Friedländer after section of the vagus and recurrent nerve has a closer bearing on the subject. Many conditions of fatigue, chill, malaria, and constitutional change may lower nerve-tone and predispose to an attack of pneumonia. In its tendency to affect some persons more than others, and to recur, it resembles erysipelas; both occur in local outbreaks under circumstances of defective hygiene. All these considerations place pneumonia further from the local inflammations, and bring it nearer to the general diseases more directly under the dominion of conservative medicine.

THE REPORT ON THE CHOLERA EPIDEMIC OF 1875-76 AMONG THE GENERAL POPULATION OF INDIA.

This Report represents Section 6 of the Thirteenth Annual Report of the Sanitary Commissioner with the Government of India, and it shows the total registered mortality from cholera in the several provinces in 1876 and the two previous years, also the monthly distribution of the mortality in the different districts of the same provinces for the year 1876. At the outset it records the melancholy and alarming fact that nearly half a million deaths from cholera were recorded in 1876, or 100,000 more than were registered in 1875, and 400,000 in excess of the number of victims attributed to it in 1874.

Again we are compelled to record, after a careful study of this Report, that no new light is thrown upon the subject. The history of the various outbreaks is faithfully detailed, but this tells us nothing that was not known before. We learn that in all parts of the country the prevalence of the epidemic was subject to great fluctuations, but that the periods of prevalence and subsidence in the two years (1875-76), though varying in different parts of the country, coincided in a great measure with certain seasons; and the rise, culmination, and decline of epidemic prevalence over given areas recurred in both years at the same seasons. The variations in the prevalence of cholera, in fact, followed so closely the changes of the season in different parts of India that it seems almost impossible to reject the inference that there exists some relation between them. But the Report immediately goes on to say that cholera is found prevailing under such totally opposite conditions of atmosphere, and its incidence on populations is so partial and uncertain, that it leads to the conclusion that the action of these atmospheric states on the human system is not direct, but through the medium of some one of the conditions—it may be of soil, or it may be of water-supply—under which the individuals or populations affected are living; and this condition, whatever it may be, must be capable of becoming subservient to the production of cholera under very opposite states of the atmosphere, during periods of intense heat or dryness, under great cold, or during periods of great moisture and heavy rain. This certainly leaves the origin of the disease in very much the same obscurity as before.

The conclusion at which the Report arrives is, that although the disease may occur under any state of the weather, the atmospheric condition most frequently attending its prevalence is that of great heat and dryness; that the condition which next to heat and dryness favours the spread of cholera is rainfall; but that, although the action of rainfall on the prevalence of cholera may be at first favourable to it, it is in the end antagonistic, and tends to bring about its subsidence; that there is little doubt that the influence of these opposite conditions on the prevalence of the disease is due to their action on the water-supply of the people. "It may seem too much to say," the Report continues, "that, wherever cholera prevails, impure water is present as one of the factors of the epidemic; that the half-million of deaths in 1876 would not have occurred had the water-supply of the people been pure and sufficient. But the incidence of cholera on a population is evidently dependent on the presence of some specific insanitary condition; and all the illustrations which have been given of the relation between meteorological changes and cholera, the circumstances of climate, position, geological formation, local surroundings, and habits of the people, were conducive to deterioration and contamination of the water-supply; and one finds it difficult to imagine any other specific favouring condition capable of development under circumstances so different and opposite. The evidence that has been given will perhaps be allowed to be confirmatory of the opinion which has found

acceptance in many quarters, that there is an intimate connexion between cholera and impure water, and that efforts having for their aim the prevention and diminution of cholera are most likely to attain that aim when directed towards the improvement of the water-supply."

Unlike yellow fever, the Report shows that elevation has no influence on the prevalence of cholera. The epidemic of 1876 was quite as virulent and fatal at Darjeeling and Murru, 7000 feet above the sea, as in the delta of the Ganges, and it found the specific condition necessary to its prevalence in the villages on the route into Kashmir at the high altitude of 11,000 feet.

The compilers of these reports on successive outbreaks of cholera in India are, of course, not to blame if they fail to discover what has, up to the present time, evaded the close observation of scientific men. They can only deal with the evidence supplied to them, which varies but little in description; and the present report, like its predecessors, leaves the origin and predisposing causes of cholera as much a mystery as they were before.

FROM ABROAD.

Paris Hospital Mortality Returns.

In his report on the mortality returns of the Paris hospitals for the last quarter of 1877, Dr. Ernest Besnier (*Union Méd.*, February 5-16) states that the meteorological conditions did not present any remarkable peculiarities capable of influencing the production of disease. The temperature was slightly superior to the mean of the quarter calculated from 1806 to 1870, and the quantity of rain that fell was below the mean of the quarter of preceding years. The prevailing winds were westerly. The *general hospital mortality* of the quarter was in excess of the mean mortality of the quarter, having amounted to 2897, and being 252 in excess of the mean mortality of the quarter during the five preceding years. Indeed, the mortality for the entire year 1877 was also in excess of that of the five preceding years, exceeding that of 1872 by nearly 2000. This is not to be explained by the mere increase of population, but proceeds especially from an aggravation of the medical constitution during this period. The general mortality of the capital has followed the same curve as the hospital mortality, being always about the quadruple of that.

1. *Affections of the Respiratory Organs.*—In spite of the thermometrical mildness of this winter quarter, the mortality from this cause has exhibited not only its normal aggravation as compared with the summer quarter, but even an excess of this, especially as regards pneumonia. Thus while during the winter quarter of 1877 there were 1181 cases of phthisis, with 670 deaths (56·65 per cent.), during the same quarter of the eight preceding years there were 9681 cases, with 5286 deaths, or 54·60 per cent.; there were 180 deaths from pneumonia in 432 cases (41·66 per cent.), as compared with 1247 in 3348 cases, or 37·24 per cent.; 67 deaths from bronchitis in 1111 cases (6·03 per cent.), as compared with 476 deaths in 7506 cases, or 6·34 per cent.; and 32 deaths in 242 cases of pleurisy (13·22 per cent.), as compared with 256 deaths in 1967 cases, or 13·01 per cent.

2. *Diphtheria and Croup.*—Dr. Besnier observes that he has repeatedly demonstrated that diphtheria, like other popular diseases, is subject to certain laws of evolution which it never eludes, even in the midst of paroxysms as excessive as that which is witnessed at the present time. In the same way as typhus is a disease of winter, typhoid a disease of summer and autumn, diphtheria is essentially a disease of winter. Every year it attains its hypogee in autumn, its paroxysm in winter and spring, to regularly decline during the warm season. This course of the disease is exhibited not only by the diminished number of cases and of deaths, but also by the relation which these bear to each other—that is to say, the diphtheritic mortality attains its maximum in winter and its minimum in summer. During 1877, for example, while the mortuary co-efficient of diphtheria in Paris has been 83 per cent. during the first quarter, it was only 79 in the second, sank to 54 in the third, and rose again to 73 in the fourth. If it be borne in mind that this is the normal, habitual, and regular course of the disease, the importance of being well acquainted with it as regards therapeutical agents is obvious, in order to avoid most serious errors of interpretation. How, for example, is a method of treatment to be correctly appreciated when applied to a disease the regular mortality caused by which varies according to the season, unless care be taken to observe with precision the period at which such treatment is put into force? And what value can be attached to statistics which do not specify the periods of observation conformably to the natural periods of great and small mortality? Hence may proceed numerous therapeutical illusions and deceptions, caused by the ulterior failure of modes of treatment which at first furnished brilliant results.

The epidemic of diphtheria of 1877 is the most important as regards the number of cases and their gravity which has been recorded in Parisian epidemiology. Its invasion has not been sudden, since for more than ten years Dr. Besnier has been pointing out the regular increase of the disease. The deaths produced by it have increased in Paris from 1132 in 1872 to 2393 in 1877—*i.e.*, more than double. It has spread over the entire town, no *arrondissement* or *quartier* being exempt; and the differences observed in various localities are far from being so considerable as those observed in other diseases. Still, they are deserving of investigation, and Dr. Besnier furnishes tabular statements for this purpose. From these it appears that altitude does not confer the relative immunity which it does in typhoid fever; and that the effects of the mere number of inhabitants and density of population nowhere seem manifest. Indigence, however, is always most marked where the disease is most prevalent, as as is also observed with regard to other epidemic diseases, especially cholera and variola. Its influence is especially notable in diphtheria, because this is essentially a scourge of childhood; and it is in the poorest localities that most children are usually found.

The study of diphtheria in the children's hospitals demonstrates still more clearly than can be done by the urban statistics (which only relate to the deaths) the progressive increase of the disease and the corresponding relative mortality. During the last quarter of 1877 there were admitted 249 cases, 183 of which proved fatal, or 73·37 per cent. The cases received during the same quarter of seven preceding years conjoined amounted to 919, with 666 deaths, or 71·38 per cent. Dr. Bergeron reports that of 70 cases admitted to the Sainte Eugénie, 31 were operated upon and only 12 recovered. At the St. Antoine, M. Dujardin-Beaumetz operated on 8 out of 10 cases, and all died. Of 15 operations performed by M. Archambault at the Enfants-Malades, 12 proved fatal.

3. *Variola.*—While small-pox was committing such ravages in London, and when it prevailed severely in Bordeaux, St. Etienne, and other ports in France, in Paris it almost suddenly disappeared. Thus for this quarter sixteen cases only were recorded in all the Paris hospitals, and none of these proved fatal, while the entire number of deaths from this cause in all Paris for the quarter was only five.

4. *Typhoid Fever.*—This affection has followed during 1877 its regular and normal curve. The æstivo-autumnal paroxysm of the preceding year, which was intense, none the less underwent its mathematical attenuation in the succeeding spring. During the summer the paroxysm was reproduced, but in the proportion of mean years, and it ceased at the end of autumn, the disease decreasing towards its annual minimum, which it will attain next spring. As Dr. Besnier announced in his last report, without any fear of subsequent contradiction, the mortuary co-efficient of typhoid has proved feebler during this fourth quarter than it had done during the preceding quarter, and that although the number of cases increased—this being the general rule, as frequently demonstrated. Thus, during the first quarter it was 16·12 per cent., during the second 18·46, during the third 26·02, and during the fourth 20·62. The total number of cases admitted into the hospitals during 1877 was 2215, furnishing 442 death. Dr. Besnier gives a tabular view of the number of cases admitted for the ten years, 1867-77, distributed into months, with the resulting mortality. The total number of cases amounted to 15,396, with 3281 deaths, or 21·31 per cent. In reviewing this mortality, so high as compared with that which is usually attendant

upon typhoid fever (which oscillates between 12 and 16 per cent.), some circumstances have to be borne in mind as regards the mortality of the civil hospitals. Not only are there the nosocomial influences, the mischievous effects of which are known to everyone, but the cases treated in the civil hospitals do not consist of all the cases occurring in a given district, but especially of the very worst cases, which have been placed from the beginning in the most unfavourable hygienic and social conditions. Moreover, cases in the hospitals are only designated as "typhoid" which absolutely deserve that name. In Paris, exclusively of the hospitals, there were 319 deaths returned during 1877 as occurring from typhoid fever.

Insanity and Medical Education.

Under this heading there is an article in the *Boston Med. and Surg. Jour.* for February 28, which fulminates a complaint that may to a great extent be re-echoed in this country.

"The State of Massachusetts," says the writer, "has recently expended about $2,500,000 in the erection of a couple of insane asylums, which may, by crowding, contain 1000 patients. Not a cent of this extravagant outlay has gone towards providing for medical education even such facilities as were had in Paris at the close of the last century. With more than 2000 insane people in our asylums, and probably double that number in our population of a million and two-thirds, there is no opportunity for the medical students of this State to get the most superficial practical knowledge of insanity without going to New York or Europe. A few years hence Baltimore will offer him the best facilities in this regard, for the trustees of the John Hopkins Hospital have already made arrangements to have that important branch taught clinically at Shepherd Asylum now building.

"The evils of this deficiency are twofold. In the first place, there are many persons suffering from the milder forms of mental disease who will not go to an insane asylum, whether it is better for them to do so or not; and they must, in the vast majority of cases, take their chance of proper or improper treatment from men who have had no opportunity of learning what the best course for them is. This is thought by competent observers to be one of the prominent causes of the neglect of early cure, and of the accumulation of chronic incurable cases in the community.

"In the second place, the asylums themselves are sufferers from the shortsightedness of their own policy in this matter. Almost none in this country make careful pathological researches, very few systematically perform autopsies, and two or three only have specially appointed pathologists, while some of the best had not even a room adapted to making post-mortem examinations. The wards of the asylums are closed to the clinical teacher and the student. Two or three physicians go daily through the routine of case-taking, prescribing, and writing records for sixty or a couple of hundred patients each, exhausting their physical and mental energies in attempting a multiplicity of duties which they cannot by any possibility fully perform; and what is the result? 1. The patients cannot get proper care; 2. The asylums, instead of becoming progressive, must follow the old marked-out lines; 3. Nothing is done to advance medical education, and not enough to raise the standard of scientific treatment; 4. When vacancies occur in the medical staff, accomplished men hesitate to assume positions of such drudgery; and 5. Properly trained men are wanting to take the offices when they are offered. Many of us have ransacked our brains with wearying frequency to find some willing and suitable person to go to one asylum or another.

"The remedy is so simple, and has been so long in common use in other countries (?), that it is strange we have not adopted it here, instead of devoting so much time to 'hospital architecture,' as it is called. Let us hope that external architectural effect and multiplication of mechanical appliances have reached their climax in the hospital, that has a machine for making mop-handles, and no provisions for advancing medical science or teaching students! There would be no difficulty in having clinical instruction in an asylum if sufficient interest were awakened. Pathologists could be easily appointed, and autopsy-rooms might be readily prepared. A half-dozen officers, too, or even a smaller number, holding the office for six months, would relieve the superintendent and his staff of much routine work, besides adding a constantly fresh element to the direction of the hospital, and furnishing a corps of trained men from whom assistant-physicians could be selected whenever wanted. The patients would benefit by the increased attention to little matters, and the superintendent might devote more of his time to general study and fresh air, to the manifest advantage of his charge."

REVIEWS.

Cyclopædia of the Practice of Medicine. Edited by Dr. H. von Ziemssen. Vol. XI. Diseases of the Peripheral Cerebro-Spinal Nerves. By Professor W. H. Erb, of Heidelberg. Translated by Mr. H. Power. London: Sampson Low and Co.

This volume is devoted to the consideration of the functional affections or "neuroses" of the peripheral nerves as well as of those in which anatomical changes have been determined. No doubt there is some convenience in still retaining the term "functional"; but the progress of pathology during the last few years has tended more and more to narrow the group of these affections, and there are few observers who have any doubt, notwithstanding that anatomical changes have hitherto failed to be made out in many examples, that they are nevertheless present in all. We have heard of an eminent physician, who, looking at a case of spasmodic wryneck, termed it an example of "mad spinal-accessory nerve." And the designation was good, provided that an anatomical change was supposed to underlie the metaphysical disorder.

The affections of peripheral nerves have not a fatal tendency, and it is to this circumstance that must be ascribed the difficulties which still largely prevail as to the exact seat and nature of the anatomical changes associated with them. They form an extremely important group, occasioning a vast amount of distress, and but too often baffling medical treatment. It must be allowed that at present progress has advanced in the direction of their accurate study from a clinical rather than a therapeutical point of view. The aid of electricity especially has been imported with effect into the diagnosis of these disorders—with far greater effect, we venture to think, than as a method of treatment. The author of this volume is well known on account of his contributions to medical electricity, and no small part of the value of this book is derived from the fact that the mode of application of currents for purposes of testing is described by so good an authority.

The book is divided into two parts.—1. Functional Diseases of the Peripheral Nerves; 2. Anatomical Diseases of the Peripheral Nerves. The first part includes neuralgia, anæsthesia, neuroses of the nerves of special sense, neuroses of the motor nerves, particular forms of spasm, writers' cramp, cramps, tetany, contractures, paralysis, especially in its localised form.

The subject of neuralgia is very fully treated, and the views of various authorities carefully considered, whilst especial and constant reference is made to the work of the late Dr. Anstie. The author regards neuralgia as constituting a well-defined form of disease, and as something essentially different from the sensory impressions caused by the immediate action of stimuli upon the nerves. As the cardinal symptoms of neuralgia are remarkably similar in all cases he concludes that the most diverse etiological influences always induce the same changes in the nerves. Of the seat of this trophic disturbance he allows our ignorance, but thinks it probable that it varies, being sometimes in the trunk or peripheric branches of the nerve, sometimes in the posterior roots and their prolongations in the spinal cord, and is inclined to believe even that the central fibrils running in the spinal cord and brain may be affected up to the terminal central apparatus. As regards the use of electricity in the treatment, Dr. Erb says that "the galvanic current has been found to yield the most gratifying results in the so-called idiopathic neuralgiæ, in most of those which are due to a rheumatic or neuritic process, and which have become habitual, and finally in a certain proportion of the excentric neuralgiæ." He considers that the current diminishes the excitability of the sensory nerves, takes away abnormal stimuli from them, modifies their nutrition, allays hyperæmia and inflammation, and acts as a derivative. Electricity,

indeed, he places first in his list of remedies. And here we cannot help thinking the author unconsciously biased by his predilection for the subject. Our own experience certainly would not lead us to this conclusion. We should rather give it the third place, after hypodermic injection of morphia and flying blisters.

In the chapter on neuroses of the motor nerves there are some pages devoted to the mode of examining motility and motor apparatus which are worthy of being attentively studied and committed to memory. The mode of testing the excitability of motor nerves according to Brenner's formula is clearly described. Without an accurate knowledge of this process it may safely be said that no progress can be made by an observer in reference to the diagnosis of affections of the peripheral nerves. On this subject it must be allowed that there is at the present time a great lack of information in this country, except on the part of the few who have devoted especial attention to it.

A good description is given of particular forms of spasm, those in the regions of the fifth, seventh, ninth, and spinal accessory receiving the largest attention; and the best modes of treating affections of this kind are clearly indicated. It is unfortunate that the results of therapeutics in these conditions are not at present of a kind to enable any writer to dwell very strongly upon them. Spasms—including what are called "business spasms," of which writers' cramp is the best-known example—must be classed amongst the most intractable of all the disorders affecting the peripheral nerves.

The description of the various forms of local paralysis is amongst the best in this book; and here especially the author's electrical experience is used to illustrate the mode of diagnosis with good effect. It is to Dr. Erb that we owe the term "*Entartungs Reaction*" (reaction of degeneration), which is convenient enough as describing the qualitative and quantitative alterations of electrical excitability so frequently seen to result from injury, infantile paralysis, and lead-poisoning. The section on paralysis of the portio dura is properly made very full and exhaustive, for the study of lesions affecting this nerve practically furnishes a key to the diagnosis of those of all the other peripheral nerve-trunks.

The second part of the work, that upon "Anatomical Diseases of the Peripheral Nerves," is necessarily very short, for unfortunately there is at present but little to say with certainty upon this topic.

No more interesting volume than the present has appeared amongst those of the present series. With the exception of the portion relating to neuralgia—a subject which had been exhaustively treated by Dr. Austie—the contents of the book, as a whole, are new. We have here, that is to say, combined in a single work, a great variety of important facts which have not hitherto been published in any separate volume in the English language, although the subjects generally have for the most part been treated by writers of our own in the form of contributions to the journals and societies. The work has been translated by Mr. Power, who has skilfully performed a by no means easy task.

It is curious, by the way, to note the size of the type in which the names of those concerned directly or indirectly in the production of the book appear upon the title-page. In the order of size, from great to small, they run as follows:—Dr. Ziemssen; Dr. Buck, of New York, who edits the English translation (in fine bold capitals); then Dr. Erb, who simply wrote the book (in much smaller letters); and last, and smallest of all, Mr. Power, who translated it!

The General Subject of Quarantine, with particular reference to Cholera and Yellow Fever. By John M. Woodworth, M.D., Surgeon-General, Mercantile Marine Hospital Service, United States of America. Extracted from the "Transactions of the International Medical Congress, Philadelphia, September, 1876." Philadelphia. 1877.

In the compass of a small pamphlet Dr. Woodworth has briefly traced the origin of the quarantine laws, which he condemns as thoroughly inapplicable to the state of things at present existing. He observes that the unreasonable hindrances to commerce imposed by quarantine can only be corrected by cutting it loose from senseless traditions and theories. It is, in his opinion, unreasonable, as it is impracticable, to apply a theoretically uniform quarantine to all places, without reference to climate, the relations of surrounding countries, or the natural history of the disease to be combated; and he closes his observations by a short summary of the rules which should be followed to render the laws of quarantine effectual with the smallest amount of discomfort to individuals and of commercial loss.

Lessons in Laryngoscopy: including Rhinoscopy and the Diagnosis and Treatment of Diseases of the Throat. By Prosser James, M.D., M.R.C.P., Physician to the Hospital for Diseases of the Throat, etc. London: Baillière, Tindall, and Cox. 1878. Second edition. Pp. 176.

In the second edition of this little volume there are no changes of importance except the addition, at the end of the letterpress, of a few new coloured plates. These are excellent, and will add to the value of the treatise as a useful introduction to the study and treatment of diseases of the throat. We would suggest for future editions the preparation of a short, serviceable index.

GENERAL CORRESPONDENCE.

THE THROAT HOSPITAL.

Letter from Major-General P. Fielding.

[To the Editor of the Medical Times and Gazette.]

Sir,—My attention has been called to a paragraph in your last issue on the subject of the Throat Hospital, in which you say, "Why does not General Fielding publish the report of the inquiry, held last July at the instance of the Prince of Wales, into the alleged mismanagement?" As this shows that you have been misled as regards the share that I have had in the matter, I venture to trouble you with a few remarks upon the subject, as I think it possible that you may have been led astray by an account of the proceedings at a special meeting of subscribers held about a month ago, and reported, I believe, in one medical paper only. Perhaps I ought to have taken some steps to correct all the inaccuracies in that report; but I was assured that the paper had not sufficient weight with the profession to warrant my troubling myself about it. From the account given, the public would be led to believe that I had some share in the constitution of the court of inquiry; and as you have asked why I do not publish the report, I presume that you have the same impression. It may, therefore, be as well that I should give you a short history of the whole case. During a casual visit which I paid to the wards of the Hospital whilst I was chairman of the Committee, I ascertained that a patient had nearly succumbed under an operation of tracheotomy; that the gentleman who operated was a clinical assistant, who had never but once before attempted a similar operation, and had then not been permitted to complete it; and, moreover, that an unnecessary delay had occurred in procuring surgical attendance, as a messenger had to go for the clinical assistant, whereas the surgeon of the Hospital might have been summoned by telegraph. I thought it my duty to bring these facts to the knowledge of the Committee, and I did so at the next meeting. The matron was then called in, and, amongst other things, she stated that she had had to point out to the clinical assistant that he had failed in inserting the tube properly after the operation. Not only was I roundly abused by some members of the Committee for bringing this matter to their knowledge, but it was ruled that the particulars should not be recorded in the minute-book. Now, as a patient had actually died a short time previously whilst a clinical assistant was being hunted for, and there were others then in the Hospital who might any night require the operation of tracheotomy; and, moreover, as I saw no hope of getting the rules altered as regarded the performance of the operation, I thought it best to retire from the management. The fact of my retirement having come to the knowledge of H.R.H. the Prince of Wales, he requested the President (Lord Bute) to convene a court of inquiry into the management, in order that he (the Prince of Wales) might judge whether the charity was deserving of the weight of his patronage. The court, as is well known, was composed of two Vice-Presidents, one member of the Committee of Management, and Sir Wm. Gull (by the Prince of Wales' request), and, as it was convened by the President, it is difficult to understand upon what grounds it can be alleged

to have been an improper one. As to the assertion that I had the nomination of any of the members, I utterly deny it, and beg to state that two out of the four members were, and still are, entire strangers to me. It will be seen, therefore, that the inquiry was solely for the information of the Prince of Wales, and the gentlemen who conducted it had fulfilled their duties when they had forwarded their report to his Royal Highness. There was no reason why they should forward a copy of it to me any more than to anyone else, nor did they do so. Although I am not in a position to publish it, his Royal Highness has authorised its being communicated to the subscribers; but the majority of those who attended at the special meeting convened for the sole purpose of hearing it declined to receive it, so the public must remain in ignorance until the subscribers consent to come out of their fool's paradise. The medical superintendent stated at the special meeting that "the interests of the Hospital and a regard for human life require them (the Committee) to provide for the instruction of a large number of practitioners in performing tracheotomy, instead of confining the operation to the hands of one person." With regard to this extraordinary confession, I have only to remark that whilst I admit that practice is essential before skill in operation can be attained, I protest against the practice of allowing clinical assistants to experimentalise upon patients in public hospitals at dead of night without some experienced surgeon being present to assist and, if needs be, to advise and instruct them.

I am, &c., P. Fielding, Maj.-Gen.

107, Queen's-gate, S.W., March 27.

[This is the first light thrown on a most mysterious subject: we trust it will satisfy everybody.—Ed. *Med. Times and Gaz.*]

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, March 26.

Charles West, M.D., F.R.C.P., President, in the Chair.

On the Condition of the Skin in Tinea Tonsurans.

Dr. George Thin read a paper as above. After giving an account of the appearances seen in sections through the entire thickness of the skin of a horse affected with ringworm, the author alluded to the evidence on which the identity of the disease in that animal and in man had been established, and to cases in which the tricophyton tonsurans had been transmitted from the former to the latter. The skin was examined in both the earlier and the advanced stages. The spores of the tricophyton tonsurans were found amongst the most superficial scales of the horny layer of the epidermis, and in the cutis only in the shaft of the hair, and between the shaft and the internal root-sheath. The spores in no instance were found in the root-sheaths, the hair-root, or hair-papilla, nor in the connective tissues surrounding the hair-follicle—that is, the spores were never found in actual contact with living tissue, the space between the internal root-sheath and the hair-shaft being analogous to the most superficial stratum of the horny layer. The affected hair first bent, and then broke at a point usually midway between the rete mucosum and the hair-root. This the author attributed to the disintegrated hair yielding to the pressure produced by the normal growth of the hair-shaft upwards. The changes found in the tissues of the cutis and rete mucosum were sometimes extensive, and were those found in inflammation from whatever cause it arose. The spaces between the bundles of connective tissue were more or less infiltrated with colourless blood-corpuscles (pus-cells), the walls and immediate neighbourhood of the bloodvessels being thickly studded with them; retrogressive changes were found in the nuclei of the cells of the rete mucosum; and at some parts the epidermis had completely broken down, leaving the cutis denuded. In the latter case the surface was found covered with pus-cells. Small localised abscesses were found in the external root-sheath and in the rete mucosum. The cell-infiltration descended along the veins to the deepest parts of the cutis. The author, finding these well-marked inflammatory effects in tissues which contained no vegetable organism, suggested that they are due to the irritation produced by the absorption of soluble matter set free during the growth of the fungus. The parasite finds its pabulum amongst effete epidermic structures, and can only assimilate by decomposing them. This theory seemed, said Dr. Thin, to be the only reasonable one, because the effects produced were far in excess of those which might be expected to follow the pressure attending the distortion of the hair. The incapacity on the part of the fungus to exist in living animal tissues explained the *modus operandi* of the very numerous methods of curing ringworm. Many of the substances applied were simple irritants, whilst the parasiticides in common use were also irritant. Inflammation, if sufficiently acute, cured ringworm, as was shown by the fact adduced by the author, in which a simple wound through a ringworm spot cured the whole patch. It was thus that beneficial effect in chronic cases of a continued slight congestion was explained. The author further pointed out the probable further injurious effect on the general health of the continued absorption of the irritating matters produced by the growing fungus.

Dr. F. Taylor said there had been under his care a child the subject of ringworm, who was at the same time suffering from a cerebellar tumour. Whilst treating the one they tried to do something for the other, but ultimately the child died of the brain disease. Sections of the diseased skin had been made, but the whole had not yet been properly examined. As far as he had gone, his results corresponded on the whole with those of Dr. Thin as to the position of the spores of the fungus. None were to be found in the internal root-sheath, and none in the outer one; but as yet he had not succeeded in getting a section of the diseased hair-bulbs. He had seen little of the secondary changes alluded to, but, as his patient had been subject to treatment, the conditions might not be identical with those recorded by Dr. Thin.

Mr. Gaskoin rather thought that Dr. Thin's views favoured the old plan of epilation. Children often suffered in general health whilst the subjects of ringworm; but, on the other hand, it was often said that they had improved since the eruption came out. His treatment was chiefly directed to improve the health, and the use of local irritants. He exhibited drawings of a case of foreign ringworm much resembling eczema marginatum.

Dr. Coupland asked how the spores produced the irritant fluid alluded to by Dr. Thin, and what analogy was there as to its production in the growth of other fungi.

The President asked why ringworm was found, comparatively speaking, more abundantly among the well-to-do classes than among the very poor.

Dr. Thin, in reply, said he could not account for it, but he said ringworm was more prevalent in London than abroad. As to the irritant fluid, that might arise from the decomposition implied by the growth of the fungus.

Paracentesis of the Tympanic Membrane.

Dr. W. Laidlaw Purves read a paper in which he set forth the results attained in the performance of the above operation in 100 cases. He said that of the different methods employed—the knife, the trephine, acids, oils and ointments, pancreatine, and the galvano-cautery—the galvano-cautery combined with pressure and ointments was preferred for maintaining, attempting to maintain, a permanent opening; but the maintenance of such was exceptional. The frequent repetition of the paracentesis caused a permanent thinning at the spot perforated, which acted to a certain extent in the same way as a perforation. Of 83 individuals operated on, 46 were benefited, temporarily or permanently; in cases of tinnitus one-fourth benefited; in acoustic affection no improvement occurred; of 39 cases of cataractons drums, 23 were improved; 5 out of 7 relaxed drums improved; of 21 paracenteses for the removal of substances from the cavity, 15 were benefited.

Mr. Dalby said this was now the second occasion on which an opportunity had been afforded for discussing, in this Society operations, on the tympanum. Hinton was the first to propose incision of the membrana tympani with a view to permanent results, and he himself had exceptional opportunities of seeing Mr. Hinton's practice. After a time Mr. Hinton became enamoured of the practice, and used it very extensively, but experience had led him to believe that it

was best adapted for accumulations of fluid, to which he would limit it. He thought that the unsatisfactory results which sometimes followed were due to thickening of the tympanic membrane, the function of which was apparently merely to support the ossicles.

Mr. Charles Brook said that one mode of operating, employed by Sir Astley Cooper, was by the triangular end of an ordinary silver probe. He had undergone the operation thus performed, on both sides, with perfect relief. The membranes were probably only relaxed.

Dr. Brandeis had seen many operations of the kind performed at Berlin, but the difficulty was to keep the perforation patent. At Breslau he had seen Voltolini use the galvano-cautery for this purpose. An opening so made does not soon close. Mr. Purves apparently made no distinction between a free puncture and the exsection of a portion of the membrane. By this last plan closure of the orifice was much retarded. To the same end, Voltolini used repeated perforation by blunt probes. In this way an opening may long be kept patent. Bougies of various kinds were sometimes introduced and left in the opening, but were rarely tolerated, and were expelled into the meatus. To avoid this, Voltolini had made use of a tube flanged at one extremity, to introduce this by the opening, and then rest the external extremity in such a situation that it received support from the wall of the meatus. The operation was also useful when there was anchylosis of the ossicles, with increased pressure on the labyrinth, enabling the waves of sound to reach the fenestra rotunda.

Mr. Cumberbatch said the question often was, would not the operation destroy the little hearing left? He quite agreed with Mr. Dalby, that the operation was best suited for accumulations of fluid. Irritation and inflammation, in trying to keep the orifice open, might destroy the whole inner ear.

Mr. Lennox Browne said that when an opening was the result of disease it was difficult to close it; the reverse was the case after operation. He thought, therefore, the plan should be limited to accumulations of fluid. In Mr. Purves's cases most success seemed to follow where the membrane was relaxed; then a slight tightening might do good. By other proceedings they ran the risk of converting an ordinary catarrh into a purulent one.

LIVERPOOL MEDICAL INSTITUTION.

Thursday, March 14.

Dr. Waters, President, in the Chair.

Tumour of the Cerebellum.

Dr. Dickinson showed a tumour of the cerebellum, of a rare and interesting character, taken from a patient recently under his care at the Liverpool Northern Hospital. The tumour was about the size of a walnut, reddish in colour, and of a soft, villous appearance, situated in the region of the fourth ventricle, and passing outwards and upwards between the amygdalæ and uvula of the cerebellum. Under the microscope, the tumour presented all the appearances of a true papilloma, and it was probably an outgrowth from the pia mater or arachnoid. It was apparently of rapid growth, the first symptoms—viz., diminution of sight, and very marked unsteadiness of gait—having been first noticed six months before death. On ophthalmoscopic examination during life, there was double optic neuritis. There had been considerable pain at times in the back of the head.

Fibroid Epulis.

Dr. Cormack showed a small tumour removed from the gum of a woman aged forty-nine. She had noticed, sixteen years before, a small lump about the size of a hazel-nut, in connexion with a carious tooth. For the last seven months it had increased rather rapidly. The growth presented the same physical appearances as the gum itself, was deeply indented by the alveolar borders of the upper and lower jaws, and was attached by a pedicle about the thickness of a crow-quill to the site of the first molar of the right upper jaw. The tumour contained a carious tooth embedded in its structure. In shape it was lobulated, and about the size of a walnut. It was removed by means of a ligature. The growth proved to be one of fibroid epulis.

Aortic Aneurism.

Dr. Archer exhibited an aneurism of the transverse aorta from a man who died suddenly in the Mill-road Workhouse Hospital. There was in this case a history of a violent fall upon the chest, nearly four months before death; and for nearly three months the man had complained of pain in the front and upper part of the right chest, between the shoulders, and down the right arm. The aneurism had given way by a small opening into the right pleural cavity.

Misplaced Testis.

Mr. Abbott brought before the meeting a child four months old, whose left testicle was situated in the perineum, to the left of the median line, half-way between the scrotum and anus. The child was otherwise well formed, and there was no family history of a similar deformity.

Villous Growths in Bladder.—Enlarged Prostate.

Dr. Alexander read a paper on two cases which had occurred in his practice in the surgical wards of the Liverpool Parish Infirmary. The first case was one of villous tumour of the bladder. A female cook, aged thirty-six, unmarried, was quite healthy until the year 1868, when her urine became scanty, thick, and red. This condition improved for a time under treatment. A year later the symptoms returned in a more aggravated form. She was treated by various practitioners for chronic cystitis until the year 1876; but no remedies appeared to give the slightest relief except copaiba internally, and carbolic acid injections into the bladder. Even these failed at last; and in July, 1876, she came under the care of Dr. Alexander, who dilated the urethra, and discovered the presence of villous growths in the bladder. These were removed partly by the polypus-snare, partly by scraping with the finger-nail. Hæmorrhage was slight and was easily controlled; and incontinence of urine lasted only two days. For a year great relief was experienced, when the old symptoms returned; relieved, however, for a short time by oil of yellow sandal-wood. In October, 1877, the bladder was again explored; numerous growths were found, and removed by the finger-nails. No constitutional disturbance followed; the urine became clear after a fortnight, and continued so for a month. Then, as it began to become turbid again, injections of nitrate of silver were used, the strength being gradually increased up to ten grains to the ounce. This produced only a temporary smarting, and the treatment has been continued since with much benefit. The woman has been for the last three months acting as cook in a large family, without any distress. Dr. Alexander pointed out that the history of this case illustrated (1) the difficulty of diagnosing such disease; (2) the success of a novel method of treatment; (3) the amount of irritation which a chronically inflamed bladder may bear with impunity; and (4) the necessity for treating diseases of the bladder on the same principles as those of the vagina and uterus—*i.e.*, by surgical means. The second case related was one of enlarged prostate gland. An old man, aged fifty-two, was admitted on June 4, 1877, with enlarged prostate, stricture of the urethra of twenty years' duration, and chronic vesical catarrh. Dilatation of the urethra by Holt's method having been followed by only temporary improvement, perineal incision (Cock's) was performed, in order to allow free drainage of the bladder. Great relief followed this operation, but death from exhaustion occurred three months later. A post-mortem examination showed great hypertrophy of the vesical walls; the fundus had been perforated by an ulcer, which had caused adhesion to the sigmoid flexure of the colon. The left kidney was degenerated into a mere cyst; the calyces of the right kidney were much dilated. Dr. Alexander considered this case showed the advantages of Cock's operation in giving temporary relief where catheterism cannot be practised without causing great distress, or for other reasons.

Mare's Milk as a Substitute for Human Milk.—In the report on the St. Petersburg Foundling Hospital for 1876, Dr. Borling narrates the trials made upon six infants with mare's milk in place of human milk, this being the milk which most nearly resembles woman's milk in composition. As the result, he states that it may be advantageously employed without any addition of other substance for this purpose. However, in these children, diarrhœa was produced, of the cause of which the reporter seems to be in some doubt.—*St. Petersburg Med. Woch.*, March 16.

OBITUARY.

JOHN ROBERTS, M.D.

Dr. John Roberts, formerly of Grosvenor-street, and, since his retirement, from ill-health, of Upper Norwood, died at Cimiez, Nice, on the 23rd ult., aged sixty-eight. He first practised with great success in Paris, but in 1849 he became a Member of the Royal College of Physicians, and settled in London, residing for over twenty years in Grosvenor-street, where he enjoyed the confidence of a large and influential *clientèle*. Threatened by kidney disease, he retired into private life about six or seven years ago, and resided at Upper Norwood. His ability as a physician and his great kindness of heart endeared him to a very large circle of friends and patients, while his unswerving integrity did honour to his professional character.

EDMUND RANDOLPH PEASLEE, M.D., LL.D.

From an obituary notice of this celebrated surgeon in the *New York Medical Record* (January 26) we extract the following particulars:—

Dr. Peaslee was born at Newton, N.H., in 1814, and received his medical education at Dartmouth College, where he was also appointed Professor of Anatomy and Physiology in 1842. After holding various other professorships, he took up his residence in New York in 1858, at the Medical College of which city he was Professor of Obstetrics, and later, Professor of Gynæcology at Bellevue. He became actively engaged in the specialty of diseases of women. For the operation of ovariotomy he soon gained a well-deserved reputation, which, after the publication of his book, became world-wide, and made him a recognised authority. His great success as a specialist was in no small degree due to the liberal and broad culture which prepared him for the place he was about to occupy, and in his case particularly it was the natural outgrowth of an earnest and faithful devotion to general practice.

As a writer he was logical, terse, and convincing, having the rare faculty of bringing out the salient points of his subject in strong relief. As a speaker he was earnest and impressive, rather than dogmatic, and always carried his audience with him, the natural feebleness of his voice alone operating to his disadvantage. With the exception of his treatise on Ovariotomy, which must be considered as the crowning effort of his life, he published but one other work, a treatise on Histology, in 1854. As an operator he was bold, yet judicious. Always very careful in his diagnosis, when once his mind was settled regarding the feasibility of an operation, everything else was bent to its accomplishment. In regard to ovariotomy, he was particularly careful of all the details, insisting upon certain methods of preparation of the patient and of the operator, which were not observed by others. To these precautions he was inclined to attribute much of his remarkable success in some of his most formidable cases. Notably, among the matters of treatment peculiarly his own was the washing out of the peritoneal cavity in cases of suppurative peritonitis—a method of practice which his earnest advocacy succeeded in establishing.

In general appearance Dr. Peaslee was never robust, but, on the contrary, gave the impression of feeble health, which impression was heightened by his pale countenance, thoughtful and solemn expression, and feeble voice. Still, his health was always good, and he was capable of bearing an amount of fatigue from which younger and stronger men would shrink. He died of pneumonia, January 21, within one day of completing his sixty-fourth year. During the past few weeks he had been more than ordinarily driven in his professional labours, and, as a consequence, his general health began to suffer. Just preceding the attack of pneumonia he was summoned to the central part of the State to perform an operation. Wishing to economise his time in order to meet other engagements, he travelled by rail the whole of one night, performed the operation, and returned the following night, having no rest for thirty-six hours. It would appear that this was beyond his strength, and pneumonia seized him at a time when he was least prepared to meet it. He was ill for about a week, but was not considered in positive danger until within a few hours of his death. "Dr. Peaslee lived to make an impression upon his day and his generation. The world was made better and wiser for his having lived in it, and he has left behind him a name which shall be cherished by his professional brethren as one of the brightest on record."

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 1st inst., and when eligible will be admitted to the pass examination:—

Aitken, Ewing McG., student of the Glasgow School.
Armand, George, of the Melbourne Hospital.
Barnes, George F., of St. Bartholomew's Hospital.
David, W. Washington, of Guy's Hospital.
Day, W. Aloysius, of the Bristol School.
Fielden, W. Eckett, of Guy's Hospital.
Hockin, G. Treverns, of St. Bartholomew's Hospital.
Jones, Robert, of St. Bartholomew's Hospital.
Laimbeer, Frederick J., of the Liverpool School.
Lowson, David, of the Aberdeen School.
March, G. Ryding, of Guy's Hospital.
Marsh, T. A. Perry, of the Bristol School.
Maslow, F. William, of St. Thomas's Hospital.
Northcott, Arthur, of University College Hospital.
Palmer, John, of the Middlesex Hospital.
Stanwell, William, of the Manchester School.
Wasse, G. Mills, of St. Thomas's Hospital.
Welch, George, of University College Hospital.
Whitehead, T. Kay, of the Manchester School.
Wolstenholm, R. Hanson, of the Manchester School.

The following gentlemen passed on the 2nd inst., viz.:—

Armitage, Joseph, student of St. Bartholomew's Hospital.
Atterbury, Walter, of the Middlesex Hospital.
Batterham, John W., of the Westminster Hospital.
Batson, Robert S., of St. Bartholomew's Hospital.
Chadwick, James M., of the Manchester School.
Cotterell, Edward, of University College Hospital.
Day, Donald D., of St. Bartholomew's Hospital.
Driver, Frederick J., of the Cambridge School.
Gilbert, H. Pearson, of St. Thomas's Hospital.
Hooley, Arthur, of the Charing-cross Hospital.
Hutchinson, Jonathan, of the London Hospital.
King, Ernest E., of the Middlesex Hospital.
Proffitt, Arthur H., of St. Mary's Hospital.
Risk, E. J. Erskine, of St. Bartholomew's Hospital.
Rice, Richard, of the Charing-cross Hospital.
Shears, C. H. Bedwell, of St. Bartholomew's Hospital.
Vivian, Richard T., of St. Mary's Hospital.
Westcott, Sinclair, of St. Bartholomew's Hospital.
Wheeler, Albert, of the Middlesex Hospital.

The following gentlemen passed on the 3rd inst., viz.:—

Bentham, Newton, student of St. Thomas's Hospital.
Collings, Charles D'A., of University College Hospital.
Corbould, Henry F., of the Charing-cross Hospital.
Duncan, William A., of St. Thomas's Hospital.
Firth, Robert H., of University College Hospital.
Francis, Lloyd, of the London Hospital.
Haigh, Alexander, of St. Bartholomew's Hospital.
Lukis, Charles P., of St. Bartholomew's Hospital.
Minchinton, Henry J., of the Middlesex Hospital.
Mouncey, Charles J., of the Manchester School.
Oates, John H., of the Leeds School.
Parsons, Herbert F., of St. Mary's Hospital.
Pryn, William W., of Guy's Hospital
Scale, Thomas W., of the Middlesex Hospital.
Shaw, Frank H., of Guy's Hospital.
Stewart, John H., of St. Bartholomew's Hospital.
Studer, Benjamin E., of Guy's Hospital.
Thirkill, Joseph, of the Leeds School.
Tucker, Joseph, of St. Mary's Hospital.
Turton, James, of the Charing-cross Hospital.
Voisin, Alexander B., of University College Hospital.
Volckman, Ronald, of the London Hospital.
Wagstaff, Ernest H., of King's College Hospital.

Nine candidates out of the seventy-two examined having failed to acquit themselves to the satisfaction of the Board, were referred to their anatomical and physiological studies for three months.

The following were the questions in Anatomy and Physiology submitted to the candidates (162 in number) at the written examination on the 29th ult., when they were required to answer at least four (including one of the first two) out of the six questions, viz.:—1. Describe an act of respiration, and the changes which the blood and air undergo. 2. Describe the mucous membrane of the dorsum of the tongue.—3. Describe the ethmoid bone and its articulations. 4. Describe the scalenus anticus muscle, its attachments and relations. 5. Describe the course, relations, and branches of the anterior tibial artery from its origin to the ankle-joint. 6. Describe the dissection required to expose the trunk of the musculo-spiral nerve. Give its branches and their distribution.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, March 28:—

Ball, William Montague, 382, Camden-road, N.W.
Fraser, Græme Bisdee, St. Mary's Hospital.
Good, Frederick Thomas, 91, Highbury-hill, N.
Gover, Henry John, Clapham, S.W.
Hawks, Robert Shafto, Hertford.
Skelding, Henry John, Bayswater.
Walter, William Henry, Sydenham.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

WILSON, THOMAS, M.R.C.S. Eng.—Medical Officer of Health for the Wallsend-on-Tyne Urban Sanitary District.

FYE, WALTER, M.R.C.S. Eng., Lecturer on Physiology at St. Mary's Hospital, and late House-Surgeon of St. Bartholomew's Hospital.—Anatomical Assistant in the Museum of the Royal College of Surgeons, in the vacancy occasioned by the retirement of Mr. G. A. Wright, of Guy's Hospital.

NAVAL, MILITARY, &c., APPOINTMENTS.

ADMIRALTY.—Fleet-Surgeon James Whicher, M.D., has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in her Majesty's Fleet, with seniority of March 8, 1878. Staff-Surgeon James Thomson has been promoted to the rank of Fleet Surgeon in her Majesty's Fleet, with seniority of March 16, 1878.

WAR OFFICE.—Surgeon-Major Donald Sinclair Smith retires on temporary half-pay; Surgeon Frederick Charles Cresswell Hewitt resigns his commission. Surgeon Herbert Braithwaite Spurgin (Northampton and Rutland Militia) to be Surgeon-Major under the provisions of the Royal Warrant of July 12, 1876.

BIRTHS.

BEATSON.—On February 24, at Sitabuldi, the wife of Surgeon-Major W. B. Beatson, M.D., F.R.C.S., Civil Surgeon, of a daughter.

PHILPOT.—On March 27, at 26, South Eaton-place, S.W., the wife of J. Henry Philpot, M.D., of a son, stillborn.

MARRIAGES.

DE MONTMORENCY—KEMMIS.—On March 28, at Booterstown Church, Dublin, the Hon. Arthur Hill Trevor de Montmorency, M.D., L.R.C.S.I., fourth son of the late Viscount Mountmorres, to Caroline, youngest daughter of the Rev. George Kemmis, of St. Helen's, Blackrock.

FLEMING—WALLS.—On March 2, at 2, Belhaven-terrace, Glasgow, William James Fleming, M.B., F.F.P.S., to Annie Cole, eldest daughter of William Walls, Esq.

MELDRUM—MILLER.—On March 27, at Wymering Church, Alexander Meldrum, Esq., H.M.S. *Martin*, to Tottie, second daughter of J. W. Moore Miller, M.D., J.P., of Cosham-park, Hants.

DEATHS.

ALLAN, ROBERT, Retired Army Surgeon, formerly in H.M.'s 87th R.I. Fusiliers, and Staff-Surgeon, at Mauritius, on March 15, aged 71.

HARRIS, ENID MARY, eldest child of Arthur G. R. Harris, L.R.C.P. Lond., M.R.C.S. Eng., of 143, Walworth-road, S.E., on March 30, aged 6½.

KELSON, GEORGE, F.R.C.S., L.S.A., late of Sevenoaks, at The Deanery, Marlow, Bucks, on April 1, aged 82.

KITCHING, JOHN, M.D., late of the Friends' Retreat, York, at Heworth, near York, on March 25, aged 65.

RUND, SAMUEL, L.R.C.P., M.R.C.S., at Penton Villa, Torquay, on March 30, aged 48.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BOOTLE BOROUGH HOSPITAL.—House-Surgeon. Candidates must possess both a medical and a surgical qualification, and be duly registered. Applications, with copies of testimonials, to the Hon. Secretary, on or before April 10.

EASTERN DISPENSARY OF BATH.—Resident Medical Officer. Candidates must possess the diplomas of a Royal College of Surgeons and the Society of Apothecaries. Testimonials, marked "Eastern Dispensary," to Francis Savage, Esq., 10, Beaufort-buildings East, Bath, on or before April 16.

EAST LONDON HOSPITAL FOR CHILDREN, AND DISPENSARY FOR WOMEN, SHADWELL, E.—Resident Medical Officer. Candidates must be unmarried and fully qualified practitioners in medicine and surgery. Applications to the Secretary at the Hospital, on or before April 11.

YORK DISPENSARY.—Resident Medical Officer. Candidates must be duly qualified and unmarried. Applications and testimonials to S. W. North, Esq., Castlegate, York, on or before April 18.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Belford Union.—Mr. J. Cunningham has resigned the West District; area 23,402; population 3140; salary £15 per annum. Also the Workhouse; salary £10 per annum.

Bradford (Wilts) Union.—Dr. H. W. Oulton has resigned the Third District; area 9801; population 2885; salary £70 per annum.

APPOINTMENTS.

Barrow-upon-Soar Union.—Alfred W. Emms, M.R.C.S. Eng., L.S.A., to the Belgrave District.

Carmarthen Union.—Valentine Rees, L.R.C.P. Lond., M.R.C.S. Eng., to the St. Clears and Mydrim Districts.

Hertford.—Charles M. Tidy, B.M., as Analyst for the County for one year.

Stafford.—Edward W. T. Jones, F.C.S., as Analyst for the Northern Division of the County.

Wolverhampton.—Edward W. T. Jones, F.C.S., as Analyst for the Borough for one year.

PARIS REGISTRATION RETURNS FOR 1877.—In a population of 1,986,748 there occurred 53,353 deaths, being an increase of 1705 on those of 1876. There were 18,088 marriages—96 more than in 1876. The births amounted to 58,472, or 3769 more than in 1876.—*Progrès Méd.*, March 30.

INNOCUITY OF BOAT-RACING.—Dr. Bradford has collected and analysed the histories of all the gentlemen of Harvard University who engaged in the intercollegiate regattas up to the year 1870, in order to ascertain what effect their training had upon them. His conclusions coincide with those of Dr. Morgan, who performed a similar work for the Universities of Oxford and Cambridge, and are opposed to the opinions commonly held by the community and a large number of professional men.—*New York Med. Record*, February 23.

FALL OF THE FUNIS.—Dr. Fröbelius, Director of the St. Petersburg Foundling Hospital, as the result of observations made in 5645 instances, states that the rapid or prolonged desiccation and fall of the funis more especially depends upon the nutrition and development of the infant, and less on the condition of the funis itself. 2. The desiccation and fall are completed in a shorter time in well-developed and healthy infants than in those which are feeble and premature. 3. The funis generally falls later in premature and feeble children than in those which are well developed and nourished.—*Petersb. Med. Woch.*, March 16.

ST. GEORGE'S HOSPITAL.—From the annual report of this institution, which has just been published, it appears that during the past year 3706 in-patients were treated, excluding 153 re-admissions of the same patients; whereas the number of out-patients amounted to the large number of 16,818, as against 15,516 the preceding year. The subscriptions amounted to £8006 1s., a decrease from the previous year of £143. The ordinary expenditure amounted to £22,889 4s. 8d., being an increase of £154 as compared with the preceding year. During 1877 ten legacies, ranging from £10,000, duty-free, from Mr. Charles McGarel, down to £25, and representing the large sum of £21,025, were received by the treasurers.

ROYAL INSTITUTION OF GREAT BRITAIN.—At the general monthly meeting on Monday, George Busk, Esq., F.R.S., Treasurer and Vice-President, in the chair, Francis Maule Campbell, Esq., Alfred Wing Everest, Esq., Lancelot Fielding Everest, Esq., Charles Cubitt Gooch, Esq., Charles Hawksley, Esq., Tom Simpson Jay, Esq., Hugh Parnell, Esq., M.A., and George W. Smalley, Esq., were elected members of the Royal Institution. The special thanks of the members were given to Lord Arthur Russell, M.P., M.R.I., for his present of eighty volumes of Ersch and Gruber's "Encyclopädie der Wissenchaften," and to Dr. William Siemens, D.C.L., F.R.S., M.R.I., for his present of a dynamo-magneto-electric machine and a small steam-engine. The presents received since the last meeting were laid on the table, and the thanks of the members returned for the same.

CONTAGION AT BABY-SHOWS.—The fact of a prize baby having died of scarlatina, supposed to have been caught at one of these disreputable exhibitions, may probably do more to prevent their continuance than any amount of criticism that may be directed against them. "As baby-shows are getting into fashion," the *New York Med. Record* observes, "the attention of parents who believe they have prize children should be directed to the danger of these exhibitions. Not only may contagious diseases be propagated by the show babies, but also by the outsiders who come to see them, to handle them, and, worst of all, to kiss them. Who can tell how many of these admiring spectators have come fresh from cases of measles, scarlatina, or diphtheria, or how many children, just convalescent from such diseases, may be brought there by their nurses?"

The St. Petersburg Hospitals.—On February 26 the following was the population of the hospitals of St. Petersburg:—The twelve Civil Hospitals contained 6214 patients (4116 males and 2098 females); the three Children's Hospitals 365 patients (174 males and 191 females); and the three Military and Marine Hospitals 1611 patients (1561 males and 50 females). The entire number of cases under treatment at that date was therefore 8190 (5851 males and 2339 females). Among this number there were 3472 cases of typhus (2805 males and 667 females), 56 cases of scarlatina (24 males and 32 females), 30 cases of variola (13 males and 17 females), and 966 cases of venereal diseases (510 males and 456 females). At the Children's Hospitals there were also 2124 out-patients during the week ending February 26, of which number 801 attended for the first time.—*St. Petersburg Med. Woch.*, March 16.

Students of the Old Paris University.—In a paper presented by M. Jourdain to the Académie des Sciences, Morales, et Politiques, an account is given of the tariff by which the lodgings of the students in the University of Paris were regulated. It seems that in the middle ages the cupidity of the lodging-house keepers was so great that the students could find no abodes. St. Louis, therefore, submitted all students' lodgings to a tariff, the terms of which were settled by a commission composed of two citizens and two professors, and when the proprietor refused to let his lodgings at the price fixed by the tariff, they were placed in a state of interdict for five years. In 1546 there were not less than 16,000 students in Paris. At the end of the sixteenth century the students were distributed into two classes—one, the *camémistes*, lodged and boarded in the house of a principal attached to a college; and the other, the *martinets* or *galoches*, lived in the town.—*Rev. Scientifique*, March 30.

A Shawl-Pin in the Left Bronchus for Thirty-three Days.—In the *New York Med. Record* for February 16, Dr. Ill relates the case of a child, six years of age, who, having a shawl-pin in its mouth, gaped, when the pin disappeared, head downwards. Laryngoscopic examination furnished only negative results; but the physical signs enabled the diagnosis to be established that the pin was lodged in the left bronchus. After the body had remained in this locality for thirty-three days, signs of pneumonia appeared, and it was determined to remove it by operation. The trachea was opened from the second to the fourth ring inclusive, violent coughing taking place during the whole operation, notwithstanding deep anæsthesia. A foreign body having been felt by a probe passed in to the extent of nearly four inches, a dressing-forceps, bent upon the flat about half an inch below the handle, was introduced. With this the pin was caught, and, after pressing it downwards to disentangle its point, was brought out. It measured one inch and three-quarters, and its head was a quarter of an inch in diameter. The operation, including the anæsthetising, took one hour and twenty minutes. The child was dismissed cured on the twenty-sixth day.

Typhus in the Russian Hospitals.—The commencement of the present epidemic is attributed to the large transport of Russian prisoners which has taken place, most of these being in a very low state of health, suffered greatly from the condition of the weather and the hardships of the marches. In Silistria, where there are 2000 sick and wounded in the hospitals, 1200 have been attacked by typhus, which also prevails severely among the inhabitants. Of 1600 sick in Zimnitza, three-fourths of the number are suffering from typhus. In Fratesti the fever broke out in a devastating manner, and the shed-hospitals were so infected that they had to be burnt. In Bucharest, where typhus has long prevailed in the Roumanian and Russian hospitals, the disease has lately extended to the civil population. It is contemplated, in the interest of the population, closing the Russian hospitals at Jassy, where malignant typhus has especially prevailed. The hospitals established between the Danube and the Balkans are exclusively filled with typhus cases. The disease has exacted many victims from among the physicians and the attendants, these last requiring constantly to be supplemented. So infected is the air in some places, as Sistova and Fratesti, that the attendants become affected by the second day at latest. Disinfection seems to have been very imperfectly executed both by the Russians and Roumanians.—*Veröffentlichungen d. Deutschen Gesundheitsamtes*, March 25.

Professional Overwork.—Dr. Emmet, in his admirable memoir of Dr. Peaslee, read before the Medical Society of the County of New York, stated that he had died of overwork. No one can doubt this, and no one similarly situated as Dr. Peaslee was should fail to heed the lesson which his untimely death affords. It is a well-established fact that ultimate success in our profession means hard work; and when this success is attained, it is still harder to restrain a desire for work within proper limits. There is a fascination about professional success, which increases with the means of its gratification until in some it becomes almost irresistible. This fact was strikingly exemplified in the case of Dr. Peaslee. The members of the Medical Society will remember that only a short time since, in some remarks on the death of the lamented Dr. Crosby, he referred to the necessity of conserving the vital forces and guarding against the very excesses of labour to which he himself fell a victim. Every one who heard him must have been impressed with the conviction that he appreciated the full force of his own remarks, and governed himself accordingly to their spirit. But, alas! scarcely six months have elapsed when, in the same hall, Dr. Peaslee's memoir offers a melancholy verification of his own warnings.—*New York Med. Record*, February 9.

The Cumberland and Westmoreland Lunatic Asylum.—The sixteenth annual report of the Cumberland and Westmoreland Lunatic Asylum for the year 1877 records an exceptionally satisfactory state of affairs. According to the statement of Dr. J. A. Campbell, the Medical Superintendent, the recovery-rate, calculated on the admissions for the year, was exactly 50 per cent., the highest recovery-rate hitherto recorded in the Asylum. In all but three of the cases discharged recovered a considerable increase in bodily weight took place during residence in the Asylum. A female patient gained twenty-four pounds during her stay, and one male patient increased fifty-three pounds in weight in a period of five months. The average increase of weight amounted to fourteen pounds. The death-rate was also exceptionally low, being only 6 per cent. on the daily average numbers resident. All the deaths resulted from ordinary causes; the only one unlooked for at the time of its occurrence was that of a woman from an epileptic fit. Five of the patients who died were above seventy years of age. The mean age at death was 54·3 years. An examination into the causation of the disease in those admitted during the year shows that only one-seventh is referred to moral causes, the rest to physical. Intemperance, old age, reduced bodily health, the puerperal state, epilepsy, and paralysis, appear as the principal of these. Dr. Campbell remarks that it is specially noticeable in this Asylum that, though a rainy season may prevent out-door exercise, and so be the cause of increased excitement and discomfort, yet that both in summer and winter the general health of the patients is better than in a dry season. This he considers principally due to the fact that the mildness is beneficial to the aged and those enfeebled by disease, especially lung disease, as well as to the rainfall keeping the sewers thoroughly washed out. The weekly cost of maintenance at the Asylum during the last quarter has been at the rate of 9s. 11d. per head.

Treatment of Wounds of the Hand.—Professor Verneuil, on the occasion of operating on a patient who had been admitted three months before for a crushed hand, repeated to his class an emphatic injunction which he has often delivered before. Whenever, he said, you have to treat any kind of crushed wound of the hand, take it as an absolute rule to excise nothing and to regularise nothing by means of the bistoury. In these cases the surgeon should only seek to prevent and to combat the primary accidents, leaving to Nature the care of saving all she can save. She will preserve more than the surgeon could, and will always diminish the mischief. One can hardly conceive the extent to which lacerated tissues, seemingly condemned on the first day, will resume their vitality and undergo reparation. Let Nature alone, then, and wait. At a later period, after weeks or even months, when cicatrisation has taken place, then only can the surgeon interfere and regularise the wound so as to render the use of his limb more easy to the patient. After describing the procedures he would have to take in order to regularise the cicatrised wound in this case, Prof. Verneuil observed that had he been tempted to interfere on the first day, some months

since, he should have removed parts which can now be made useful, while the patient has passed through the intervening time favourably by the aid first of simple and then of antiseptic dressings. He contrasted the progress of this case with that of another in which, before sending the patient to the hospital, his surgeon performed some partial amputations, which were followed by phlegmon of the forearm, arthritis, and suppuration of the carpus, etc. The case demonstrates the immense difference there exists between operations performed on the hand during the acute period of the accident, and operations executed later during a condition of absolute quietude of the region. Such cases are met with daily, and the practitioner ought to have a very clear opinion and pursue a practice rigorously determined upon, never employing the bistoury in a recent wound of the hand, and never regularising the wound until two or three months after the accident.—*Gaz des Hop.*, March 20.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Walter Dickson.—We cannot prescribe under such conditions. Go to a respectable surgeon, and leave the chemist alone.

University of Brussels.—The fee for graduation as M.D. is 540 francs—rather more than twenty guineas. The examination consists of three distinct divisions, and occupies about a week. Candidates must be qualified, and may be examined through an interpreter. Apply to the Dean of the Faculty.

Practical Philanthropy.—The first course of instruction gratuitously given at Woolwich by the St. John Ambulance Association culminated a few days since in a public meeting in the town, when certificates were presented to fifty-eight of the students. Major Duncan, Superintendent of the Ambulance Association of the Order of St. John of Jerusalem, described the progress of the movement in Woolwich. He also remarked that they did not intend to rival doctors, for whilst aspiring to become their lay-helpers, and holding in trust the life of an injured person, their first thought would be to "send for the doctor." Several of the students gave practical illustrations of the treatment of injured persons, after which the fifty-eight certificates were presented by the chairman, Colonel Walker, Inspector of Auxiliary Artillery.

L.S., Blackburn.—The statistics of mortality show that in England the death-rate from fever in 1877 was 0·39 per 1000. There has been a steady decrease in the mortality from fever for several years past.

Longevity.—As an attestation of the salubrity of the Hawkshead portion of the lake district, as conducive to the longevity of its inhabitants, Mr. James Dickinson, the registrar of births and deaths, during the past four weeks has registered the deaths of seven persons whose ages were as follows: 63, 64, 70, 72, 74, 77, and 88; total 508 years.

Whisky at Cardiff.—Six publicans of Cardiff were last week fined £10 or £5 each respectively for selling adulterated whisky. Nine samples of whisky had been taken from the premises of different licensed victuallers in the town, but in the other three cases the adulteration did not amount to 20 per cent., and no proceedings therefore were taken against them. In all the cases the adulterant used was water, except in one, where burnt sugar was detected by the analyst.

How Small-pox is Spread.—The Local Government Board have very properly addressed the Woolwich Board of Guardians, expressing their great dissatisfaction on a flagrant case of recklessness relative to the removal from Plumstead of a person suffering from small-pox. The ambulance started at six o'clock, stopped at three public-houses, and reached the hospital at midnight, the driver and attendant being in a state of intoxication. The distance was only four miles.

Ipso Facto.—You are mistaken; it was on June 22, 1874, the Select Committee on the Adulteration of Food completed their task of receiving evidence. The good done by the inquiry it is impossible to estimate. The chemists examined were unanimous in their opinion of the good effected by the Act, imperfect as it was. Adulteration, it is true, is still extensively carried on; but, largely as the nefarious practice at the present time prevails, it shows a very favourable and striking decrease in its universality as compared with years ago.

Drunkenness amongst Servants.—At the inquest held on Saturday on the body of an under-butler in the service of a gentleman in Clarges-street, Mayfair, who committed suicide whilst suffering from intemperance, Mr. F. Manley Sims, of Halfmoon-street, who was called to see the deceased, made a lengthened address to the jury respecting the numerous cases he had to attend of drunkenness amongst the servants of the higher classes. He said that, although a coroner's inquest did not always result, it was very sorrowful to watch the habits of drinking to excess, which very often terminated fatally, and trusted this inquiry would act as a deterrent.

Centenarians.—According to Mr. A. H. Bailey, who read a paper entitled "Principles to be observed in the Valuation of Life Assurance Companies," before the Institute of Actuaries at King's College, it appears that although life assurance has been practised in this country since the time of Queen Anne, *one centenarian* only, he states, has been found in the records of the offices. This is surprising, since the lives insured are supposed to be "selected lives."

Self-Interest.—The Austrian Government have been appealed to by the insurance companies to obtain a satisfactory disinfection of the fields of the late battles in Bulgaria and Roumania. A large number of dead bodies lie unburied in Turkey, and an epidemic is dreaded in Vienna, which may involve risks not contemplated in the calculations in the actuaries' tables.

Boiler Explosions and Coroners' Courts.—The Manchester Steam Users' Association has resolved to urge the Government to take immediate steps for the prevention of boiler explosions, and that in every case, whether fatal or not, a searching investigation should be made by a court other than, and independent of, the coroner's, and competent to deal with technical questions.

The Russian Red Cross Society.—This Society's report, just issued, shows that during the late war the management consisted of a general committee of thirty-four members, eight of whom constituted the executive committee, working in connexion with which were seventy-four local committees, and 231 ladies' committees. Russia in Europe was divided into seven districts, and three others were formed at the seat of war—namely, in Roumania, in Bulgaria, and at Jassy. The medical staff employed by the Society consisted of 113 doctors, 19 chemists, 90 students, 29 female students, 35 assistant-surgeons, 112 female assistant-surgeons, 658 sisters of charity, 17 female nurses, 350 letter-bearers, and a reserve force for special emergencies. Of the 1433 persons thus employed, 816 were women. The expenditure amounted in English money to £872,125. The balance still in hand, inclusive of the subsidy granted by the War Office, is £523,250. Various articles (gifts) were distributed during the first six months of the war, to the value of £80,375.

The Baroness Burdett-Coutts.—Ever engaged in acts of benevolence, and always ready to ameliorate the condition of the poor, the Baroness Burdett-Coutts is in treaty for the purchase of a large site of land in Osnaburgh-street, contiguous to Cumberland Market, for the erection of dwellings for the poor. These dwellings are intended to accommodate 10,000 persons, to be built in flats, and to be let at rents the maximum of which is to be 4s. 6d. a week.

Turpentine Bandages.—The coroner of the city of Manchester recently held an inquest on the body of John Horsfield, aged twenty-three, a carter. The deceased was suffering from rheumatism, and while lying in bed with his arms wrapped in turpentine bandages, struck a lucifer match to light his pipe. He set fire to himself, and his injuries were of so serious a nature that he died. The jury returned a verdict of "Accidental death."

The Western Dispensary, Westminster.—The eighty-ninth annual report of the Western Dispensary, Broadway, Westminster, shows a large increase in the members—namely, 3810 in 1876, against 6225 in 1877. This is attributed to the natural growth of the work of the institution, and to the exceptional circumstance that the neighbouring hospital was closed during the summer and autumn months. The number of home visits was nearly double that of the previous year. This fact is specially mentioned because it is the feature of dispensary work which is most valued by the poor. The balance-sheet shows an expenditure of £783 10s. 8d., against £615 1s. 6d. in the previous year. But through the liberality of a few friends of the charity, the increased outlay has been fully met. The awards received from the Hospital Sunday and Saturday Funds are slightly less than last year, owing to an increased number of institutions participating in the funds. The amount paid by enrolled provident members rose from £93 0s. 1d. in 1876 to £164 10s. 1d. in 1877. A legacy of £1000 in Consols, bequeathed to the charity, has been received, and invested in the names of the trustees of the institution.

Dust and Refuse on Government Buildings.—The local authorities of all places containing Government buildings were, some time ago, called upon to undertake the removal of dust and refuse from those buildings as a condition of the payment by the Crown of contributions to the local rates. As the duty was likely to be attended with considerable expense, most of the parishes were reluctant to enter upon it; but after several months' procrastination the Woolwich Local Board of Health have undertaken the work, and it is expected that other sanitary authorities similarly placed will do likewise. About £5000 a year is the rate paid by the Government to the parish of Woolwich.

BOOKS AND PAMPHLETS RECEIVED—

John Parkin, M.D., The Antidotal Treatment of Disease, part 1—Dr. Abeille, Fibromes Interstitiels de l'Uterus—Newton M. Shaffer, M.D., The Etiology and Pathology of Chronic Joint Disease—Walter Ridgden, M.R.C.S., The Laws of Health: a Lecture—Dr. L. Hermann, The Vivisection Question Popularly Discussed—Thirteenth Annual Report of the Sanitary Commissioner with the Government of India, 1876—James R. Russel, M.D., On the Comparative Prevalence of Filth Diseases in Town and Country.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Medicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Home Chronicler—Hardwicke's Science-Gossip—Transactions of the Odontological Society of Great Britain—National Anti-Compulsory Vaccination Reporter—Students' Journal and Hospital Gazette—Veterinarian—Sunday at Home—Leisure Hour—De Limburger Courier—Monthly Homœopathic Review—American Practitioner—Edinburgh Medical Journal—Maryland Medical Journal—Obstetrical Journal of Great Britain and Ireland.

COMMUNICATIONS have been received from—

Dr. Squire, London; Mr. W. E. Poole, London; Dr. H. Sutherland, London; Mr. John Chatto, London; Mr. Thomas Bryant, London; Dr. Thos. Barlow, London; Dr. Heaman, London; Mr. B. R. Wheatley, London; Dr. J. M. Bauce, London; Mr. T. M. Stone, London; Dr. Heywood Smith, London; Mr. Byrom Bramwell, Newcastle-on-Tyne; The Registrar of Apothecaries' Hall, London; The Secretary of the Metropolitan and National Nursing Association; Dr. Sykes, Doncaster; Dr. T. Hawksley, London; Dr. Dunglison, Philadelphia; Mr. C. J. Cullingworth, Manchester; The Secretary of the Royal Institution, London; Mr. Russell Steele, Hemel Hempstead; Dr. Spender, Bath; Mr. Walter Dickson, London; The Secretary of the London Hospital; Mr. Clement Lucas, London; Major-General Fielding, London; The Secretary of the Clinical Society; Dr. W. B. Kesteven, London.

APPOINTMENTS FOR THE WEEK.

April 6. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Pauer, "On the Clavecinistes of England, Italy, France, and Germany, and their Works (with Musical Illustrations on the Harpsichord and Pianoforte)."

8. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Mr. William Rose will exhibit a Child from whom he has removed the Half of the Lower Jaw. Mr. Fisher will show Two Cases of Congenital Talipes. Dr. Sansom will read a paper, "Notes on some Common Disorders of Children."

9. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Prof. Garrod, "On the Protoplasmic Theory of Life and its Bearing on Physiology."

Royal Medical and Chirurgical Society (Ballot, 8 p.m.), 8½ p.m. Dr. Southey, "On some points in the Minute Anatomy of the Kidney which have important bearings on its Physiological Functions in Health and Disease." Mr. Jonathan Hutchinson, "On Paralysis of the Internal Muscles of the Eye: a Group of Symptoms which usually indicate Diseases of the Lenticular Ganglion."

10. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Epidemiological Society, 8½ p.m. Surgeon-General John Murray (President), "On the Plague and Typhus Fever in India."

Hunterian Society (London Institution), (Council Meeting, 7½ p.m.), 8 p.m. Mr. Davies-Colley, "On a Rheumatoid Affection of Joints in Women." Dr. Galabin, "On the Treatment of Prolapsus Uteri."

11. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Dewar, "On the Chemistry of the Organic World."

12. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Clinical Society, 8½ p.m. Mr. Nunn, (1) "Electrolytic Treatment of Epulis"; (2) "Plantar Bunions." Dr. Semon, "Bilateral Paralysis of the Crico-Arytenoidei Postici Muscles" (living specimen). Dr. Barlow and Mr. Marsh, "Ovariotomy in a Child aged twelve years." Mr. Barker, "Wound of an Abnormal Obturator Artery in an Operation for Femoral Hernia."

Royal Institution (Weekly Evening Meeting, 8 p.m.), 9 p.m. Sir Joseph D. Hooker, "The Distribution of Plants in North America."

VITAL STATISTICS OF LONDON.

Week ending Saturday, March 30, 1878.

BIRTHS.

Births of Boys, 1210; Girls, 1181; Total, 2391.
Average of 10 corresponding years 1868-77, 2370·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	894	872	1766
Average of the ten years 1868-77	823·4	809·6	1633·0
Average corrected to increased population ...	...	...	1747
Deaths of people aged 80 and upwards ...	...	...	62

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	2	4	6	2	27	...	3	...	2
North ...	751729	33	13	13	4	29	...	6	...	3
Central ...	334369	...	2	5	1	7	...	2	...	3
East	639111	5	3	8	4	36	1	6	...	2
South	967692	8	13	15	1	59	2	6	2	1
Total	3254260	48	35	47	12	158	3	23	2	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·423 in.
Mean temperature	35·5°
Highest point of thermometer	48·5°
Lowest point of thermometer	24·3°
Mean dew-point temperature	28·6°
General direction of wind	Variable.
Whole amount of rain in the week	0·71 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, March 30, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending Mar. 30.	Deaths Registered during the week ending Mar. 30.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2391	1766	48·5	24·3	35·5	1·95	0·71	1·80
Brighton	103923	44·1	58	64	48·0	25·5	35·1	1·73	0·73	1·85
Portsmouth ...	129461	28·9	65	39	49·5	30·0	37·3	2·95	0·50	1·27
Norwich	84620	11·3	51	32	45·5	28·2	35·4	1·89	0·22	0·56
Plymouth	73599	52·8	42	45	50·0	29·0	38·9	3·83	0·39	0·99
Bristol	206419	46·4	152	96	53·4	27·1	36·4	2·44	0·51	1·30
Wolverhampton ...	74240	21·5	62	39	45·4	23·6	33·0	0·56	0·39	0·99
Birmingham ...	383117	45·6	339	230	...	...	...	...	...	...
Leicester	121473	38·0	109	58	48·8	25·0	35·2	1·78	0·40	1·02
Nottingham ...	165267	16·6	96	81	48·0	22·0	34·5	1·39	0·25	0·63
Liverpool	532881	102·2	387	305	44·5	30·0	36·0	2·22	0·57	1·45
Manchester ...	360514	84·0	241	197	...	...	...	...	...	...
Salford	170251	32·5	123	71	49·4	23·0	34·2	1·22	0·27	0·69
Oldham	107366	23·0	83	68	...	...	...	...	...	...
Bradford	185088	25·0	142	88	46·0	26·9	34·7	1·50	0·19	0·48
Leeds	304948	14·1	224	114	47·0	27·0	35·6	2·01	0·20	0·51
Sheffield	289537	14·7	223	131	46·0	28·0	35·6	2·01	0·36	0·91
Hull	143139	39·4	110	71	45·0	27·0	34·7	1·50	0·65	1·65
Sunderland ...	112459	34·0	115	63	47·0	28·0	36·5	2·50	0·40	1·02
Newcastle-on-Tyne	144570	26·9	120	71	...	...	...	...	...	...
Edinburgh	222371	53·1	149	116	44·2	24·5	34·6	1·45	0·25	0·63
Glasgow	586940	94·0	382	304	46·5	27·7	37·3	2·95	0·04	0·10
Dublin	314666	31·8	268	173	49·8	26·6	39·0	3·89	0·31	0·79
Total of 23 Townsin United Kingdom	8373953	37·9	5957	4220	53·4	22·0	35·8	2 12	0·39	0·99

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·43 in. The highest reading was 29·91 in. on Tuesday morning, and the lowest 29·01 in. on Friday morning.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

MEETING OF THE GENERAL MEDICAL COUNCIL,

HELD AT THEIR HOUSE, OXFORD-STREET, W.

FIRST DAY—WEDNESDAY, APRIL 10.

OPENING ADDRESS BY DR. ACLAND, F.R.S., PRESIDENT.

THE MEDICAL COUNCIL has this year been called together thus early in the Parliamentary Session to enable it to carry forward, and if possible to conclude for a long time to come, its deliberations on the amendment of the Medical Acts. It may not, however, be assumed that in one sitting the Council will be able completely to fulfil its duty in this respect.

Although the business of the Council has of late increased, there is not much that demands your instant attention, except the Bills affecting the profession of medicine, actually before Parliament or in contemplation, together with questions arising out of them.

Since your last meeting, steps have been taken to make the Medical Register more accurate than heretofore. The volume which is now in your hands has in it several thousand corrections, besides other alterations in the typographical arrangements and some additional prefatory matter. For these, as for other office improvements, the Council is indebted to the Registrar.

The Minutes of the Executive Committee will have informed the Council of communications from the Board of Trade relating to Weights and Measures, and from the Registrar-General on important points connected with the relation of his office to the Medical Council.

Communications concerning the removal of names from the Register, and other subjects connected therewith, will, when required, be laid before you.

Acting under your instructions, the Executive Committee made applications to the various licensing bodies concerning the insufficiency of general education in many of the candidates who present themselves for professional examination. The answers from these authorities will be laid on the table. Papers written by registered practitioners have been confidentially forwarded to me as President, to show that the neglect of the practice of writing the English language, permitted by some examining boards, cannot be reprehended in too strong terms, if ordinary literary culture is to form an essential part of the training for a scientific profession.

The scheme for the Conjoint Examining Board in England has been industriously elaborated under the Presidency of Sir James Paget. It may be permitted to one of the members of the Committee to say that the discussions among the representatives of the several licensing bodies have shown, when considered in connexion with the recommendations of the Council, and the evidence given to it through Mr. Syme's Committee in 1868, that much remains to be done before this country can rightly claim to have settled views on the course, time, and methods indispensable for securing a sound education for the practice of medicine. It becomes more and more clear that the examining boards regulate the steps by which a student is fitted to pass an examination on a particular day. The question is whether thus we best prepare him for the practical discharge of his life-long work. This proves the great importance—nay, the necessity—of having examining boards composed of the highest and fittest persons for the special duty of examining that can be induced to undertake it. Another important conclusion may be drawn—so trite, indeed, as to seem almost impertinent to name it—that the opportunities for learning in different hospitals and universities are at least as diverse as the mode of testing results has ever been. As regards scientific teaching, an eminent teacher (Mr. Savory) has again lately drawn public attention to the importance of organising the means for the best scientific teaching not necessarily connected with the chief place of clinical teaching, the hospital.

A recommendation just made by the Commissioners of the Universities of Scotland, that no candidate shall be admitted to examination in human anatomy or physiology, or in any purely medical subject, unless he has passed an examination in natural philosophy, chemistry, physiology, botany, and zoology, as constituting the second and third groups of the fifth or natural science department for the degree of M.A., will have an important bearing on the time and place necessary for scientific training preparatory to medical study, and for professional study, respectively.

Considerations of this kind will force themselves on our minds whenever we discuss the nature and extent of examination rules to be made generally binding by the authority of the Medical Council.

Documents will be laid before you from various bodies affected by the Medical Acts Amendment Bill presented to the House of Lords on March 19.

At the close of the session of last year the Medical Council urged on the Lord President that a Bill should be brought in by the Government to amend the Medical Acts. The Lord President, acknowledging the importance of the objects which the Council presented to his view, promised his best attention to the whole matter. His Grace has fully redeemed this pledge, and, whatever be the result, deserves the warm thanks of all who are interested in the settlement of medical legislation.

Immediately after the summer recess the Lord President personally considered all the materials which he had before him for amending the Medical Acts, whether obtained from the Council or from other sources.

The Medical Council had pressed on his Grace, and through him on the Government, the importance of an early settlement of the following five subjects, viz.:—

1. The recognition of foreign and colonial qualifications in England;
2. The privileges of women in regard to medical qualifications;
3. The appropriation of penalties under the Medical Act;
4. To some extent the education of midwives;
5. And, indirectly, the emendation of the law affecting certificates of lunacy.

After full consideration of these several subjects, the Lord President informed me that the Government were of opinion that it might in the end be more satisfactory to the Council, as well as to the Legislature and to the country, to bring into a Bill, together with these points, certain others for which legislation had at one time or other been desired.

On all these matters the Lord President sought from me information; and I gave him such as I believed would most nearly express the opinions of the Council. But I would not take on myself to advise his Grace to omit from a Government Bill any of the subjects relating to our profession which might be regarded as of public importance, even though on some of them the Council had not expressed a definite opinion.

There is a great temptation for your President to summon the Council on every occasion of consequence, and to throw responsibility at every turn on the Executive Committee. But both are so heavy a charge to the finances—the Committee costing nearly £50 for one afternoon, the Council £300 if summoned for one day(a)—that the President must often be content to bear the burden which you impose upon him, feeling sure of your support where he deserves it, and always certain of your lenient judgment.

This last winter, indeed, the task was not difficult, for the Lord President seemed to have one only desire, to know how best to legislate for the medical profession in its varied relations to the body politic, and in its own complex inner organisation. Nor can it be without interest to this Council, that, looking on this body as the appointed exponent of a great department of society, he had desired in all ways to aid and support it.

The important Society of Obstetricians had pressed repeatedly on the public mind the desirability of complete legislation concerning midwives. It is, moreover, manifest that the vexed question of the relations of the medical profession towards women, and the fitness of women to practise the whole of medicine and the whole of surgery, or any part or parts of medicine and surgery, could not be completely decided upon without a discusssion on the education and organisation of the midwives of the future.

The body of dentists—a class in the body politic of whom,

(a) Or an average of about £165 daily for a whole session.

when the actual suffering which they seek to prevent and to alleviate is taken into account, one must say that it is an important and useful body—urged on the attention of Parliament their claims to better organisation, depending on and justified by a higher education and fitness.

The Lord President was little disposed to neglect the numerous persons engaged in these occupations respectively—professionally occupied as they are—through the entire country, nor to sever those classes thus growing in importance, as social organisation becomes more perfect, from the medical profession and the Medical Council.

Having decided, then, to consider all outstanding questions known to affect the profession of medicine, and through it the public at large, the Duke could hardly have left untouched the subject of examinations, which was handled in a complete and masterly way in the Bill so well-known as Lord Ripon's Bill. Though the Council had not last year pressed on the Lord President's notice the subject of diminishing the number of ways by which the licences could be obtained, he knew well the anxious thought which the Council had long and often bestowed upon it; he was acquainted with the resolutions which the Council had passed with regard to Lord Ripon's Bill; and fully estimated the importance to the public of one uniform and satisfactory test of qualification for entry to the Medical Register in each branch of the United Kingdom.

The Lord President could not therefore but entertain the question. If a Bill was brought in either without Lord Ripon's clauses relating to examinations, or without some modification of them, it was clear that it would have to be argued in Parliament that the existing arrangements need no alteration. Could this argument be maintained? Is the Medical Council fully agreed upon it?

It is often said that the whole profession considered, when Lord Ripon's Bill was brought before Parliament, that the mode of conducting examinations by the examining bodies was the subject that most urgently called for Parliamentary revision. It is not, however, necessary now to revert to the circumstances which led to the withdrawal of the Bill.

But in this the Council will assuredly be unanimous, that it is in the interest of all persons concerned—in the interests of the public, of the Council, of medical teachers, and of students—no longer to delay a final settlement of the principles on which examinations shall be conducted in England, in Scotland, and in Ireland. Some evils have disappeared: some new difficulties have perhaps arisen. Education, examination—nay, even knowledge itself—have greatly altered within the last twenty years. Those who have attended the more than fifty conferences which have taken place in England, in the belief that they were discharging a great public duty, may fairly ask to be released if their labours be not shown to be material for the public interest, or if the apparent benefit in one division of the kingdom should be productive of other and unknown evils through any other division of the kingdom. It is clear that the matter cannot be decided without frank and full discussion both in this Council and in Parliament. The discussion here will be dispassionate and based upon correct estimate of the present and of the past state of the several licensing bodies and of the Popular sentiment. That sentiment is certainly in favour of making impossible the continued existence of nineteen separate examining and licensing boards with their varied qualities. The public are convinced that there are dangers in the continuance of so many modes of entering the profession, and think the system of inspection offers only a cumbrous and fitful check to constant danger. There are not wanting signs that some both within and without the medical profession would prefer State-appointed examiners, or an examining board appointed by this Council, not only to the present system of many examining boards—with permissive power to combine—but would even prefer State-appointed examiners to persons appointed by the present universities and corporations in combination. It is well known that the framers of the Act of 1858 expected the permissive principle of combination, under Section 19 of the Act, to be more largely adopted than it has been.

It would ill become me to use any arguments on one side or the other, inasmuch as my function is limited to collecting facts for your consideration. Yet I cannot but observe in this relation that it will be a grave misfortune for our generation if it be forced to the conclusion that our ancient medical institutions, hitherto self-administered, must abdicate their functions of guiding the education of our youth. And that is the risk that is run. One Government might give to this Medical Council a task which the corporations decline to execute—namely, the making the national examining boards. Another Government might assign it, not to this Council, but to a single person, who, however able, might not possess the combined judgment of the many and eminent minds brought together of necessity by a representative board.

The Lord President, as the Council is aware, has not at present elected to make the formation of a single board compulsory for each branch of the United Kingdom. It is not too much for me to say that, as his Grace hoped for discussion and for the freest expression of opinion from all who are entitled to be heard, and having referred the Bill to this Council, the question for us to consider is whether union is expedient or requisite. The form in which the proposition is put is not, perhaps, of much moment for the issue. But it cannot be less acceptable to the various authorities to ask the Government, after discussion, to grant more extended power for good, than to have had to protest against unnecessary interference and uncalled-for dictation for which the Council had not applied.

I cannot help noticing, with regard to those who in 1858 first undertook the working of the Medical Act, with all its conflicting interests, that while during the twenty years that the Act has been in operation, in Ireland one licensing body alone has changed its representative, Scotland sends only one of its original members, England sends but two such members, and not a single original nominee of the Crown remains in the Council. It cannot be amiss, therefore, to take the sense of the existing Council in the most unfettered way on the state of the medical examinations in the country.

It would waste the time of the Council if the details of the Bill that has been in the hands of all the members between two and three weeks were even enumerated. The aim of the Bill is, without doubt, to supply all the known deficiencies of the Medical Acts, and, if possible, to adjust the machinery of this Council so that it may not be distracted from its strict work, the regulation of medical education, and the watchful care of a great profession in the public interest.

The principal objects of the Bill (I quote from the Lord President's speech) "are, first, to require a person registered in the Medical Register to have both a medical and a surgical qualification; second, to allow the registration of foreign and colonial practitioners; third, to further restrict the assumption by unqualified persons of designations implying qualifications; fourth, to make further provision for the uniformity of the standard in the grant of qualification in the United Kingdom; fifth, to make provision for women similar to that intended to be made by 39 and 40 Vict., cap. 41, commonly called Mr. Russell Gurney's Act; sixth, to make provision for the examination and registration of dentists; seventh, to make provision for the examination and registration of midwives; eighth, to make amendments in the Medical Act of 1858 as regards the registers, erasures from the register, the certificates of medical practitioners under the Lunacy Acts, the qualification of medical officers in colonial ships, and other minor matters."

It was truly added by the Lord President that this measure "deals with a subject of great importance, but one of great complexity, and which, when legislation is proposed in respect of it, requires great consideration in numerous details. The subject is one for which there should be no hasty legislation, and I should hope that by the time the Bill comes on for a second reading we shall have the benefit of being in possession of the views of all persons in the country who may be interested in its details, and who are competent to give advice on the matter. I hope I need not add that we shall be most ready to give an attentive consideration to all suggestions which may be offered with the object of securing a good and useful measure, and one which will be satisfactory both to the medical profession and the public at large."

Before quitting the consideration of this part of the work of the session, I beg you to excuse me if I seem in any improper way, or indeed in any sense, to be the interpreter of a measure to which the Government has given much thought, which is full of delicate and difficult questions, and which deals with great institutions and important persons.

I need not say that I have no functions in the matter

except, first, to carry out as far as I can your desires, and secondly, in your absence to act to the best of my judgment on your behalf.

The grave anxiety of the Eastern Question has made it difficult to arrange the times and the mode for the introduction and the readings of the Bill in the way best calculated to carry a Bill this session, and to suit the time and convenience of the Medical Council. But that way has been sought—I trust, attained.

Let us hope that we may come to unanimous conclusions as to the changes which may be required in the Bill, and then that it may this session become an Act with good effect.

This done, might we not hope for the consolidation of all the Medical Acts, with further power if necessary? Thus would be ended the first twenty years of combined effort towards harmonising the work of the time-honoured institutions which have nurtured in Great Britain the science and practice of medicine.

Thus would the Council go forward unfettered to accomplish further work, in aid of the great demands made, in many ways, upon our profession.

ORIGINAL LECTURES.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

LOCALISATION OF CEREBRAL DISEASE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.

LECTURE II.

(*Concluded from page* 359.)

Brachio-Crural Monoplegia.(a)—Paralysis of the leg occurs more frequently in association with paralysis of the arm than singly as the result of cortical lesions. I have already given several cases of this kind; the following may be added.

MM. Charcot and Pitres(b) give a case of paralysis with rigidity of the left limbs of three years' duration, sensibility being unimpaired. A patch of softening 5 × 2·5 centimetres was found at the upper extremity of the fissure of Rolando, on the convex surface of the right hemisphere. (Fig. A.)

FIG. A.

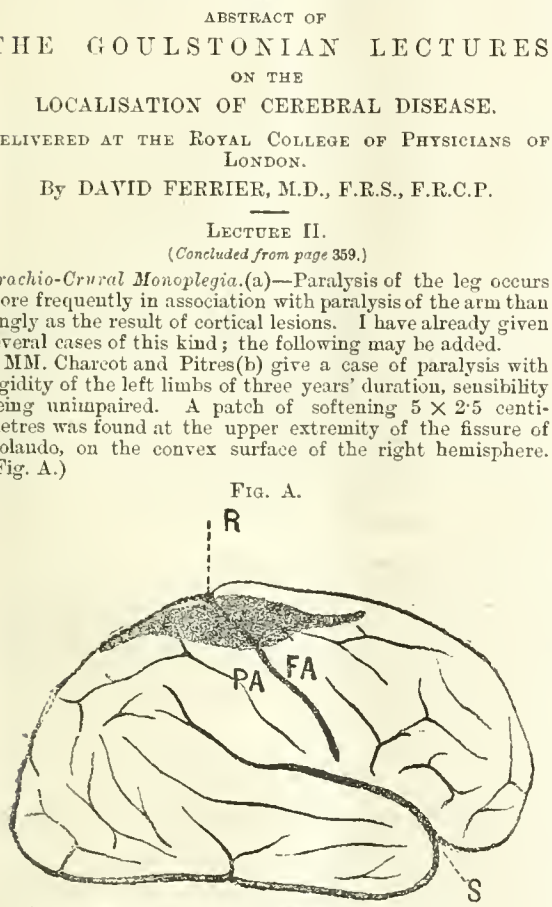

FIG. A.—S, Fissure of Sylvius; R, Fissure of Rolando; FA, Ascending Frontal Convolution; PA, Ascending Parietal Convolution.

Brachial Monoplegia.—The centres for the movements of the arm and hand occupy a considerable space, as might be expected from their importance as organs of intelligence. And it is obviously highly important, in any given case of brachial monoplegia of cortical origin, to determine, if possible, which of the movements of the upper extremity are particularly affected. This has not been done with any great degree of accuracy in many of the recorded cases.

M. Maurice Raynaud(c) reports a case of paralysis limited to the left arm, and more particularly to the extensor muscles, though the flexors were also paretic. There was no diminution in sensation, or alteration in electro-motor contractility. The lesion was situated in the ascending parietal convolution of the right hemisphere, in the position of a line drawn back from the second frontal. It was an area of softening surrounding a tubercle the size of a millet-seed, and of about a centimetre in diameter; the softening affecting the subjacent medullary fibres more than the cortex. A smaller area of softening of the size of a pea was situated near this, but within the fissure of Rolando. The whole lesion could be covered with the pulp of the finger.

M. Sabourin(d) records a case of sudden partial right hemiplegia without loss of consciousness, which soon disappeared, leaving paralysis of the right hand and arm, which continued till death seven days afterwards. A focus of red softening, of the size of a two-franc piece, was found in the left hemisphere, the centre of which, in which the softening was greatest, corresponded with the junction of the ascending parietal convolution and supramarginal lobule. The softening extended half-way up the ascending parietal convolution, somewhat concealed within the fissure. The ganglia were intact.

M. Boyer(e) has recorded a case of sudden paralysis of the left arm and leg. After four or five days the leg regained its power, while the left arm remained permanently paralysed. The affection happened in 1872. In 1877 the condition was ridigity of the left arm and atrophy of the muscles of the forearm. Sensation was unimpaired. The patient died of broncho-pneumonia. The left hemisphere was normal. In the right hemisphere a patch of atrophy, caused by an old yellow softening, existed in the ascending parietal and ascending frontal convolutions; and an extension of the same existed in the temporo-sphenoidal region.

Mr. Bourdon(f) has collected several other cases, and quotes an interesting case of double brachial monoplegia communicated to him by M. Vermeil. This was the result of a cranial injury. The arms only were paralysed as to motion, sensation being unimpaired. Death occurred two days after the accident. There was no depression of the skull at any part. On the surface of the brain were two small superficial hæmorrhagic extravasations of about fifteen millimetres in diameter. The one of these was situated towards the upper part of the ascending frontal in the left hemisphere. The other, in the right hemisphere, was situated at the junction of the ascending parietal with the supramarginal lobule.

I will only refer to one other case of brachial monoplegia, respecting which there exists some doubt as to its harmony with the other facts related in reference to limited paralyses. The case is related by M. Cotard.(g) A woman, who died at the age of seventy-one, had been seized with convulsions, followed by paralysis of the left arm, about the age of two years. The left arm continued paralysed and rigid. She walked with difficulty; but this was apparently due to fracture of the neck of the left femur a few years before. Formerly no difficulty was noted in this respect. The right hemisphere was smaller than the left. "Behind the upper extremity of the fissure of Rolando there was a longitudinal depression of the cortex, which extended parallel with the longitudinal fissure as far as the occipital lobule, five centimetres in length by one centimetre in breadth." It is not clear in this case what extent of the ascending parietal convolution was involved, or how much of the postero-parietal lobule, if any, as it is only said that the linear depression was parallel to the longitudinal fissure. M. Charcot, in whose *clinique* the case occurred, is unable to give me further particulars as to the exact seat of the lesion. The uncertainty in this case is as regards the extent of the affection of the centre for movements of the leg, which, whether they were affected at first or not, do not seem to have been permanently so.

A somewhat similar uncertainty also exists in reference to Boyer's case, already quoted, in which, though the leg was at one time paralysed, yet recovery took place, though some lesion of the leg-centre still appears to have continued. It is, therefore, a question whether the leg may regain complete power notwithstanding the existence of partial lesion

(a) I use the term monoplegia here to indicate paralysis of a distinct group of movements, and not as meaning paralysis of *a* muscle or *a* limb.
(b) *Op. cit.*, page 185.
(c) *Bulletin de la Société Anatomique*, July, 1876.
(d) *Le Progrès Médical*, 1877, page 391.
(e) *Bulletin de la Société Anatomique*, May 4th, 1877.
(f) *Op. cit.*
(g) "Atrophie Partielle du Cerveau," page 21.

of its cortical centre. These cases would seem to indicate this, granting always that the observations were thoroughly exact and minute.

M. Charcot, in a private communication to me respecting Cotard's case, thinks that cortical lesions in infancy do not have precisely the same effect as similar ones in the adult, owing to the functions of the cortical centres not being as yet well defined. This is worthy of particular investigation, and would seem to be justified by the experiments of Soltmann in reference to the development of the cortical centres in young animals.(h)

With the exception of Cotard's case, which must remain doubtful, the cases I have quoted of limited lesions with brachial monoplegia are entirely in harmony with the localisation of the head- and arm-centres in the monkey; for, though the lesions recorded did not occupy the same position in all, yet they were all in regions included within the area in which these centres are situated—viz., the ascending parietal and upper part of the ascending frontal convolutions.

In those in which it was noted that the hand in particular was affected, the lesion invaded the ascending parietal convolution, in accordance with the facts of experimental localisation. In others, no differentiation was made or was possible. It would have been most interesting if this had been done in Vermeil's case of double brachial monoplegia, as the lesions occupied centres for different movements of the upper extremity.

As with the leg, so also in regard to the arm, some cases of amputation, or congenital deficiency, of the hand or arm are on record in which atrophy has been described in certain convolutions of the opposite hemisphere.

A case is reported by Chuquet(i) of amputation of the right arm six years before death. In the left hemisphere there was atrophy of the upper third of the ascending parietal convolution and corresponding part of the internal surface of the hemisphere. The length of the atrophied part was two centimetres.

M. Boyer(k) examined the brain of a man who died at the Bicêtre, having had his left arm amputated thirty years previously. The ascending convolutions were atrophied at their superior extremity, and the ascending frontal was throughout very slender and flattish.

Dr. Gowers has kindly given me the particulars, accompanied by a photograph of the brain, of a case of congenital absence of the left hand. The middle part of the ascending parietal convolution in the right hemisphere is, as clearly shown in the photograph, much smaller than the corresponding convolution in the left. A microscopic examination had not been made at the time Dr. Gowers gave me these particulars, though he intended carrying this out.

The cases of atrophy—and of these Dr. Gowers' seems the most satisfactory, inasmuch as the lesion was congenital—if we cannot place absolute reliance on them as yet, are not opposed to the localisation of the hand- and arm-centres as determined by physiological experiment or the facts of disease.

Brachio-Facial Monoplegia.—The combination of brachial with facial paralysis is a much more frequent occurrence than brachial or facial paralysis singly in connexion with cortical disease; and very commonly, and for obvious reasons, it is associated with aphasia when the disease is in the left hemisphere. This, however, is not always the case; and I have recently seen two cases of right brachio-facial monoplegia without aphasic symptoms. Many such occur, but recover, and are lost sight of. Post-mortem examination has, however, been made in several.

Dieulafoy(l) has recorded the case of a woman, aged sixty, who was suddenly seized with paralysis of motion in the right arm and right lower facial region. Death occurred the day after from coma. The necropsy revealed a hæmorrhagic extravasation, the size of a nut, surrounded by a zone of softening in the ascending frontal convolution of the left hemisphere. The exact position of the lesion in the ascending frontal is not given more accurately in the record.

Troisier(m) gives a case of a man, who died of phthisis, who had been suddenly seized with paralysis in the right arm, at first showing itself in the muscles supplied by the musculo-spiral, and followed by complete paralysis of the limb, with the addition of right facial paralysis; sensation was intact. In the left hemisphere a patch of hyperæmia and yellow granulations, of seven to eight square centimetres in extent, was found posterior to the third frontal convolution. The lesion was not very definite in this case, and it was further complicated by the simultaneous occurrence of granulations in the membranes behind the posterior parietal convolution.

M. Hippolyte Martin(n) has recorded a case of left facial paralysis with paresis of the left arm, more particularly shown in the first three fingers. The affection had come on suddenly, without loss of consciousness or other paralysis, five or six months previously. The necropsy revealed a patch of yellow softening in the lower fifth of the ascending parietal convolution of the right hemisphere. The softening extended up the fissure of Rolando to a level with the posterior extremity of the second frontal convolution. The softening penetrated about one centimetre from the surface. The basal ganglia and the rest of the brain were normal.

Cruveilhier(o) gives a case, illustrated by a figure, of paralysis suddenly occurring on the right side of the face and tongue (aphasia), with paralysis and rigidity of the right arm. The lesion in this case was a patch of red softening of about two by four centimetres in extent, situated at the lower third of the fissure of Rolando, and affecting also very specially the ascending parietal convolution.

A case reported by Anton Frey(p) is referred to by M. Pitres,(q) as showing that brachio-facial monoplegia may occur from lesions limited to the medullary fibres of the middle pediculo-frontal and frontal section. The symptoms were paresis of the left arm and left side of the face, without affection of sensation. Death occurred from gangrenous erysipelas of the face. In the right hemisphere a small focus of hæmorrhage, formed by the juxtaposition of three minute extravasations, each of the size of a mustard-seed, was found in the medullary fibres at the junction of the middle frontal with the ascending frontal convolution.

Other similar cases are given by Pitres, which I need not, however, quote. I might cite many other instances of this form of monoplegia in connexion with cortical lesions; they are not, however, all described with the degree of topographical accuracy which is desirable. I would refer the reader to M. Landouzy's work, where most of them are collected and details given, and also to Grasset's recent memoir, "Localisation dans les Maladies Cérébrales," 1878.

The lesions causing brachio-facial monoplegia are all towards the middle of the ascending frontal and parietal convolutions, or somewhat lower—regions which include facial and brachio-manual centres, as indicated by experimentation on monkeys.

Facial Monoplegia.—Facial paralysis of the cerebral type—*i.e.*, paralysis limited almost exclusively to the lower facial region—is not a very common occurrence by itself in connexion with cortical disease. Usually, it is complicated with brachial paralysis or with aphasia; with the latter more especially when the lesion is in the left hemisphere. This is naturally to be expected from the proximity of the facial centres to those of the arm and hand already indicated, and to the lingual and oral centres.

Brown-Séquard(r) reports a number of cases of facial paralysis, "seemingly caused" by lesions in various parts of the brain, such as the frontal, occipital, and temporo-sphenoidal lobes; but as there is not even a common, to say nothing of a constant, relation between such lesions and motor paralysis of any kind, and as there seems to have been no attempt at differentiation between peripheral and central facial paralysis, the facts have little or no value as regards localisation.

The cases on record in which paralysis limited to the face has been found in connexion with localised cortical disease have been due to lesion of the right hemisphere; but in none can the lesion be said to have been accurately defined or uncomplicated. Charcot and Pitres(s) give a case, with a figure (Fig. B), of a lesion, extensive in one sense, but limited as regards the motor area of the brain involved. This was a case of apoplexy with facial paralysis and early rigidity of the limbs on the left side. The rigidity of the limbs

(h) *Jahr. für Kinderheilk.*, Band ix.
(i) *Bulletin de la Société Anatomique*, November, 1878.
(k) *Ibid.*, April, 1877.
(l) *Gazette des Hopitaux*, 1868, page 150.
(m) *Bulletin de la Société Anatomique*," 1872, page 262.
(n) *Revue Mensuelle*, No. 3, page 136. (o) "Atlas," liv., xx., plate 4.
(p) *Archiv für Pyschiatrie*, 1875, page 327.
(q) *Op. cit.*, page 76. (r) *Lancet*, April, 1877.
(s) *Revue Mensuelle*, 1877, page 181.

disappeared, but the facial paralysis persisted till death. An extensive area of softening was found in the right hemisphere, invading the third frontal, the lower extremities of the ascending convolutions, and a large extent of the parietal, temporo-sphenoidal, and insular lobes.

FIG. B.

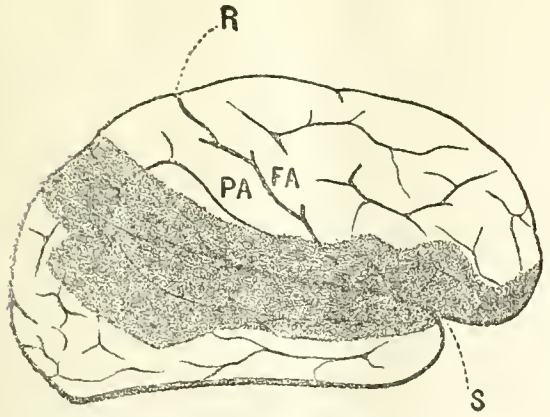

FIG. B.—S, Fissure of Sylvius; R, Fissure of Rolando; FA, Ascending Frontal Convolution; PA, Ascending Parietal Convolution.

Hitzig(t) relates the case of a French soldier who, two months after a bullet-wound on the right side of the head, began to be affected with clonic spasms in the left side of the face. These were followed by transient, but complete, paralysis of the left side of the face and left side of the tongue. Clonic spasms occurred also in the left hand. After death, an abscess was found corresponding to the seat of the injury, situated in the ascending frontal convolution, between the precentral fissure and the fissure of Rolando. It should, however, be noted that there were indications of meningeal inflammation over the whole surface of the right hemisphere, though there was no cerebral softening except in the neighbourhood of the abscess. A similar case is reported by Wernher.(u) Had the lesions been in the left instead of the right hemisphere, we should in all probability have had the symptoms of aphasia superadded, as in the following case—to select one from a host—related by Hervey.(v) This was a case of right facial paralysis with aphasia. A focus of softening was found anterior to the fissure of Rolando, at the junction of the third frontal with the ascending frontal convolution of the left hemisphere.

Dr. Gowers(x) has reported a case of left hemiplegia, which gradually recovered, with the exception of very marked paralysis of the inferior facial muscles. Under the influence of emotion, however, the muscles acted equally well on both sides. This was found to depend on a hæmorrhagic extravasation in and beneath the upper half of the precentral sulcus, which had pressed upon the convolutions bounding it—viz., the posterior extremity of the middle and superior frontal, and corresponding part of the ascending frontal of the right hemisphere.

Aphasia—Oro-Lingual Hemiparesis.—I would now make a few remarks on what may be described as an objective-subjective monoplegia: in the one aspect, oro-lingual hemiparesis; in the other, aphasia. It is not my intention to discuss the intimate pathology of aphasia, nor the relation between the objective and subjective aspects of the lesion on which this depends. Nor do I think it necessary, in the present state of clinical medicine and pathology, to take up time with the enumeration of instances of aphasia with lesions in what is termed Broca's region.

The occurrence of aphasia in the immense majority of instances in connexion with disease of the left hemisphere, and with disease in a region which, as you will see by reference to the diagrams, corresponds with the oral and lingual centres in the monkey, is a fact which can no longer be disputed. It is also a fact that, in the great majority of instances, aphasia is associated with a greater or less degree of right hemiplegia or right monoplegia, of which the most common is brachio-facial or facial monoplegia.

(t) *Archiv für Psychiatrie*, 1872, Band iii., page 231.
(u) *Archiv für Path. Anat. und Physiologie*, Band lvi., page 289.
(v) *Bulletin de la Société Anatomique*, 1874, page 29.
(x) *Pathological Transactions*, 1876, page 35.

It is necessary that those who dispute the validity of inferences as to causal relationship between the lesions indicated and aphasia should clearly understand what is contended for by those who consider this relationship established. Aphasia, in the strictly limited sense of the term, or Broca's aphasia, does not mean speechlessness from paralysis of articulation, nor speechlessness from general cerebral disturbance, such as emotional shock, etc., but the inability to express thoughts in articulate speech, or to think in words, and all that this implies.

It is not contended that there is an absolute restriction of the speech-centre to the left hemisphere. This, though the rule, is not an absolute rule, but only an approximate generalisation, and therefore exceptions may be admitted without invalidating the localisation of the speech centre in one side or the other, which is what is really maintaine . Hence, to overturn the localisation of a speech centre it is not enough to bring forward a case of lesion of the left speech centre without aphasia. This is admitted by all; and it is a very significant fact, that in several at least of the cases of aphasia with disease of the right speech-centre, the patients have been left-handed.

It is incumbent upon the opponents of this localisation to bring forward a case in which, with bilateral lesion of this centre, no aphasia occurred. But I need scarcely say no such evidence exists.

The effect of a bilateral lesion would be, according to the results of experimental physiology, both aphasia and anarthria, or paralysis of articulation.

A beautiful, and I believe an unique, instance of this has been put on record by Dr. Barlow.(y) A boy aged ten, the subject of aortic disease, of which he ultimately died, was seized with right hemiplegia, chiefly brachio-facial, and aphasia. Of this he had apparently recovered at the end of a month. Three months after, he was seized with left brachio-facial monoplegia. This time there was not only aphasia, but paralysis of all voluntary movements of the month and tongue. Reflex deglutition, however, was unimpaired. There was no affection of sensation in the paralysed parts, either in the skin or mucous membranes of the palate, etc., and the muscles reacted normally to the faradic current. "To sum up the cerebral condition," says Dr. Barlow, "there appeared to be loss of voluntary motor power over the muscles concerned in deglutition and articulation." This lasted till death, while the arms improved somewhat in power. Intelligence was fair, and comprehension good. On post-mortem examination, a lesion was found in each hemisphere, and in exactly corresponding situations. The region involved by the lesion—which was yellow softening—was "the lower end of the ascending frontal and the hinder end of the middle and inferior frontal convolutions."

This case, in all its features, whether we look at it as an experiment of disease approaching to the conditions of an exact and precise experimental lesion, or to the care with which it was observed and differentiated from peripheral or bulbar paralysis, is one of the most satisfactory and conclusive demonstrations of the harmony between human pathology and experimental physiology that I am acquainted with.

Some ingenious—if we cannot call them successful—attempts have been made to overthrow the causal relationship between lesions in Broca's region in the left hemisphere and aphasia, and to make it a relationship merely of co-existence.

As embolism or thrombosis of the left middle cerebral artery or one of its branches is perhaps the most frequent cause of aphasia, it has been suggested by Jaccoud and others that the greater frequency of aphasia with left cerebral lesion might be accounted for by the greater frequency of embolism in the left middle cerebral artery than in the right. That this is so appears to be an indisputable fact, and perhaps to be accounted for by the physical conditions of the blood-supply. Meissner(z) found in 38 cases of embolism, 26 in the left and 12 in the right; and Bertin found 31 cases of embolism of the left to 7 of the right middle cerebral. Aphasia, however, does not always depend on embolic softening; and if we take the relative frequency of softening due to any cause, in the right and left hemisphere respectively, we find, according to Andral's statistics, that the right hemisphere is more liable than the left.

(y) *British Medical Journal*, July 28, 1877, page 103.
(z) For these various statistics I am indebted to Küssmaul, "Die Störungen der Sprache," Ziemssen's "Handbuch," vol. xii., Anhang 1877.

Thus, out of 169 cases, 73 were in the right, 63 in the left, and 33 in both hemispheres. And in reference to diseases of the hemispheres generally, Charcot and Vulpian found the relative proportions in the two hemispheres very nearly equal. They found 58 cases of left hemiplegia with disease of the right hemisphere, to 52 cases of right hemiplegia with disease of the left. As regards the relative frequency of aphasia with right and left hemiplegia respectively, Seguin found, from an analysis of 266 cases of hemiplegia with aphasia, 243 with right hemiplegia, and 17 with left hemiplegia; *i.e.*, a proportion of 14·3 : 1. Now, if we take Bertin's statistics as to the relative proportion of embolism of the left and right middle cerebral as 4·4 : 1, and Seguin's association of aphasia with lesion of the left hemisphere as 14·3 : 1, we have, in favour of the association of aphasia with lesion of the left hemisphere, a preponderance of 10 : 1, which cannot be accounted for by mere fortuitous collocation; and even if the arguments founded on the relative frequency of disease in the left and right hemisphere respectively had not been thus shown to be without foundation, they would be at once disposed of by cases of aphasia resulting from traumatic lesions of the left hemisphere. Several interesting cases of this kind are on record.

Sydney Jones(a) gives a case of aphasia resulting from fracture of the left side of the skull by the kick of a horse. After death, an abscess of the size of a nut was found in the medullary substance of the third left frontal convolution.

Simon(b) gives a case of a healthy man who fell from horseback, and who on getting up was found by a physician who came up to be aphasic, and without any signs of paralysis. Death occurred from meningitis. A small wound with depressed fracture of the left side of the skull was found; and corresponding to this was a cerebral softening —surrounded by meningeal inflammation—of the third left frontal (in which a spiculum of bone was embedded), the second frontal, and the island of Reil.

A similar case of aphasia from fracture of the left side of the skull, in which recovery took place on trephining, has been recorded by MM. Proust and Terillon.(c)

That gross anatomical lesions have not always been discovered in Broca's region in cases of aphasia may be true, but this is a fact of no value against the localisation of the speech-centre here. Perhaps they might have been discovered more frequently if careful search had been made, for on more than one occasion they have been found, when supposed absent, in the subjacent medullary fibres. Of instances of this kind several have been collected by M. Pitres.(d)

The clinical evidence alone is amply sufficient to establish the relation between aphasia and lesion of Broca's region as an empirical generalisation, but when we take into consideration also the facts of experimental physiology and the light they throw on the motor substrata of mind, the connexion between lesion of Broca's region and aphasia is no longer a merely empirical generalisation, but a derivative law, which, in my opinion, is established on as firm grounds as any other fact in scientific medicine.

Diagnosis of Cortical Paralysis.—Apart from considerations as to the mode of onset, etc., of the affection, thore are no features which clearly enable us to distinguish between hemiplegia depending on general destruction of the motor area of the cortex, and hemiplegia due to destructive lesions of the corpus striatum, more particularly those involving the anterior two-thirds of the internal capsule. There is the same relative affection of the different movements; those being most paralysed which are most volitional, at least after the first rude shock of the disease has subsided. The facial paralysis is seen especially in the lower facial region, or in those movements which are most independent; while the frontal and the orbicular muscles of the eye are but slightly affected. The movements of the leg are less paralysed than those of the arm, and the proximal movements of the arm less than those of the hand. In neither case is sensation affected, if the lesion be strictly limited to the cortex, or to the anterior two-thirds of the internal capsule, and in neither case is the nutrition or electric contractility of the paralysed muscles directly impaired. The same tendency exists in the development, sooner or later, of descending sclerosis of the motor tracts of the crus, pons, medulla, and spinal cord, and the appearance of late rigidity or contracture of the paralysed limbs. This late rigidity seems, according to the views of Charcot, Bouchard, Bastian, etc., to be essentially dependent on the degenerative process, and has its analogue in lateral sclerosis of protopathic origin. Hughlings-Jackson, however, looks on late rigidity as a species of tonic distortion, caused by the cessation of the cerebral influence, and the consequent unantagonised action of the cerebellar and mesencephalic centres; for, says he, "there is unimpeded cerebellar influx, and hence rigidity of the muscles which in health the cerebrum chiefly innervates."(e) I see serious objections to this view. If it were true I should expect the antagonism or cerebellar influx to show itself at the beginning of the paralysis; for distortion, consequent on the cessation of an antagonist, is always most marked at the commencement, whereas, in the rigidity of hemiplegia, it is usually weeks or months before it sets in. And if it were cerebellar influx, I should further look for the rigidity in the extensor muscles of the trunk and legs, owing to the more especial relation of the cerebellum to these movements; whereas the very contrary holds, as the rigidity is most marked in, and in a large majority of cases is confined to, the arm, and to the flexors more especially. The rigidity, in fact, seems to affect those muscles most which are most paralysed by destructive lesions of the hemispheres. If it be objected—and this seems to be the main objection—that the remittent or intermittent character of the late rigidity, in its early stages, militates against the idea of its being dependent on a permanent organic lesion, we can find analogous phenomena. The neuralgic pains which are associated with progressive sclerosis of the posterior columns of the spinal cord are not constant, but remit, intermit, or vary under different conditions, which modify the nutrition and activity of the nerve-centres. It seems to me more in accordance with all the facts to attribute, with Charcot, etc., the late rigidity to irritation set up by the process of degeneration of the motor tracts, just as in protopathic lateral sclerosis.

As regards the temperature of the paralysed limbs, in central and cortical disease respectively, there seems to be some uncertainty, and we cannot speak definitively on this point as yet. It is, however, generally stated(f) that there is less difference in temperature between the two sides when the paralysis depends on cortical than on central disease. It is certainly less marked than in paralysis due to mesencephalic lesions. Experiments have been made on animals, with a view to determine the question; but the results do not seem quite in harmony with each other. Eulenburg and Landois state that vaso-motor paralysis occurs in dogs, in consequence of destruction of the cortical motor centres in this animal, and in this they are supported by Hitzig. Vulpian, however, fails to detect such phenomena. And it would appear, from a preliminary communication by Küssner,(g) that, in rabbits at least, no vaso-motor paralysis occurs from cortical lesions. It may be that the representation of the vaso-motor centres in the hemispheres follows the same laws as the motor centres in different orders of animals, and that the vaso-motor paralysis, at first resulting from cortical lesions, subsides more rapidly than when the lesion is central; and this seems to me highly probable. That vaso-motor should accompany motor paralysis from cortical lesions is, I think, what might be expected, from what we know of the physiology of motor and its correlated vaso-motor innervation; and that such vaso-motor paralysis should subside more rapidly in cases of cortical lesion would, I think, be in harmony with the comparative escape of movements independently organised in lower centres. To the correlated vaso-motor disturbances I would ascribe the subjective sensations of numbness, tingling, and the like, which so frequently usher in paralysis or spasm in connexion with lesions of the motor centres, rather than look upon them as projected central sensory irritation.

Hemiplegia, complete from the first and permanent, is not, however, the most common type of paralysis depending on lesion of the cortex or subjacent medullary fibres. More frequently, paralysis of cortical origin is fractional or dissociated, or is a succession of dissociated paralyses or monoplegiæ. In cortical affections we frequently find a hemiplegia, at first complete, resolving itself into a monoplegia;

(a) *Lancet*, 1873, vol. ii., page 449.
(b) *Berliner Klinische Wochenschrift*, 1871.
(c) *Bulletin de l'Académie de Médecine*, November, 1876.
(d) *Op. cit.*

(e) *Medical Examiner*, April 5, 1877.
(f) Bastian, "Paralysis from Brain Disease."
(g) *Centralblatt für die Medicin. Wissen chaften*, November 10, 1877.

or a monoplegia becoming a hemiplegia by progressive advance of the disease to other motor centres. This latter is a significant indication of cortical disease. Paralysis of voluntary motion of the arm and leg; of the arm and face, or this combined with aphasia, if the lesion be in the left hemisphere; or paralysis of the inferior facial region; of the arm alone; or of certain movements of the hand and arm; or of the leg alone; without affection of sensation, and without qualitative or quantitative changes in electrical contractility, or direct impairment of nutrition, may be looked upon as depending on lesions of the cortex or subjacent medullary fibres. Monoplegia is very often associated with monospasm or early rigidity of the paralysed limb, or of the muscles governed by the centres surrounding the lesion. Sometimes the paralysed limb may remain motionless while convulsions occur in the others. Cortical paralysis is frequently erratic and transitory, more especially in connexion with superficial meningo-encephalitis; appearing and then vanishing, first on one side, and then on the other. According as the lesion is superficial or deep, and invading the whole depth of the cortex and subjacent medulla, we get transitory paralysis, or a paralysis which remains permanent, and is followed by descending sclerosis and late rigidity.

Whereas early rigidity is of frequent occurrence in cortical disease, it is rare in central cerebral disease; and then particularly, it would seem, when the medullary fasciculi of the fronto-parietal region are irritated—a condition generally found in connexion with hæmorrhagic effusions into the lateral ventricles. Consciousness is less frequently lost in cases of sudden cortical lesion than when similar disease occurs in the central ganglia. This is to be accounted for by the special tendency in the latter case to sudden displacement of the cerebro-spinal fluid, and, through this, general disturbance of the cerebral circulation, in the manner indicated by Duret.

As an accessory element in the diagnosis of cortical lesions, may be taken the fact, noticed by Callender(h) and others, that cortical lesions are more frequently accompanied by localised pain in the head; and I have frequently observed that, even when pain is not spontaneously complained of, it may be brought out by percussion over the seat of lesion.

While we cannot be quite certain of the position or extent of a cortical lesion causing a sudden and complete hemiplegia, we may take a monoplegia of the leg, or of the arm and leg, as an indication of lesion of the upper extremity of the ascending convolutions close to the longitudinal fissure; brachial monoplegia as a sign of lesion of the upper part of the ascending frontal convolutions, or, if the paralysis affect the hand more particularly, of the ascending parietal convolution; brachio-facial monoplegia as indicating lesion of the mid-fronto-parietal region; while facial and oral monoplegia, or this combined with aphasia, indicates lesion of the lower part of the ascending frontal convolution, where the third frontal unites with it.

International Hygienic Congress.—Among the numerous international assemblages which are being organised for the forthcoming Paris Exhibition, there is one bearing the above title, which, it is stated, is founded under the patronage of the French Government, Profs. Bouchardat and Gubler being among its chief promoters. A long programme of the subjects to be discussed during the first fortnight in August has been printed by several of the Paris journals, but as our readers must have a pretty good idea of what these must be we need not transcribe this.

Hypodermic Injection of Dialysed Iron in Chlorosis.—In a clinical lecture at the Pennsylvania Hospital, Dr. Da Costa related a case which he believes to be of great importance as showing that dialysed iron may be hypodermically used without exciting the local irritation produced by other preparations of iron, and exhibiting the great efficacy of this mode of iron treatment, by means of which disorders of the digestive organs and the production of constipation are avoided. It was a case of advanced chlorosis. Fifteen minims of undiluted dialysed iron were daily injected at first, and these in a few days were increased to twenty and thirty minims. He suggests that the plan of employing dialysed iron should be tried in pernicious anæmia.—*Philadelphia Med. Times*, March 2.

(h) *St. Bartholomew's Hospital Reports*, 1869.

ORIGINAL COMMUNICATIONS.

NOTE ON THE MIXTURE OF CHARACTER FOUND IN EPILEPSY.

By H. SUTHERLAND, M.D.

The more the character of epileptics is studied, the more difficult it appears to understand its inconsistencies. Every asylum superintendent is well aware that some of the most useful household work is frequently performed by epileptics, and that these patients are, moreover, extremely kind and attentive to the sick, more especially so those suffering from the same malady as their own. Yet amongst epileptics are found the most dangerous, the most vindictive, and the most troublesome cases of insanity, these good and bad traits of character being often united in the same patient.

The following case, lately under my care at the St. George's Dispensary, appears to illustrate these remarks somewhat aptly:—T. S., aged sixteen, a sailor-boy. Three paternal and one maternal aunts insane; one brother died of meningitis. No convulsions at teething. No history of masturbation. When aged seven had an epileptic attack. The fits have continued at intervals of three to twelve months since that time. He is known as a very steady boy in the navy; yet when at home he will go out at night and mix with the lowest orders. He has passed his examinations satisfactorily, and has obtained several good conduct stripes; yet he is decidedly backward in arithmetic, and very dull in conversation. He is very affectionate usually to his relations. Yet when the attacks are coming on he declares he will kill his brothers and sisters; and he has once attempted suicide by tying a handkerchief round his neck. The case was treated with bromide of potassium in somewhat large doses (twenty to forty grains thrice daily) with temporary success.

The case appears to illustrate the difficulty as to whether epilepsy should be placed amongst the responsible or the non-responsible nervous diseases. The boy was fairly intelligent, and was performing his duty in life satisfactorily; yet he was an epileptic. Should this boy ever be guilty of a homicidal act, would the epileptic neurosis obtain him a pardon, a punishment, or a modified sentence?

REDUCTION OF STRANGULATED INGUINAL HERNIA BY ASPIRATION.

By Surgeon-Major F. P. STAPLES, A.M.D.

The following case is offered for publication in the hope that it may be useful for statistical information, as well as for the purpose of re-directing the attention of surgeons to a procedure not perhaps—judging from the number of recorded cases—practised so frequently as the success which has attended it would seem to warrant:—

Private J. P., 33rd Regiment, aged forty, a spare, healthy-looking soldier, was admitted into hospital at Aldershot on July 2 last, complaining that he was unable to return a rupture which he said he had had for about a year, and for which he had worn a truss. He suffered during the night previous from a severe attack of diarrhœa, and during violent straining the hernia descended. When he tried to return it—no doubt after some little time had elapsed—he found that he was unable. The tumour on examination was found to be very hard, about the size of a billiard-ball, directly below the right inguinal ring, and without visible alteration of the covering tegument. The constitutional symptoms were feverishness and frequent vomiting of darkly coloured matter, but the latter emitted no odour of the fæces.(a) On the failure of the usual methods of taxis at the hands of a good many medical officers, and there being apparently no muscular tension to overcome by the use of anæsthetics, aspiration was decided upon. Deputy Surgeon-General W. A. Mackinnon, C.B., suggested this when first he saw the case, and from previous successful experience said he had little doubt that it would

(a) Whether this was due to the recent diarrhœa, or to the fact of the bowel obstruction not having existed for a sufficient length of time, is doubtless matter of opinion.

succeed. Accordingly, with the assistance of Surgeon H. Boyd, about twenty hours after the tumour became irreducible, I passed the finest needle of the aspirator into the centre of the tumour, and about one ounce and a half of reddish-coloured fluid, and apparently about the same quantity of gas, escaped into the vacuum. The result of this was the immediate collapse of the tumour and the easy return of the emptied gut into the abdomen. The subsequent progress of the case was uninterrupted recovery, and Surgeon-Major J. Wilson, to whose kindness I was indebted for the opportunity of operating, wrote subsequently to me to say, regarding the case, "that no intestinal symptom followed the operation, but that he kept the man a little longer than usual under observation before discharging him."

Remarks.—There is little to be said of such a very simple case as the above, but it is, perhaps, permissible to reiterate that in an irreducible enterocele we have a powerful aid to the taxis in aspiration; and that the introduction of the needle into the intestine for this purpose is almost, if not quite, devoid of danger, is shown abundantly in the writings of the Continental surgeons. The remarks of M. Demarquay on presenting his first successful case of this operation to the Académie de Médecine, in May, 1872, may not, perhaps, be inappropriate in conclusion.(b) He proposed to apply it (1) in all congenital hernias and to recent hernias which became strangulated at the time of their formation; (2) to old hernias which were quite reducible a few days prior to strangulation, and in large umbilical hernias that have been recently strangulated. (3) Aspiration, which has for its object facilitating the employment of the taxis, should only be employed at an early period, when one can be well-nigh certain of returning into the abdomen the intestine in an unaltered state and capable of resuming its functions.

MEMORANDUM ON SCURVY.

By J. FORSTER, Adelaide.

A MARRIED woman, living in the bush, about 400 miles from Adelaide, consulted me at her own station, when I was visiting the adjoining station (all sheep); her husband was with her, a healthy man, aged about thirty years; and she was a healthy woman, with two or three fine healthy children. They were short of all provisions save tea, flour, and plenty of good fat fresh mutton, which they killed as they required. The woman showed all the usual symptoms of scurvy, especially in the gums. I gave her no medicine, but ordered her to procure a cask (three dozen) of good English bottled porter and a case (one dozen) of mixed pickles; and in a month she had nearly recovered. It was a limestone country, with granite cropping up here and there. The water was ninety feet deep, and tolerably good. I have seen other cases, some more severe and some milder, but they have always recovered with the same remedies. Some patients prefer jams, which are quite as good. I have more confidence in bottled porter than anything. Cases occasionally go into the hospital in Adelaide from the far bush, where it is not very uncommon—and some very severe cases,—but they all recover.

I believe one great cause of scurvy—at least, in the Australian bush—is too few articles of diet.

INFLUENCE OF THE PIANO IN AFFECTIONS OF THE UTERUS.—Dr. Balestre terminates an article which he has published in the *Nice Médical* by saying that his meaning would be misunderstood if it were thought that he discountenanced music as a part of female education, or that he believed it to be the origin of uterine ailments. All he wishes to enforce is what observation has demonstrated to him—that in very nervous and impressionable women who are suffering from affections of the uterus, music may provoke and aggravate congestions of this organ, and that in advising the patient concerning her hygienic management this fact should be borne in mind. Moderation in the practice of music and interruptions in its pursuit must be insisted upon while pursuing the ordinary measures of treatment; and by this means various accidents occurring during uterine affections will be obviated.—*Rev. Méd.*, April 1.

(b) *Medical Times and Gazette*, June 1, 1872.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GREAT NORTHERN HOSPITAL.

OCULO-MOTOR PARALYSIS AND ATROPHY OF THE OPTIC DISC, PROBABLY DUE TO SYPHILITIC GROWTH.

(Under the care of Dr. LEARED.)

H. T., admitted on December 5, 1877, aged twenty-eight; married five years; has one child four years old, quite healthy; had two miscarriages. She states that she was in fairly good health until ten days ago (November 25) when she was seized with lancinating pains in the left eye and around the left orbit and in the temporal fossa. For two or three days the pain greatly increased, and was referred especially to the eyeball. During this time she noticed that the upper lid began to drop. The pain then ceased, but with this cessation complete ptosis set in, and sudden attacks of dimness of vision every now and then supervened. There is a history of syphilis followed by secondary symptoms, but none of a specific character have appeared for about two years. She has, however, suffered at intervals during this period with difficulty of opening the mouth; this has always yielded to medicine. In connexion with the above attacks she has had fulness in the left temporal fossa with some pain. Present Condition: Fairly well nourished; chest-sounds normal; urine not albuminous; complete ptosis of the left side, and fixation of eyeball, a slight tremulous action being the only result of any attempts to move it; left pupil responds to light very feebly; same size as other. Mr. Lowne, Ophthalmic Surgeon to the Hospital, examined the patient's eyes, and found that the left disc was atrophic and pearly white, the veins and arteries reduced in calibre, details of lamina cribrosa very plain, and that the right disc was congested at its edges, too white at its centre. The patient was placed on the biniodide of mercury and iodide of potassium, which treatment, considering the urgency of the symptoms, Dr. Leared determined to push as rapidly as possible. The levator palpebræ in a few days regained partial power, but the eyeball remained more or less fixed, and sight was worse. The medicine had at times to be decreased, and even discontinued, owing to the specific action of the mercury. Movement of the eyeball gradually returned, commencing with contractility of external rectus, and on January 5 (one month after admission) the levator had regained normal power, and also the several muscles attached to the eyeball. She could, however, discern no objects whatever with the left eye. The note of January 12 says: "The levator and muscles of eye act well, as also the pupil, but vision is almost entirely gone. Left disc perfectly atrophic, quite white; right disc somewhat too red. No exophthalmos." The patient was discharged on January 25; the action of the muscles was then normal, but vision was completely lost. The pathological view taken by Dr. Leared of the case was that a syphilitic growth, probably of a gummatous nature, had been rapidly formed in such a position as to involve the optic nerve as well as the third, fourth, and sixth nerves. Iodide of potassium and the biniodide of mercury were given every four hours in increasing doses until twelve grains of the former and one-eighth of a grain of the latter had been reached. The treatment seemed to confirm the diagnosis. Dr. Leared remarked that while the motor power of the eye was restored, it was interesting to observe that the presumably higher nerve-function of vision seemed irreparably destroyed, either by pressure, that had probably been removed, or else by the action of the syphilitic poison.

CHARING-CROSS HOSPITAL.

PARALYSIS OF THE MUSCULO-SPIRAL NERVE.

(Under the care of Dr. D. B. LEES.)

S. D., twenty-three, tailor, came to the out-patient department of Charing-cross Hospital on January 9, 1878, complaining of a loss of power in his left forearm. He stated that on Christmas-eve he fell asleep with his left arm extended over the back of a chair. When he awoke, after a

sleep of about two hours, he found that the hand felt numb, and that he had partially lost the use of his arm. The numbness had almost entirely disappeared when he applied at the hospital; it had been most marked over the dorsum of the first phalangeal division of the thumb, and had also extended over the dorsal surface of the index, middle, and ring fingers, but the patient thinks not over the little finger, and not over the dorsum of the hand itself. On examination of the arm it was found that there was complete paralysis of all the extensor muscles of the wrist, fingers, and thumb. When pronated, the hand hung helplessly; when supinated, the hand was in a line with the arm, but somewhat adducted at the wrist, so that the ulnar margin of the hand formed an oblique angle with that of the forearm. The fingers were flexed at the metacarpo-phalangeal joints, otherwise nearly straight. The little finger was drawn forward somewhat in advance of the ring finger, and this again somewhat in advance of the middle finger. The metacarpal division of the thumb was adducted, and the phalangeal joints very slightly flexed. The muscles of the thenar and hypothenar eminences were more prominent than usual, giving the palm of the hand a "cupped" appearance. The flexors of the wrist and fingers and the muscles of the upper arm (including the triceps) appeared to be normal. Pronation could be effected with ease, but in supination the hand was, as it were, jerked over into the supine position by the action of the biceps, which could be felt to contract strongly. During flexion of the fingers the little and ring fingers seemed to be acted upon simultaneously and more readily than the index and middle fingers. The patient stated that this difference had been more manifest a few days ago. After flexion the fingers could be restored, though rather slowly, to their former position, apparently by the action of the interossei and lumbricales. No loss of sensation could be detected, though the patient stated that there was a little numbness still over the middle of the thumb. The early recovery of sensation may be explained by the fact that the median nerve sends communicating branches to join the digital cutaneous branches from the radial on the dorsum of the fingers. The whole left arm and forearm was less muscular than the right, but this the patient ascribed to the fact that in his occupation as a tailor he had to make use of very heavy irons with the right hand. He stated that such exaggerated development of the right arm is common amongst tailors. He believed that his left arm had not wasted since the injury. On testing with electricity it was found that the reaction to faradism was diminished as compared with the right side, and that the reaction to the continuous current was decidedly increased. After three weeks' treatment with the continuous current a very considerable amount of power over the extensors was regained, and the patient ceased to attend.

NAVAL MEDICAL SUPPLEMENTAL FUND.—At the quarterly meeting of the directors of the Naval Medical Compassionate Fund, held on the 9th inst., Dr. J. W. Johnston, Inspector-General, in the chair, the sum of £60 was distributed among the various claimants.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN MARCH, 1878.—The following are the returns (by Dr. Meymott Tidy) of the Society of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, etc.	Nitrogen: As Nitrates, etc.	Ammonia.		Hardness. (Clarke's Scale.)	
				Saline.	Organic.	Before Boiling.	After Boiling.
Thames Water Companies.	Grs.	Grs.	Grs.	Grs.	Grs.	Degs.	Degs.
Grand Junction ...	21·20	0·051	0·120	0·000	0·007	13·7	3·3
West Middlesex ...	21·10	0·062	0·105	0·000	0·008	13·7	3·7
Southwark and Vauxhall ...	20·90	0·061	0·120	0·000	0·011	13·2	3·3
Chelsea	20·90	0·018	0·120	0·000	0·010	13·7	2·8
Lambeth	22·20	0·062	0·114	0·000	0·011	13·7	2·8
Other Companies.							
Kent	26·40	0·090	0·195	0·000	0·002	17·0	4·6
New River ...	20·20	0·024	0·134	0·000	0·007	13·7	2·8
East London ...	22·40	0·032	0·105	0·000	0·007	14·3	4·2

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases.

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THE MEDICAL TIMES AND GAZETTE *is published on Friday morning: Advertisments must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, APRIL 13, 1878.

THE GENERAL MEDICAL COUNCIL.

THE General Council of Medical Education and Registration met on Wednesday, the 10th inst., having been called together thus early to consider, and to advise her Majesty's Government upon the Medical Acts Amendment Bill, presented to the House of Lords on March 19 by the Lord President of the Council, the Duke of Richmond and Gordon; or, to use the words of the President of the Medical Council, "to enable it to carry forward, and, if possible, to conclude for a long time to come, its deliberations on the amendment of the Medical Acts." After the introduction of the new members of the Council—Dr. Andrew Fergus, Dr. James Bell Pettigrew, and Dr. Robert Scott Orr—the President delivered the Address, which will be found elsewhere in our pages, and which will be read with very considerable interest. It does not, indeed, include this year a long list of questions awaiting consideration by the Council, a kind of *catalogue raisonné* of the various matters to be laid before it; and the President states at the outset that there is not much business that demands the instant attention of the Council, "except the Bills affecting the profession of medicine, actually before Parliament or in contemplation, together with questions arising out of them"; but the Address is very interesting, for it gives the history of the Bill which is now so largely engaging the attention of all the medical authorities, and of the profession at large. It will be remembered that at the close of the session last year the Medical Council strongly represented to the Lord President the desirability of a Government Bill to amend the Medical Acts, and the Council especially pressed on his Grace the importance of an early settlement of five subjects, viz.—the recognition of foreign and colonial qualifications in England; the privileges of women in regard to medical qualifications; the appropriation of penalties under the Medical Act; to some extent the education of midwives; and the emendation of the law affecting certificates of lunacy. The

Lord President promised that the matters thus laid before him should have his best attention—as Ministers always do courteously promise every deputation they receive. But his Grace did more: he kept his promise, and that speedily, for so soon as the summer recess was over he applied himself to the task of examining into all the materials he had at command relating to amendments of the Medical Acts, as well as into the subjects to which the Medical Council had requested his attention. And it appears that, after full consideration, he put himself into communication with the President of the Medical Council, and informed him that her Majesty's Government were of opinion that "it might in the end be more satisfactory to the Council, as well as to the Legislature and to the country, to bring into a Bill, together with these points, certain others for which legislation had at one time or other been desired." On all these matters the Lord President asked information from Dr. Acland, who gave him "such as he believed would most nearly express the opinions of the Council." But the Lord President proposed legislation on some points upon which the Medical Council had not declared itself; and while the Council may think this unwise of his Grace, it will not doubt the loyalty of its President, though he "did not take on himself to advise his Grace to omit from a Government Bill any of the subjects relating to our profession which might be regarded as of public importance, even though on some of them the Council had not expressed a definite opinion." Dr. Acland speaks almost pathetically of the burden of responsibility imposed by the Council upon its President, and of the great temptation the President must feel "to summon the Council on every occasion of consequence, and throw responsibility at every turn on the Executive Committee"; but, though strongly tempted, he thought of the expense—"the Committee costing nearly £50 for one afternoon, the Council £300, if summoned for one day"; and he took the burden of advising the Lord President on his own shoulders. He modestly says that the task was not difficult, for the Lord President seemed to have but one desire—to know how best to legislate for the medical profession in its varied relations to the body politic, and in its own complex inner organisation." The Council is further assured that the Lord President, "looking upon it as the appointed exponent of a great department of society, had desired in all ways to aid and support it." This is all very—what shall we say?—sweet, and the Council ought, no doubt, to feel charmed. Nevertheless, we venture to think that no difficulty whatever would have been felt about summoning the Executive Committee or the Council had the Lord President expressed any desire to consult either body, and that the Council would have more highly appreciated his regard for it had he asked for its opinion upon the Bill before introducing it into Parliament, instead of afterwards.

Dr. Acland glances only at some of the provisions of the Bill, as those relating to dentists and to midwives, but dwells at length on the Joint Examining Boards question. He speaks of the "complete and masterly way" in which the subject of examinations was handled in Lord Ripon's Bill (of 1870), and says that the Lord President was acquainted with the resolutions which the Council had passed with regard to that Bill, and "fully estimated the importance to the public of one uniform and satisfactory test of qualification for entry to the Medical Register in each branch of the United Kingdom." The Lord President was therefore obliged to entertain the question. "If a Bill was brought in either without Lord Ripon's clauses relating to examinations, or without some modification of them, it was clear that it would have to be argued in Parliament that the existing arrangements need no alteration. Could this argument be maintained? Is the Medical Council agreed upon it?" Dr. Acland says that the Popular (with a big "*p*") sentiment "is certainly in favour of making impossible the continued existence of nineteen separate examining and licensing boards, with their varied qualities"; and that "the public are convinced that there are dangers in the continuance of so many modes of entering the profession, and think the system of inspection offers only a cumbrous and fitful check to constant danger." We doubt very much whether the public trouble their heads at all about the matter. We should be glad if they did, for they would be likely then to value the profession more highly than they appear to do at present. But Dr. Acland goes on to say that "there are not wanting signs that some, both within and without the medical profession, would prefer State-appointed examiners, or an examining board appointed by the Medical Council, not only to the present system of many examining bodies, with permissive power to combine, but would even prefer State-appointed examiners to persons appointed by the present universities and corporations in combination"; and this is no doubt true to some extent, but it is so because the "some" think that any settlement would be preferable to the present constant discussions on the subject, and the constant threatening of change. Dr. Acland observes that it would ill become him, in his position in the Council, to use any arguments on one side or the other of the question, but he rather more than hints that if the present examining bodies do not satisfy the Popular Sentiment, Government may take the matter out of their hands. "I cannot but observe in this relation," he says, "that it will be a grave misfortune for our generation if it be forced to the conclusion that our ancient medical institutions, hitherto self-administered, must abdicate their functions of guiding the education of our youth. And this is the risk that is run." But the Lord President "has not at present elected to make the formation of a single Board compulsory for each branch of the United Kingdom." His mind, we are to suppose, is still open on the subject, though we venture to assert that most people, except the President of the Medical Council, know that the Lord President is well assured that the Government could not carry a compulsory Bill. We are told, however, that his Grace "hoped for discussion, and for the freest expression of opinion from all who are entitled to be heard," and having referred the Bill to the Council, "the question for it to consider is, whether union is expedient or requisite." Dr. Acland says that "the discussion here will be dispassionate, and based upon correct estimate of the present and of the past state of the several licensing bodies, and of the Popular sentiment." The wish is probably father to the thought. The form in which the proposition—is union expedient or requisite?—is put is not, perhaps, Dr. Acland thinks, of much moment for the issue, and the kind of excuse he makes for the way in which it is put is ingenious. "It cannot be less acceptable," he says, "to the various authorities to ask the Government, after discussion, to grant more extended power for good, than to have had to protest against unnecessary interference and uncalled-for dictation for which the Council had not applied." He states also that it had been difficult to arrange the times and the mode for the introduction and the readings of the Bill "in the way best calculated to carry a Bill this session, and to suit the time and convenience of the Medical Council," but that that way had been sought and, he trusted, found.

The next item of the programme of business for the day was the "reading of the Medical Act (1858) Amendment Bill" of the Lord President; and this was taken as read. Then Dr. Humphry moved a resolution, which, after reciting a resolution passed by the Council by a large majority in 1870, to the effect that a Joint Examining Board should be formed in each of the three divisions of the kingdom, and

noticing that the Council "has subsequently sanctioned a scheme for an Examining Board for England, made in conformity with that resolution," went on to say, "the Council adheres to the principle of that resolution, and is of opinion that no medical legislation relating to examinations will be satisfactory which does not provide for the formation of an Examining Board in each of the three divisions of the kingdom, and direct that every person who desires to be registered under the Medical Act shall be required to appear before one of these Boards, and be examined in the subjects which may be deemed necessary by the Medical Council"; and the debate on this was continued till, and was adjourned at, the close of the sitting for the day. It will be observed that Dr. Humphry's motion forestalls to no little extent the consideration of the new Medical Bill, as it raises at once the question of whether or not the formation of joint boards shall be made compulsory. He spoke strongly in favour of joint boards, and lauded the excellent example set in this way by the English licensing bodies. Dr. Andrew Wood, on the other hand, declared that the great virtue of the Lord President's Bill lies in the fact that it is permissive, pointed out that they had formed joint examining boards in Scotland many years before the question had been taken up in England; and argued strongly against one joint board for each division of the kingdom, and against uniformity of examinations as impossible and undesirable, for differentiation, he said, is the order of nature; and he argued that, if the universities and the corporations combine, there will be the greatest danger that the examination-standards of the universities will be lowered, or that that of the corporations will be made too high. Sir Dominic Corrigan spoke also against joint examining boards; and Professor Rolleston threatened the licensing bodies that if they did not give way, and combine as is desired, they would be put on one side, and a *Staats-Examen* be formed in their stead. The discussion will, no doubt, run to some length, but we hope the Council will remember that the second reading of the Bill is fixed for the 15th inst., and that Easter is near at hand; and may we hope that the whole question of joint examining boards will not be raised again when the Council come to discuss the Bill itself?

THE LONDON COLLEGES AND THE DUKE OF RICHMOND'S BILL.

In view of the Duke of Richmond's Bill to amend the Medical Act (1858) being brought under consideration of the Council of the Royal College of Surgeons, the President and Vice-Presidents associated with themselves the two members of the Council (Sir James Paget and Mr. Simon) who happen to be also members of the General Medical Council, and with their invaluable assistance wisely prepared, for the guidance and aid of the Council, a memorandum or report, noting the provisions of the Bill that are of most importance to the College, and very ably and clearly setting forth the objections to which they seem obnoxious. The memorandum observes that the leading intentions of the Bill fall practically under five heads. Under the first are classed the "preliminary," and several of the "miscellaneous" clauses, such as those dealing with the *details of registration*, those relating to foreign and *colonial practitioners*, to *erasures from and restoration to the Medical Register*, and to *lunacy certificates*, and the *penal* clauses; and upon these no special criticism is offered. Under the second head, the fourth paragraph of Clause 14 and the second half of Clause 20, relating to the *examination and qualification of women*, are considered. These provisions, it is observed, are most probably meant only to secure more effectually the object unsuccessfully aimed at by Russell Gurney's Act—namely, that of enabling any medical authority which may so wish to grant its qualifications to women. Provided that the intention of the Bill in relation to the medical authorities be in no respect compulsory, the President and Vice-Presidents see no reason why the College should object to the amended permission; but they go on to observe:—"Adverting, however, to resolutions which the Council has already passed on this subject, the President and Vice-Presidents apprehend that no amended permissive law would be such that the College would choose to act under it, unless it clearly allowed discretion to the medical authorities to distinguish in their examination rules and diplomas between the almost necessarily different cases of men and women candidates. Some such distinction between the two sexes is evidently contemplated in the Bill, and indeed has express provision made for it in the sentence which is lettered '*b*' in the fourth paragraph of Clause 14; but it is to be noticed that in this sentence, under what seems a curious misapprehension of the rights and responsibilities of the case, a *personal option* is allowed to the candidate instead of a *regulative discretion* being vested in the authority."

Thirdly, the memorandum refers to Clause 23 of the Bill, the object of which is to provide a duly protected legal status for qualified *dentists in the United Kingdom*. It will be remembered that it is proposed that the General Medical Council, subject to approval from the Privy Council, shall be the governing authority for the profession of dentistry; empowered to control the education, examination, etc., of dentists; and, as the memorandum observes, "to act in these matters not merely by way of superintendence, but as having sole responsibility for initiation." On this subject the President and Vice-Presidents remarked that they "have no reason to believe that the Medical Council has sought to be invested with this large authority, nor can they say whether that body would even at request consent to be charged with it; but the fact which they have to bring under notice of the Council is, that if the proposed Clause 23 became law, no valid action of this College, under its Charter of 1859, could thenceforth be taken, until the General Medical Council and the Privy Council had seen fit to approve the action in some 'scheme' proposed for the purpose, nor except so far as those approvals might extend, and subject to such particular directions as they might impose. The President and Vice-Presidents are not aware of any reason of public concern for which this College should be expected to acquiesce in the above proposal; and they therefore, as at present informed, recommend the Council to withhold assent from it." Paragraph 4 of the memorandum has reference to Clause 24 of the Bill, which proposes, "as a new national institution," that the Medical Council, subject to approval of the Privy Council, shall provide for the examination, licensing, registration, and disregistration of *midwives throughout the United Kingdom*, etc.; and a belief is expressed that "a law which would compass these objects must throw the main stress of the responsibility on *local* administrative authorities, with *local* professional assistance"; the General Medical Council perhaps providing some *general rules* with regard to the proper conditions of education and examination for midwives.

Fifthly. Clauses 3 and 14 of the Bill are commented on at considerable length. In the Bill the principle of Clause 3 is shortly described as "*necessity of double qualification for registration*"; and the purpose of Clause 14 as "*examination-rules for securing uniformity of examinations for qualifications.*" The memorandum points out that "if Clause 3 became law, the now registrable qualifications of the College—its Membership, its Fellowship, and its Midwifery Licence—would no longer of themselves be registrable; that the Membership and the Fellowship, as purely *surgical* qualifications at law, would have to be accompanied by a *medical*

qualification from some authority entitled to grant the same; and that the Midwifery qualification would apparently not be registrable at all, unless perhaps in certain contingencies (under paragraph 7 of Clause 9 of the Bill) as an addition to titles otherwise sufficient for registration." And, further, that "if Clause 14 became law, the College would thenceforth not have authority to confer even a valid surgical diploma, except in subordination to such examination-rules as the General Medical Council, with the sanction of the Privy Council, might have laid down." The memorandum then continues as follows:—"In commenting on these clauses, by which it is proposed so largely to disfranchise the College in favour of a central supremacy, the President and Vice-Presidents take as their principle, that the magnitude of the sacrifice which is demanded of the College ought to be estimated as a question of proportion: with reference, namely, to the general scope and promise of the Bill in its bearing on public interests, and especially as regards the degree in which the Bill may be expected to secure, in the national system of licensing for the medical profession, certain necessary and substantially final reforms. In this point of view, the President and Vice-Presidents have to submit to the Council that, in their opinion, the Bill does not offer any such promise of public advantage as to claim that the College should on that account make any considerable surrender of independence; and they must even observe that, in their opinion, the reforms which are most wanted in the licensing system of the United Kingdom would perhaps be rather impeded than promoted by the passing of the Bill. For the Bill, if it became law, could hardly fail to be deemed an expression of indifference on the part of the Legislature to that which the largest and weightiest consent of skilled authority has long recognised to be the chief evil of the present system: the evil of nineteen uncombined and (in principle) competing examination boards in the three divisions of the United Kingdom, with the privilege allowed to each separate authority to grant registrable titles which shall be valid throughout the British Empire." Reference is then made to "the long-continued strenuous endeavours which the authorities of this division of the United Kingdom have made, to terminate, so far as their own private action is concerned, the scandal of that sort of independence," and to the fact that, "after surmounting great difficulties," the sanction of the Medical Council has been obtained to a basis on which the seven English authorities have agreed to co-operate as a single examining board for granting minimum qualifications. The Royal College of Surgeons of England, it is observed, "entering into that combination with a professional prestige certainly not inferior to that of any other authority, and with larger pecuniary interests at stake than all the other authorities together, has abundantly shown that, for an adequate purpose, it is ready to sacrifice nearly all its freedom of separate action, and to place, as regards its interests, a practically unreserved confidence in the justice and public spirit of the kindred authorities with which it would act." The President and Vice-Presidents feel sure, therefore, that, had Government seen fit to propose a compulsory establishment of joint examining boards for the respective divisions of the kingdom, "the College would, for so great a public interest, have declared itself ready to accept, with regard to its minimum qualification, any such subordination to the General Medical Council, and any such sacrifice of its separate licensing power, as might be really necessary for the success of that intention. But the case, as it stands with the present Government Bill, has unfortunately quite a different aspect," and the Council are recommended to dissent from Clauses 3 and 14 of the Bill. The President and Vice-Presidents remark, moreover, that they "cannot refrain from expressing to the Council how serious the probability appears to them that, if this Bill, by becoming law, virtually gives a new Parliamentary sanction to the evils of the present system, the promoters of the English joint board will have to recognise that their board can have no reasonable chance of success in the one division of the United Kingdom, while uncombined authorities in other divisions of the kingdom may compete against them for English candidates."

We have given much of this memorandum or report very fully, as, in stating in admirably terse and clear language the grounds on which the College of Surgeons bases its opposition to the Lord President's Bill, it sets forth the chief objections that the other English authorities must feel to the measure. The resolutions agreed to by the College on the subject of the Bill are published at length elsewhere in our columns.

By the Royal College of Physicians also an excellent memorandum, firmly though temperately expressed, has been drawn up on the Bill. This relates, of course, to many of the points dealt with in the report of the Royal College of Surgeons, but it also goes into more detail, and treats of a larger number of the clauses of the Bill than the report of the sister College does. It begins by expressing "the extreme regret and disappointment of the College that the Bill altogether fails to provide for that compulsory establishment of conjoint examining boards for each division of the United Kingdom which was recommended and urged on the medical authorities by the General Medical Council, for which the College has been strenuously labouring during many years, and which constituted the main feature of Lord Ripon's Bill." And, after alluding to sacrifices the College had been ready to make for the attainment of this object, believing it was acting in the common interests of the profession, and for the good of the public, it remarks that this object "admitted on all hands to be of supreme importance in any scheme of medical reform," would certainly be hindered rather than advanced should the present Bill become law, for it would compel the English authorities "to abandon the scheme, and all hope of reaping any fruit from their labours." Then it is observed that Clause 3 of the Bill "not only deprives the present licence of the College of its double qualifying power, but also deprives the membership and fellowship of the College of the qualification to register unless accompanied by some other qualification. That the College is, by this clause, really disfranchised, is proved by the third schedule of the Bill, which repeals the Act 32 Henry VIII., c. 40, by which the words of the College charter are defined as conveying a right to practise both medicine and surgery." Objection is taken to Clause 8, "as enabling the Medical Council, at their discretion, to place on the registry any foreign practitioner who has practised abroad for more than ten years, although he may hold no diploma or qualification of any kind"; and it is well observed that it is difficult to see what is the object of this clause, seeing that by other clauses provision is already made for the registration of both foreign and colonial practitioners. To Clause 9 it is objected that no provision is made for the registration of female practitioners in a separate list, though Clause 14 provides that women need not pass the same examination as men, without distinction on the ground of sex; and that Section 7 of the clause appears to render higher qualifications registrable only at the discretion of the Medical Council, and not as a matter of right, "which surely is undesirable and objectionable." Of Clause 14 the memorandum treats at some length. The College observes that this again is a disfranchising clause. "It deprives the medical authorities of all discretion as to the requirements requisite for their several

diplomas; and whilst it requires the several authorities to confer their licences, it deprives them of the power of determining the conditions on which they are granted, and so deprives each diploma of its distinctive value, and reduces all to one dead level." To a power of *supervision* by the General Medical Council the College could have no objection, and would think it desirable that such body should have authority to secure the efficiency of rules for conducting examinations, and a proper standard of fitness for reception of the several diplomas. But the initiation of such rules, and their adaptation to the respective diplomas, should remain, the College holds, in the hands of the several authorities. The College draws attention also to the apparent want of clearness and consistency in the provisions of the Bill relating to the right of women to claim diplomas.

THE BRITISH MEDICAL ASSOCIATION.

The Extraordinary General Meeting of the British Medical Association has been held at Birmingham, and ended very satisfactorily—to the Committee of Council. We observe that even in the *Journal* of the Association the meeting is called a "Special General" one, but in the summons calling it together the term "Extraordinary" is used, and it is much the more appropriate of the two, for, as a "General" meeting of an Association numbering more than 7000 members, the meeting was certainly an extraordinary one. It has been stated that Dr. Grigg's resolutions regarding the reports of the proceedings of, and the new business arrangements resolved on by, the Committee of Council, had received, on paper, the support of some 2000 members of the Association; but only about 145 members appear to have attended the meeting, of whom some sixty were Birmingham men, while only five London members, including Mrs. Garrett-Anderson, were present, though 300 signed the requisition for the meeting. Dr. Grigg's first resolution was—"That this meeting is of opinion that the reports of the Committee of Council should be published in as complete and intelligible a form as is consistent with the conduct of business; and that in no case should important resolutions affecting the general interests of the Association be omitted." The first clause of the resolution is a truism which no one can dispute; and the second clause touches the degree of confidence to be placed in the Committee of Council: and as it was declared that, if the resolution was carried, the Committee would regard the vote as one of censure, there was virtually an end of the matter. Mr. Sampson Gamgee moved as an amendment—"That it is necessary for the successful transaction of the business of the Association, that the publication of reports of meetings of the Committee of Council should be left to the discretion of the Committee of Council." Only some ten members voted against this amendment, and when it was put as a substantive motion the opposition numbered only five. Now, everybody will admit that when the business managers, whether known as directors, executive committee, committee of council, or by any other name, of any firm, company, or association are intending to take new premises, it would be extreme folly to let their determination be publicly known in the market; but we do not quite see how that excuses the fact that the Committee of Council of the British Medical Association did not publish till a month after date the proceedings of the meeting at which new premises were actually and definitely taken, nor how it justifies the total suppression in that report of the resolve to spend large sums in repairing those premises, and in fitting them up for new and special purposes.

Dr. Grigg's second resolution—"That this meeting desires to express its opinion that, in the selection of a house for the Association, it is desirable that the council-, committee-, and waiting-rooms should be separate from the printing and publishing offices"—was not a happily chosen *cheval de bataille*. There can be no valid objection to all the offices of the Association being under one roof, if that can be well and conveniently arranged; and the possibility and advisability of such an arrangement can be much better discussed by a committee than by the Association at large. And, further, Dr. Grigg's main contention did not concern this arrangement, but was directed against the Council's scheme for undertaking the printing and publishing of the *Journal* of the Association, instead of having it done, as hitherto, by contract. Now, Dr. Grigg had taken a great deal of trouble to provide himself with facts and figures that seemed to prove that the adoption of such a plan will be a grievous mistake as regards both economy and efficiency; and he marshalled his facts and figures with considerable skill and ability. But the scheme had been decided on; the Committee of Council also had very carefully considered the whole question, and could adduce in favour of their decision at least as goodly an array of figures and facts as Dr. Grigg could against it; and it was argued that under the existing system of management by the Committee of Council, without reference to the Association at large, the course of the Association has to a remarkable degree been one of continuously increasing prosperity and strength. The Extraordinary Meeting was staunchly loyal to the Committee of Council, and the amendment, "That the arrangements contemplated by the Committee of Council in leasing the premises in the Strand are of a nature to promote the successful conduct of the business of the Association," was carried by a very large majority. The whole of this part of the proceedings of the meeting partook rather of the character of a family squabble, the real exciting cause of which probably has not appeared; and the result is, no doubt, as we have said, satisfactory to the Committee of Council. But if it is true that some 2000 members of the Association agreed, on paper, with Dr. Grigg's resolutions, it is not at all so sure that the results will be thought satisfactory by the Association at large. The powers for action, and for concealment of actions, left to the Committee of Council, by the first resolution adopted, are enormous; and it is more than probable, we should think, that the matter will be brought before the next ordinary general meeting. It is not easy to see either that special general meetings of the Association must always be held in Birmingham because they have for many years been held there; or that, as was stated, the meeting to consider a requisition never ought to be held in a place where that requisition originated.

The final subject before the meeting—the question of the privileges of lady-members—had had all the interest taken out of it by the fact that the Committee of Council, at its last meeting, had judiciously resolved—"That the Committee of Council is of opinion that women should not be admitted as members of the Association, and that a by-law be submitted to that effect to the annual meeting." A question was raised, however, with regard to the ladies who are at present members; and it was proposed that a sub-committee should be appointed, "to inquire as to the privileges of lady members, with power to take counsel's opinion, and to report to the annual meeting." To this an amendment, instructing the Committee of Council "to take the opinion of counsel as to the rights of lady-members, and to report to the annual meeting," was proposed, and carried by forty votes to thirty-eight. It is certainly important that it should be decided, as soon as possible, whether or not medical women shall in future be eligible as members of the Association. We cannot but think, however, that it will be in a high degree impolitic, ungenerous, and illiberal to determine, or even to propose

to determine, that the medical-women already elected (and they are but two) shall "cease to be members"—even if it can be shown, as some think, that the legality of the election is questionable.

THE REPORT OF THE SCOTTISH UNIVERSITIES COMMISSION.

The Report of the Scottish Universities Commission, recently published, affords much food for sober meditation to those who wish well for the future of sound education. The Commission was issued in April, 1876, and the members nominated included, as far as possible, those who had taken part in the work of 1858, which in many respects remodelled the ancient constitution of the Scottish Universities, but many of whom are since dead. The members of the Commission whose report is now before us were the Lord Justice-General Inglis (who was the moving spirit of the 1858 regulations), the Duke of Buccleuch, Lord Moncrieff, Lord Ardmillan and Sir William Stirling Maxwell (both unfortunately now dead, and by neither of whom the report is signed), Dr. Lyon Playfair, the present Lord Advocate, Dr. John Muir, Dr. Campbell Swinton, and Dr. Alexander Campbell, all LL.D.'s, together with the names better known to southerners of Froude and Huxley, chosen for their connexion with the Universities of St. Andrews and Aberdeen respectively, they having been Lords-Rectors of those Universities. Of these three were to constitute a quorum; and Mr. Berry, Professor of Roman Law and the Law of Scotland in the University of Glasgow, was to act as Secretary. The questions to be investigated were as follows:—The constitution and powers of the University Court; the functions of the General Council; the course of study and regulations for graduation in the Faculties of Arts, Medicine, Law, and Divinity; the expediency of instituting any new faculties or degrees; the institution or continuance of entrance examinations; the creation of new professorships or lectureships; the provision of assistance and apparatus for any present or future professors or lecturers; the length of the University sessions, and the expediency of introducing any changes in respect to these; the recognition of extramural teaching, and the conditions under which such teaching should be recognised; regulations as to time, place, right, and manner of presenting and electing all University officers; the emoluments and retiring allowances of principals, professors, and lecturers; the mode of appointment to bursaries, scholarships, fellowships, and other similar foundations, and the conditions of their tenure; the financial position of the Universities, and the administration of their property and revenues; the condition of the University buildings, libraries, and museums, and the provision for their management, maintenance, and extension.

It will be seen that the ground to be covered in these investigations was ample enough; and it is plain, from the volumes of evidence taken, that the Commissioners were not slack-handed in accumulating it; but we confess that we are at a loss to see the connexion between certain portions of the Report and the greater part of the evidence, though in some respects, it must be confessed, there is a touching unanimity in the evidence recorded, especially as regards the increase of the professors' salaries, and the desirability of protecting them from what is called extramural competition.

On the present occasion, however, it will be well for us to confine ourselves to one particular portion of our subject, and the part we shall select is that which refers to the regulations for the degree of M.A. in Scottish Universities. Unfortunately, in certain of these Universities it has not been the rule for students to make themselves possessed of this degree; whilst in others a man was almost considered disgraced provided he passed through a full curriculum and did not attain to that honour. The present Commission seem to have inclined their minds to make this degree more popular—with what result, if their recommendations are adopted, we shall see.

The type of a Scottish University is to be sought in France. Most of them go back to the fifteenth century, and had their foundation in Papal bulls; and a degree in arts meant, as it does mean even now, a knowledge which the recent Commissioners do not hesitate to describe as having the merit of breadth and catholicity. The curriculum necessary for such a degree necessitated four years' attendance in classes in the University on subjects which are included in three groups, viz.:—(1) Classical Literature, including the languages and literature of ancient Greece and Rome; (2) Mental Philosophy, including Logic, Metaphysics, and Moral Philosophy; and (3) Mathematics, including both pure Mathematics and Physics, or Natural Philosophy. To these subjects the Commissioners of 1858 added English Literature, which had not previously been required.

Under these conditions the number of graduates has, it seems, increased, especially in Edinburgh. Probably students came to cherish the degree as an honour, such as it had not been in days gone by; and this we believe to be the correct inference to be drawn from the facts. But Glasgow has not followed suit with 1100 art students; the graduates number only forty or fifty annually. We understand tolerably well what that means: boys are sent to the University only for a year or two instead of being sent to an advanced school. How far such a plan should be supported beyond the boundaries of the University concerned, we shall not try to decide; but that such should be supported by large grants of public money is, we hold, unjust to the cause of education in its higher phases. But the recent Commissioners have a panacea for this. They will imitate, as they say, the example of the English Universities; they will allow a man to "go out" in a variety of subjects. How they propose to do this we shall hereafter consider.

THE WEEK.

TOPICS OF THE DAY.

The annual meeting of the Charity Organisation Society was held last week, at Willis's Rooms, St. James's, under the presidency of Lord Aberdare. In the course of the proceedings it was stated that the returns of cases dealt with by district committees in the year 1877 showed a decrease of 668, entirely accounted for by the great reduction in the number of cases forwarded by the Children's Hospital, Great Ormond-street, for investigation, in accordance with an arrangement made with the authorities of that institution. The report showed that the metropolitan hospitals were, by the indiscriminate administration of medical relief to all who presented themselves at them, great obstacles to the prosperity of provident dispensaries, by supporting which latter the people would learn to be self-dependent and self-reliant. An estimate was given that from £4,000,000 to £6,000,000 sterling were yearly expended in the way of charity in London, with the result that London contained a larger degraded population depending upon charity than existed among any like number of poor people. After the adoption of the report, Sir William Gull moved a resolution in support of the principle of the extension of provident dispensaries, as one of the most important means of developing the condition of the people, and this was unanimously carried.

A new infirmary for Lambeth, capable of accommodating 600 patients, and standing on four acres of ground, was last week opened for public use, with the usual formalities, in

the presence of the whole of the members of the Lambeth Board of Guardians. The building consists of six blocks, four of which contain the patients' wards, and is situated near the recently erected workhouse at Lambeth.

The Rural Sanitary Authority of Northwich applied at the recent Petty Sessions held there for an order to compel Lord de Tabley to close a well upon a farm in his lordship's possession at Nether Peover, Cheshire. In support of the application, the inspector stated that the tenant of the farm in question and his wife had both died of typhoid fever, and he produced an analysis of the water, which proved it to be of such a nature as to account for an outbreak of typhoid fever on the premises. The medical officer of health to the Moss Side Local Board also stated that there had been thirteen cases of typhoid fever at Moss Side, where families used the milk from this farmhouse. Since the summons had been taken out a second analysis had been made by the county analyst, and the water was then found to be in a worse condition than before. Drains were connected with the well, which was further polluted and contaminated from the sink. Lord de Tabley had begun to sink another well where the water was pure. The Bench made an order with costs on Lord de Tabley to close the well complained of.

A deputation, which included the Rev. Dr. Gott (vicar of Leeds), Mr. Edward Baines, Professor Thorpe, Professor Rucker, and Mr. R. Reynolds, recently waited upon the Mayor of Bradford, with the object of inducing the Corporation of that town to adopt a memorial to the Privy Council on the subject of establishing a new University in the North of England. The Mayor, in reply, intimated that the matter would be referred to the Finance and General Purposes Committee of the Corporation for consideration.

The Prince and Princess of Wales last week paid a visit to St. Bartholomew's Hospital, of which institution it will be remembered his Royal Highness is President. The buildings now in course of erection for the purposes of the Medical Council and School were first inspected, after which the Royal party were conducted through some of the wards, and several cases were explained by the medical staff of the establishment. After viewing the new lavatories and dispensaries their Royal Highnesses took leave of the Treasurer, Sir Sydney Waterlow, and the medical staff, having expressed their satisfaction with all that had been shown them.

A communication has been sent from the Local Government Board to the Guardians of the South Union, Dublin, threatening to dissolve their Board for not taking, when warned, sufficiently prompt and effectual steps to provide accommodation for small-pox patients. The Local Government Board states that, from the latest returns, it is manifest the disease is rapidly spreading. Several members of the Union have approved of the step taken by the Board, and it has now been determined to push forward efforts to procure increased accommodation.

Orders have been sent by the Admiralty to the authorities at Devonport Dockyard to survey the *Howe*, a wooden sailing three-decker, and the *Canopus*, a wooden sailing two-decker, both at that port, with a view of ascertaining their fitness for hospital service. The *Victor Emmanuel* was fitted up, at considerable outlay, as a military floating hospital for the Ashantee War, and was found to be a very great success; on her return from the West Coast of Africa all her hospital fittings were removed, as she was required for a receiving-ship at Hong-Kong. A Service contemporary suggests that some of the hospital fittings of the *Victor Emmanuel* may, perhaps, be available for fitting up one of the vessels now ordered to be surveyed; at any rate, the hospital-ships appointed to accompany any expeditionary force leaving this country will be equipped in a precisely similar manner.

A deputation of delegates from various friendly societies last week waited on the Registrar-General, at Somerset House, for the purpose of bringing to his notice the practice now in force amongst registrars of death, of distributing blank forms of certificates to agents and collectors of friendly societies and others. The deputation urged that this practice should be discontinued, on the ground that it opened the door to fraud, by offering to unprincipled persons the temptation to forge certificates of death in order to obtain payment from friendly societies. The Registrar-General promised that he would take the matter into consideration, and issue instructions to the registrars throughout the country on the subject.

An English ship, the *W. G. Putnam*, recently arrived at Falmouth from Calcutta, with several of the crew suffering from scurvy. The men attacked were so unfit for duty that they were at once discharged, and brought on shore to the Sailors' Home Hospital. The Board of Trade were at once communicated with, and their local medical inspector was instructed by telegraph to hold a strict inquiry into the cause of the outbreak. The members of the crew were accordingly examined, and the stores inspected. It was found that the food provided had not been of good quality, the beef and flour being pronounced bad, and the medical requirements deficient. The vessel has been ordered to proceed to Dundee to discharge.

Small-pox is still on the increase in the metropolis. At the last fortnightly meeting of the Metropolitan Asylums Board the returns presented showed that in the Homerton Asylum there were 166 patients, in Stockwell Asylum 144, in Hampstead Asylum 193, and in Fulham Asylum 199, in all 702, as against 663 at the period of the previous return. A letter was read from the Local Government Board, advising that, as the epidemic appeared to be increasing in the metropolis, the Deptford Asylum, which has for some time been closed, should again be opened; and this communication was ordered to be referred to a committee. Sir Edmund H. Currie presented the annual report of the Clapton Asylum, where pauper imbecile children are being trained. Complaints had been made that the children in this establishment were taught dancing, and it was explained that, under the methods employed to train the children, music was brought into requisition with highly beneficial effects. The extra cost of the education of the children was counterbalanced by the fact that many who would otherwise have been hopeless imbeciles have been trained to industry.

In a report made to the Home Secretary by Drs. Forbes Winslow and Winn on the state of mind of the Rev. H. J. Dodwell, now confined in Newgate, these gentlemen express a decided opinion that the prisoner is sound-minded, and that there is nothing to justify his detention as a criminal lunatic. To Dr. Winn he stated that he had no vindictive feeling against the Master of the Rolls, or murderous intention, and that he fired a blank cartridge at him simply with the hope that it might be the means of bringing his case before the public, extreme poverty having urged him to the commission of the offence.

THE LONDON HOSPITAL.

On the 4th inst. a large and influential meeting was held at the Mansion House, in support of an effort now being made to provide the London Hospital with an adequate annual income, and thus prevent the only alternative measure of closing 400 beds to the poor of the surrounding neighbourhood. The Lord Mayor presided, and was supported by his Royal Highness the Duke of Cambridge, President of the Hospital, who moved the first resolution—"That the London Hospital, the only large general hospital for the

eastern part of the metropolis and adjacent suburbs, comprising a population of one million, occupies a position of paramount importance among the charities of London, and is worthy the liberal support of all classes." In the course of an explanatory speech the Duke stated that it was with very much regret he had to inform the meeting that the Hospital authorities did not see their way to continuing the full advantages of the institution unless the present annual income was largely increased, and it was for that purpose the present meeting had been convened. The Hospital had now a fixed income of only £13,000 a year; all the rest it derived from voluntary donations. The working expenses were £44,000 a year, and the authorities had recently been compelled to sell out £21,000 worth of stock to keep the institution afloat, which he was sure everyone would deplore as a most unsatisfactory state of affairs. He admitted that for many reasons it was a somewhat awkward moment for appealing to the public, but he reminded them that the benevolent work of the Hospital went on irrespective of times, and he concluded by an earnest appeal to the public to support the authorities. Mr. Hubbard, M.P., seconded the resolution, and Monsignor Capel supported it, urging that in such a case bare justice compelled them to be charitable; and that, having so lately given abundantly to the wants of strangers, the public might now fairly be asked to support a home charity. The Duke of Westminster also proposed a resolution, which was seconded by Mr. Buxton, that a special fund be established for maintaining the charity for the next five years, and that a committee of appeal be formed in order to obtain contributions for the purpose. Before the close of the meeting several handsome donations were announced, and with such a host of wealthy supporters it is to be hoped that the special appeal of the authorities of the Hospital will not have been made in vain.

PATHOLOGICAL SOCIETY OF DUBLIN.

At a meeting of the Pathological Society of Dublin, on Saturday, April 6, Dr. S. M. MacSwiney in the chair, Mr. F. T. Porter presented sequestra which he had removed from the lower jaw of a woman aged thirty, a wet-nurse. There was no history of syphilis. A gumboil had formed in connexion with the second bicuspid on the right side ten years previously, but the course of her present illness did not extend over more than six weeks. Before the operation sensation was lost on the right cheek, but since the removal of the necrosed bone feeling had returned. The diseased bone was a little above the mental foramen. Dr. Edward W. Collins laid before the Society the thigh-bone of a soldier who had been struck by a waggon and flung against a wall, thus sustaining a severe compound fracture of the right femur. He lost much blood, and was in profound collapse when brought to hospital. Life was sustained by hypodermic injections of ether, etc. There was a feeling of sucussion in the wounded limb, owing to the presence of blood and air in the soft parts. The bone was broken about the junction of the lower with the middle third. The obliquity of the fracture ran downwards and backwards—the upper fragment being consequently displaced inwards, and the lower one upwards, outwards, and forwards. The operation was performed at 1 a.m., the method of "mixed narcosis" being adopted to render the patient anæsthetic. Amputation was performed at a high level, but so far the patient was progressing well. In commenting on the case Professor Bennett said that there was only one specimen of such a displacement of the fragments in the Museum of the School of Physic in Ireland. Dr. Charles F. Moore showed the femur of a fowl, which had been broken, but had united by firm bony anchylosis. The lower fragment lay in front. Professor Bennett drew attention to the fact that the fracture had united precisely as a similar one in man would have united, and not by ensheathing callus, as was laid down by many distinguished authors.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

In consequence of the 19th being Good Friday, the next meeting will be held on Friday, April 12, at 7.30 p.m. A. Haviland, Esq., Medical Officer of Health for Northamptonshire Combined Sanitary District, will be balloted for as an extra-metropolitan member. A communication will be read from the Ladies' Sanitary Association, on the subject of the prevention of the spreading of measles in schools. Dr. T. O. Dudfield will make some remarks on a recent epidemic of enteric fever in Kensington, supposed to be related to milk—the relation, however, being apparently disproved. Dr. J. N. Vinen will give a short statement of a limited outbreak of typhus fever in St. Olave's District.

PATHOLOGICAL SOCIETY.

We may remind our readers that the discussion on Diseases of the Lymphatic System was adjourned, and will be resumed at the next meeting on Tuesday evening.

RESOLUTIONS ADOPTED BY THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS

AT ITS MEETING ON APRIL 1, 1878.

1. That the report of the President and Vice-Presidents on the Government Bill for amending the Medical Acts be approved, and be entered on the minutes of the Council.

2. That the consolidation of all present licensing authorities into conjoint boards, one for each division of the kingdom, recommended for many years past by the General Medical Council, and accepted by the House of Lords in 1870 as a principle for compulsory legislation, is an object to which the College attaches the highest importance, and for which it has long been exerting itself; that already, by taking part in the settlement of a voluntary Joint Scheme for England (approved by the General Medical Council) the College has shown its willingness to make all needful sacrifices for that object; that, in the opinion of the Council, the object would not only remain unpromoted, but even the progress already made towards it in this division of the United Kingdom would be seriously endangered, and in all probability be lost, if the Legislature were now to affirm that it leaves the principle of joint examinations for the option of the individual medical authorities.

That therefore, as regards Clauses 3 and 14 of the present Bill, the College hopes it may not be called upon to surrender any of the independence which it now has in respect of its diploma and examination-rules, unless such surrender be in contribution to a general system, which (so far as minimum qualifications are concerned) shall make joint-examinations compulsory for all the divisions of the United Kingdom.

That further, as regards Clause 14, the College, while recognising the necessity of providing for *supervision* by the General Medical Council in all the essentials of medical education and examination, would not think it desirable to give to that body the *initiative* in framing examination-rules, either for the respective joint boards, should such exist, or, should such not exist, for the separate authorities.

3. That, as regards Clause 23, the College recommends that the clause be withdrawn in favour of the less centralised plan of Sir John Lubbock's Bill.

4. That, as regards Clause 24, the College recommends the withdrawal of the clause, with a view to the subject being dealt with separately from any question of amending the Medical Acts, and mainly on a system of local, rather than of central, responsibility.

5. That, as regards the granting of qualifications to women for entering upon the medical profession, the College approves the giving to the authorities amended powers for optional exercise in this matter, but recommends that the powers be so given as to allow the authorities reasonable discretion to

distinguish in their examination-rules and diplomas between men and women; provided that the examinations of the two sexes be in the main equivalent for like certificates or diplomas.

6. That, as regards the remaining provisions of the Bill, the College gives general approval, but authorises the President to recommend such minor amendments as he and the Vice-Presidents may find desirable.

7. That the President and Vice-Presidents be instructed to request an interview with the Lord President, in order to set before him the views of the Council on his Bill; and that it be an instruction to them, in any such interview, particularly to explain to his Grace the regret which the Council feels, on public grounds, that the Bill does not contain any provision for enforcing joint examinations in each division of the United Kingdom.

FROM ABROAD.

Dr. Peaslee on Hysteria.

During a discussion on hysteria which took place at the New York Medical Association (*New York Medical Record*, February 9), the late Dr. Peaslee made some interesting observations.

He agreed, he said, with the author of the paper, that the pathology of hysteria was not well understood. He was of opinion, however, that in the present state of gynæcology we had a right to believe that if one organ was responsible more than another for hysterical symptoms it was the ovary. That they always depended on the condition of the uterus or ovary was obviously incorrect, from the fact of their occurrence in males, and in girls before puberty. Still, confining attention to women, and especially between the ages of fifteen and forty-five, he believed that the ovaries were almost always responsible, and the uterus scarcely ever so—so that it is safe to say, as a general proposition, that hysteria is always ovarian and never uterine. But it is not grave affections of the ovary that give rise to hysterical symptoms; so that while ovarian inflammation does not cause them, congestion does so constantly in a certain class of women. For there are some women who never have hysteria under any circumstances, so that the disease is restricted very nearly to those who have what might be called the "ovarian temperament." In such women the slight derangement incident to congestion of the ovaries usually gives rise to an explosion of hysteria, while in the same women, when acute inflammation of one or both ovaries occurs, hysteria is no longer met with until they get better, when it will probably return. Again, women inclined to be hysterical on becoming pregnant do not, as a general rule, exhibit any manifestion of the disease during the first half of their term.

Dr. Foster, who had introduced the paper, had observed that in treating hysteria it is of the greatest importance to impress upon the mind of the patient the idea that there is no actual stigma attached to her illness. With reference to this point, Dr. Peaslee observed that if we had to deal with a patient who had suffered from ovarian irritation for a long time, and had been educated wrongly upon the subject of hysteria—that is, had been led to believe that it was about the most discreditable thing that could happen, to have an attack—if such a woman were told exactly what her ailment was, the effect would probably be to make her an enemy for life, and at the same time, in all probability, to cure her of her hysteria. He had cured about ten cases in that manner, but they were chronic cases, and the women understood perfectly well their own condition. In ordinary cases it is proper to tell the woman kindly that she is hysterical, that there is a cause for it, and that the best thing possible would be done with a view to its complete removal. Dr. Foster also in his paper had expressed the opinion that the cases were exceedingly few in which marriage should be recommended, for if uterine disease were present it was liable to be made worse instead of better. The belief that benefit followed the gratification of sexual desire rested on no foundation of fact. As to this point, Dr. Peaslee would not advise a woman to marry with reference to the gratification of sexual excitement; but it was probable that if a woman became married her surroundings and occupations would be changed, and her attention drawn from herself. He would advise delay in marriage in cases in which chronic ovarian congestion existed. If the ovaries were not so injured that conception might occur, marriage might be beneficial, for in that way a rest of nearly two years could be secured for the ovaries. In certain cases, therefore, marriage might be of the greatest importance.

GENERAL CORRESPONDENCE.

THE HOSPITAL FOR DISEASES OF THE THROAT AND CHEST.

Letter from Mr. E. J. Luck.

[To the Editor of the Medical Times and Gazette.]

Sir,—My attention has been called to a letter from General Feilding, a gentleman who was chairman of the Committee of this Hospital in the year 1876, but was not re-elected to that office in 1877, and who subsequently withdrew from the Hospital. His letter contains so many inaccuracies that I feel bound, in justice to the medical staff, to ask you to make some corrections. There are three matters somewhat mixed up together in General Feilding's letter, which require explanation:—

1. As to General Feilding's share in constituting the so-called Committee of Inquiry.
2. The circumstances which were the subject of complaint.
3. The conditions under which clinical assistants should be allowed to operate.

(1.) The question of General Feilding's share in the constitution of the Committee is a matter of very little importance, but the facts are as follows:—A Committee was appointed, consisting of three gentlemen nominated through the influence of General Feilding, and of three subscribers nominated by the Committee of Management. When it was found that there was likely to be an impartial inquiry, the arrangements were thrown over by General Feilding's friends, and a letter was obtained from the Prince of Wales appointing the same three gentlemen who had been nominated through General Feilding, together with a fourth person, but altogether ignoring the subscribers appointed by the Committee of Management. Of these four gentlemen, one was a cousin and the other a most intimate friend of General Feilding. How far General Feilding was responsible for the Committee it is difficult to say; but the Duke of Grafton, writing to me on July 6, says: "Colonel Feilding laid the complaints before me, and I considered it my duty to seek for an investigation into them." I know as a fact that in the same way General Feilding applied to Lord Dunmore.

(2.) Under this heading General Feilding has introduced certain statements which are totally at variance with the facts. When he says that he "ascertained" that a patient had nearly succumbed under an operation of tracheotomy, that the gentleman who operated was a clinical assistant who had never but once before attempted a similar operation, and had then not been permitted to complete it," etc., he is simply relating a series of malicious anecdotes which were the conclusion to a long train of intrigues against a most distinguished clinical assistant. It is the custom at our Hospital for clinical assistants always to perform operations for the first time in the presence of the medical officer under whose care the patient may happen to be. In November, 1876, a Belgian was admitted, and, in the presence of the physician and numerous practitioners, the clinical assistant performed tracheotomy. I am informed by the physician in question that the operation was most skilfully accomplished, but that, as a new kind of instrument was used, he himself introduced it, instead of leaving it to the clinical assistant. He was, however, so satisfied with the way in which the operation was done, that he sanctioned the clinical assistant performing it in future. Some weeks afterwards the same clinical assistant was again called upon to open the windpipe. The operation was completed with the most perfect success, and two witnesses were present at the so-called Committee of Inquiry to prove that it was most ably done. This was the case, however, in which the matron considered that it was necessary to show that her scientific knowledge and surgical ability were much greater than those of the clinical assistant. I may add that the same gentleman has since successfully performed the operation of tracheotomy seven times. It is somewhat surprising that

though three meetings of subscribers have taken place since the events referred to—one of which was specially summoned to consider the matters at issue,—on no occasion has General Feilding endeavoured to substantiate his unfounded charges, which, moreover, were voluntarily brought forward and refuted at the special meeting by the Committee of Management themselves.

(3.) Although I believe that at most of the large hospitals tracheotomy is performed by the house-surgeon without the supervision of any member of the permanent staff, the more careful method adopted at this Hospital has been already explained. The two cases which have been brought forward are, indeed, an excellent illustration of the special precautions which are adopted at this institution, and prove that the rhetorical flourish as to "clinical assistants experimentalising in public hospitals at dead of night," etc., belongs to the realms of General Feilding's fancy.

I am, &c.. E. J. Luck (Chairman).

Letter from Mr. W. Pugin Thornton.

[To the Editor of the Medical Times and Gazette.]

Sir,—It would appear from the editorial comments appended to my letter in the *Medical Times and Gazette* of March 23, that I had not quite appreciated the sense in which you asserted that I was "instrumental" in bringing forward certain charges against the management of the Throat Hospital; I must, therefore, ask your indulgence while I explain why I felt compelled to sever my connexion with this Hospital.

I have already denied that I was in any way responsible for the inquiry instituted at the special request of his Royal Highness the Prince of Wales. I may now add that the inquiry, strictly speaking, in no way arose out of my retirement from the medical staff, and the five charges which you attributed specially to me were not due to my action or influence. Nos. 1 and 2 (use of telegraphic wire) arose entirely from steps taken by the Secretary after I had tendered my resignation, and he never consulted me in the action he took. Nos. 3, 4, and 5 (concerning a case of tracheotomy) arose from particulars of a case which came under the chairman's notice during a visit to the wards. General Feilding's explanation of the true origin and nature of the inquiry frees me from the imputation that I was responsible for the inquiry. I will, therefore, content myself with making the following brief statements.

In the autumn of 1876 I learnt that Dr. Mackenzie had intimated to the Secretary that if, as he supposed, I had not been formally elected to the post of Surgeon (that is, if my appointment had not been ratified at a general meeting of the subscribers) I should have to be re-elected, and should then stand below the junior medical officer, and thus could not succeed to the duty of seeing out-patients on two afternoons in the week. As a fact, my appointment to the office of Assistant-Surgeon was perfectly regular, and had been made in accordance with the by-laws of the Hospital, and my promotion to the rank of Surgeon did not require the ratification of the subscribers. I confess Dr. Mackenzie's conduct did not take me wholly by surprise, because a short time before this I had been made aware that Dr. Mackenzie, at a meeting of the Committee of Management, whilst speaking of the new practice of seeing out-patients on two evenings in the week, had stated that the arrangement had been made expressly for me, and that I had been "pitchforked" into the post. The fact is, the plan of permitting evening attendance was first proposed by Dr. Mackenzie himself, in consequence of its adoption at another throat hospital, and it was only at his earnest request, and after three days' consideration, that I reluctantly undertook the duty. For many months I had gradually been coming to the conclusion that Dr. Mackenzie's autocratic action was detrimental both to the proper working of the Hospital and to the interests of the patients. I stated my opinion both to him and to the Secretary, and as matters did not mend, but rather grew worse, and as Dr. Mackenzie had previously declared "I am the Committee"—an assertion which experience had convinced me it would be folly to contest—I felt that it would be useless to lay my grievances before the Committee of Management. I felt, moreover, that if I had appealed to the Committee, or even to my colleagues, I should have been compelled to state that the Secretary was my informant as to Dr. Mackenzie's statement to which I have just referred—a course which would have probably led to the Secretary's removal from his post. Consequently I determined to resign the office of Surgeon. There is, however, no truth in the allegation that there had been a private quarrel between Dr. Mackenzie and myself.

My presence at the special meeting of subscribers, which you say showed a "want of delicacy," was necessitated by a desire to refute certain false allegations respecting my conduct, which had been reprinted from the last annual report of the Hospital. It certainly severely taxed my power of control to sit and listen to the numerous fallacious statements, without making any attempt to correct them; but, as I had only gone for the purpose stated, I refrained. My refutation, which was, moreover, substantiated by facts, did not, however, appear in the report of the meeting published either in the *Medical Examiner* or in the *Court Circular*. Respecting the latter periodical, I may incidentally remark that the report of the meeting was not published in the copies of the paper issued to the general public; but (as admitted at the office) only a limited number of copies containing the report were struck off, and these were given to "one man" for the sake of "charity." In the subsequent issues of this charity-loving journal the report (which report General Feilding justly spoke of in his letter to you as full of inaccurate statements) was omitted, and the pages renumbered. This fact may be left to speak for itself.

I have hitherto abstained from publishing any statement of my reasons for retiring from the Throat Hospital, because I have hoped that, sooner or later, a full and complete inquiry would be instituted, and facts brought out in their true light. In this hope I begin to fear I have been disappointed; and my silence has been wrongly interpreted, and the purity of my motives impugned. But, whatever may be the present state of feeling, I trust that after this statement (of necessity curtailed) I may stand clear of any suspicion that I have acted otherwise than honourably, or that I have on any occasion forgotten the laws which should always regulate professional conduct. I am, &c.,

W. Pugin Thornton.

42, Devonshire-street, Portland-place, W., April 9.

[We have only two words to add to this letter—1. We never attributed the authorship of any charge to Mr. Pugin Thornton; 2. We never alleged that there had been a quarrel between him and Dr. Mackenzie.—Ed. *Med. Times and Gaz.*]

At a recent meeting of the Committee of the General Hospital, Birmingham, it was announced that a bequest of £1000 made by the late Mr. Frederick Cohen, of Hagley House, Edgbaston, had been handed over by Dr. Balthazar Foster, for the purpose of founding a special permanent fund for the relief of necessitous patients leaving the Hospital. Special trustees of this fund have been appointed.

Rather a singular case was heard at the Worship-street Police-court last week. A man was charged on remand with having assaulted another; the prisoner had been in custody under remand for the past two months, having failed to find bail for his appearance. When the prisoner first appeared before the Court, the sitting magistrate had to attend at the London Hospital to take the prosecutor's depositions; he then appeared seriously ill, and his statemeut went to show that the prisoner, with whom he had quarrelled in the street, had kicked him in the body: this the prisoner persistently denied. The prosecutor, a miserably poor-looking Hebrew, has, however, never left the Hospital, but keeps to his bed, and states that he cannot be moved. The police report that the house-surgeons fail to discover what is the matter with their patient, who exhibits no external injury. He is carefully tended, well nursed, and supplied with luxuries and first-class diet. The prisoner protests that he never kicked the man, and does not believe there is auything the matter with him; he therefore asked if he could not be discharged or put on his trial. The magistrate said he was unable to help him, and remanded him for the ninth time. It seems strange that the magistrate contented himself with taking the medical testimony at second-hand, and that he did not request the attendance of the House-Surgeon at the London Hospital to report more fully on the case.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MARCH 22.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

THE APPLICATION OF MAGNETS FOR THE REMOVAL OR DISPLACEMENT OF IRON AND STEEL CHIPS FROM WITHIN THE EYE.

MR. MACDONALD MCHARDY read notes of a case illustrative of such use of magnets. The patient, a man aged thirty-one, came under treatment at the Royal South London Ophthalmic Hospital during July last, for an injury to his left eye caused by a chip flying from either a steel tool or the hammer with which he was striking the tool. Twenty-four hours after the accident there was commencing slight iritis; and altered reflex from a portion of the cornea indicated where the steel chip had impinged. Before dilatation of the pupil, no lenticular opacity could be detected, and the ophthalmoscope revealed nothing abnormal in the vitreous. Tension was normal. There was but insignificant tenderness. The eye was far easier than on the night after the accident. Atropine drops, two grains to the ounce, were prescribed. The next day, forty-eight hours after the receipt of the injury, the eye was quieter. The pupil was widely dilated. Vision equalled six-twelfths. The corneal surface was almost normal. But there was a fragment of metal upon the anterior surface of the lens, occupying a situation downwards and inwards from its centre, and so placed as to be completely concealed, except when the pupil was widely dilated. The lens was seen to be perfectly transparent, except at the small area hidden by the chip, which was a long narrow strip. From the position and shape of the chip, Mr. McHardy judged that, if left alone, it was certain sooner or later to gravitate down behind the iris and lead to destructive mischief of one or both eyes; hence, that its removal was imperative. Recognising the possibility of the lens capsule being wounded by the chip, notwithstanding the continued transparency of the lens—possibly through the chip by its very presence plugging a laceration in the lens capsule, and thus excluding the aqueous—he could not feel sure that the lens capsule was then so damaged as to necessitate the formation of cataract. He hesitated to subject the eye to the dangers attending the extraction of a transparent lens by the scoop, and was not satisfied that such a measure would insure the removal of the chip. The use of forceps for removal or dislodgment of the chip was undesirable, as they would almost certainly wound the lens capsule, and, through occasioning a loss of the aqueous, would cancel the hydriatic action of the atropine, so as to conceal the chip from view. To meet the requirements of the case, Mr. McHardy devised a magnetic spatula, which, being inserted through a needle-puncture which it just plugged, would prevent an escape of aqueous, and the attendant diminution of the pupil, so allowing the foreign body to be manipulated whilst fully in view. Mr. McHardy had preferred a spatula which was an electro-magnet, as he could apply such an one to the chip before calling the attractive force into play; and this power could be interrupted at pleasure, so that any undesirable position of the fragment, with reference to the spatula, might be changed; thus obviating the risk of damage to the lens capsule which would be incurred if the chip were induced to jump across, on the approach of a permanent magnet. Seventy-two hours after the accident, when the condition of the eye was that described on the previous day, his colleague, Mr. Brudenell Carter, suggested that, before introducing the spatula, it should be tried what, if any, influence a magnet would exert through the cornea upon the chip. Accordingly, Mr. McHardy sat the man up in a chair, held before his eye a powerful electro bar-magnet, with the result that, when its pole was four inches from the cornea, the chip was seen to spring away from the lens to the inner surface of the cornea. On withdrawal of the maguet the chip fell into the anterior chamber, whence it was evacuated through an ordinary iridectomy incision. As soon as the chip left the lens it revealed a patch of opacity precisely of its own size; it was, therefore, evident that complete cataract might be anticipated. This followed, and the injured lens underwent absorption without setting up any inflammatory reaction. Atropine was continued during the absorption; and the patient, who was present, had normal distant vision with a lens of twelve dioptrics, and read No. 1 of Jaeger's types with a lens of fifteen dioptrics—the most favourable possible issue to such a case, and one that had been attained without subjecting the eye to any danger other than that directly produced by the entrance of the chip. Mr. McHardy was indebted to Mr. Ladd for the loan of the large magnet, as well as for valuable hints respecting the battery power to be used; and to Mr. Foveaux, of the firm of Messrs. Weiss, for the great, prompt, and faithful pains he had taken in carrying out the suggestions for making the electro-magnetic spatula, which was exhibited. In his concluding remarks, Mr. McHardy quoted from a paper by Dr. McKeown, in the *Dublin Journal of Medical Science*, who had successfully used magnets for the removal and diagnosis of chips of steel or iron in the vitreous; he said that this case had so enlisted his interest in the subject that he looked forward to carrying out investigations with a view to ascertain the most favourable conditions under which the magnetic power could be applied for these purposes.

MR. B. CARTER had seen the case, and thought that any other mode of removal would have been dangerous to the eye; whilst, if nothing had been done, there would probably have been destructive inflammation. Any use of forceps would have injured the lens. The use of the maguet had obviated all difficulties.

ON RETINITIS HÆMORRHAGICA AND ITS SUGGESTED CONNEXION WITH GOUT AND VENOUS THROMBOSIS.

MR. JONATHAN HUTCHINSON read a paper upon this subject. He first mentioned the characteristics of the disease known as retinitis hæmorrhagica, and said that it must be carefully distinguished from cases of retinal hæmorrhage in association with evidences of kidney disease. The latter were common enough, the former rare. He exhibited three ophthalmoscopic drawings to illustrate the malady—one copied from Jaeger's Atlas, and two original—and remarked that they showed, as was always the case, innumerable hæmorrhages scattered over all parts of the fundus, and all of flame-shape, and branching out in lines radiating from the disc. In one they were small, in the two others of considerable size. Amongst other peculiarities of the disease were mentioned the absence of any white deposits such as occur in renal retinitis, the extreme turgescence of the vena centralis, the diminution of the artery, and frequently considerable swelling of the disc and the adjacent parts. Some statistical facts as to a group of fifteen cases were given. The author thought the disease more common in men than women, in one eye than in both, often sudden in its onset, and he had been much impressed by the fact that most of those who had been under his care were past middle life, of somewhat plethoric habit, and frequently with definite history of gout. The extreme turgescence of the vein had led him to conjecture that the cause of the disease might not improbably be plugging of the central vein. This hypothesis would account for the sudden onset, the frequency with which one eye only was affected, and the extreme multiplicity of the hæmorrhages. He had tried in several cases, since this idea had occurred to him, whether stagnation of the blood in the veins could be proved by pressure on the eyeball, and, although in most cases it was certain that the veins did empty somewhat on pressure, yet more than once it had appeared to be almost motionless. He had not had any opportunity for making a dissection. His hypothesis was, that, in connexion with gouty tendencies, the vein became plugged, and that from this plugging all the other conditions resulted. He had seen several cases of retinitis hæmorrhagica in which no definite history of gout could be obtained, but in almost all his cases the patients' state of health favoured the supposition that a gouty tendency was present. In a few of the cases, small quantities of albumen were present in the urine; but, as a rule, the cases differed much from those of renal retinitis, and their prognosis was probably somewhat less grave. In no single case had any dropsy been present. The author fully admitted that the group was not one which could be abruptly defined, and that some cases occurred in which the characters were ill marked, and in which the conditions were mixed with those of renal retinitis. The flame-shaped peculiarity was, no doubt, to be explained by the supposition that

the blood was in the innermost or nerve-fibre layer, and there was no doubt that this form was assumed by retinal hæmorrhages in many other cases—as, for instance, in optic neuritis from tumours, and in renal cases. In these also it was quite possible that thrombosis of branches of the vein might exist. He concluded by asking the experience of members of the Society on the points in question.

Dr. Broadbent said that retinitis and hæmorrhages were by no means limited to one kind of kidney disease, nor indeed a constant feature in any. Certainly hæmorrhages were more common with the contracted kidney; but were they more common in gouty subjects? He would like to know some more definite characters as distinguishing those spoken of from the hæmorrhages of cerebral tumours. If due to thrombosis, the causation would be similar to that produced by obstruction in cases of tumour.

Mr. B. Carter thought that two of the drawings did not correspond. In one there was obliteration of the disc and flame-shaped hæmorrhages; in another the disc was well defined and the hæmorrhages round. He thought Mr. Hutchinson's explanation of the shape of these hæmorrhages the true one. When they were flat and expanded they probably lay beneath the membrana limitans. A distinction ought to be made between arterial and venous hæmorrhages: the latter were sometimes found in women about the turn of life, and he had seen it in the case of osteitis deformans described by Sir James Paget. He would also like a somewhat more exact definition of gout; a mere history of gout obtained from a patient was too vague to go upon, except there were well-marked symptoms of the condition. There was a risk in a too hasty attempt to connect local phenomena with general states.

Mr. Howard Marsh alluded to the connexion between gout and certain forms of phlebitis as pointed out by Mr. Prescott Hewett and Sir James Paget. In these cases there was often both a gouty family history and a personal history of the same kind. One of the gouty phenomena described by Mr. Prescott Hewett—namely, plugging of the veins of the corpora cavernosa of the penis—had recently been re-described in America as a new disease.

Dr. Barlow had only seen one case of the form of hæmorrhagic retinitis described. It was interesting in connexion with the other forms of hæmorrhage found with gout, as, for example, the hæmorrhages occurring into the joints, described by Drs. Hilton Fagge and Pye-Smith. His patient was a young man aged twenty-five, the subject of the hæmorrhagic diathesis, and then suffering from renal hæmorrhage. When only twenty-one he developed signs of gout, and when under Dr. Barlow's care he had one of these arthritic attacks, in the course of which the temperature rose to 103° and 104° Fahr. Sir W. Jenner had shown the cause of swelling of the joints of those of the hæmorrhagic diathesis to be the effusion of blood or serum. The case showed the connexion between gout and the hæmorrhagic diathesis.

Mr. Hutchinson, in reply, said he was not acquainted with effusions of blood elsewhere in the body in gout. The obstruction of the veins in it he bore in mind. The apparently punctiform ecchymoses, remarked by Mr. Carter, were really linear, but small.

Cases of Effusion into the Pleural Cavity.

Dr. W. H. Broadbent read notes of three such cases. *Case* 1.—Rapid Effusion of Bloody Fluid into the Right Pleural Cavity at the age of seventy-six; Paracentesis; Recovery.—A gentleman, aged seventy-six, under the care of Mr. Meehan and Dr. Broadbent, unusually vigorous for his years, who had for a few days suffered from dyspnœa after exertion, was found on May 16, 1877, to have fluid in the right side of the chest up to the level of the nipple; the heart and other lung being sound. Next day the pleural cavity was nearly full, and on the following day quite full. The patient could not now turn in bed without serious shortness of breath. Under these circumstances, paracentesis was considered to be urgently required; and, after consultation with Sir William Jenner, was performed on May 19. Eighty ounces of fluid were withdrawn. The fluid had almost the colour of blood, and rapidly deposited a layer of blood corpuscles nearly an inch thick. Notwithstanding this, the patient made a good recovery, and still remained well. The points worthy of remark in this case were considered to be (2) the rapid effusion of the fluid, which was unexampled in the experience of the reporter; (3) the large amount of blood, which, with the rapidity of the effusion, was suggestive of malignancy. This, however, might be considered as set aside by the recovery and present good health of the patient. Probably the cause was undue exertion. 1. The age of the patient. Advanced age was taken by Dr. Broadbent as a reason for early operation when the pleural cavity was full of fluid. The patient was then less able to bear a long illness, and the want of elasticity of the structures rendered the pressure-effects more dangerous, and prevented the falling in of surrounding parts during resorption, should the lung fail to expand. *Case* 2.—A second illustration of recovery after paracentesis thoracis in advanced life was a case of pleurisy with effusion at the age of seventy-three. The patient, a billiard-marker, was admitted into St. Mary's Hospital on September 24, 1874, with all the signs of effusion into the left pleural cavity, filling it completely, and displacing the heart. On October 6 five pints of clear fluid were drawn off; and on the 17th he left the hospital convalescent. He resumed his occupation, and was well twelve months later, but died in 1876. *Case* 3.—Pleurisy of the Right Side, with Effusion; Sudden Death.—A gentleman, aged twenty-four, of a phthisical family, but personally healthy, began to suffer pain in the left side in August, 1877; a fortnight later, he was compelled by shortness of breath to give up cricket and violent exercise generally, but he continued to go out up to September 24, when Mr. Wigmore was called in, and, finding signs of fluid in the left pleural cavity, confined him to his room. On September 28 the patient was seen by Mr. Wigmore and Dr. Broadbent in consultation, and it was agreed that paracentesis should be performed next day at 4 p.m. There had been no dyspnœa nor other urgent symptom. At 6 a.m., on waking up after a good night, he was suddenly seized with shortness of breath, and, after a struggle of two or three hours, died. A post-mortem examination could not be obtained; but probably the cause of death was thrombosis in the veins of the compressed lung extending to the heart.

Dr. Whipham referred to a case under the care of Dr. Barnes, at St. George's Hospital. The patient had been in hospital a month for ulceration of the os uteri, when she had slight shivering, but nothing to indicate any pleural effusion until two hours before death, when she began to suffer from dyspnœa. He was able to make out the existence of fluid in the left pleura, and this was confirmed after death. No thrombi were found.

Dr. Cayley said that Dr. Broadbent's cases showed the dangerous condition of a patient with the chest full of fluid. In the case of a gentleman in this condition, who refused paracentesis, death occurred suddenly.

Dr. Symes Thompson mentioned a case where rapid effusion was successfully treated by tapping.

Mr. Maunder said one point of interest in Dr. Broadbent's elderly patient was the origin of the blood; the only explanation offered being the possible presence of malignant disease. Probably this was not the cause, the patient being in good health, and twelve months having elapsed since the operation. He suggested that it might be accounted for as the result of congestion and oozing, from want of tone, in an elderly person, and analogous to the accumulations of blood sometimes met with in the bladders of old men, and from which they often recover. With regard to tapping in such a case, there probably would be no two opinions upon the propriety of such a step when a patient's life was in imminent danger from suffocation.

Mr. Marsh referred to a case of sudden death with pleural effusion in dropsy after scarlet fever.

Dr. Lees mentioned a case, spoken of by Dr. Clifford Allbutt, of a young girl suffering from pleuritic effusion, who fell down dead while walking to Addenbrooke's Hospital.

Dr. Broadbent briefly replied, and the meeting adjourned.

THE PATHOLOGICAL SOCIETY.

Tuesday, April 2.

C. Murchison, M.D., LL.D., F.R.S., President, in the Chair.

Adjourned Exhibition of Specimens of Lymphadenoma and Leukæmia.

Mr. Nunn exhibited microscopical specimens of lymphatic glands invaded by cancer, and showed drawings of the same. The first specimen was one of simple hypertrophy of

lymphatic glands; the second specimen presented sarcoma of the popliteal glands; the third illustrated the arrangement and position of the cells in cancerous invasion of a lymphatic gland; and the fourth specimen showed the microscopical appearances of an axillary gland in cancer of the breast. In the third and fourth specimens, Mr. Nunn pointed out that the cells were arranged in groups surrounded by the ordinary gland-cells. These specimens illustrated one connexion of malignant disease with lymphoma. In the case from which the first specimen was taken there was neither general lymphadenoma nor leukæmia.

Dr. Thomas Jones exhibited a specimen of enlarged axillary glands from a case in which leukæmia was also present. A gentleman of fifty years was first seen on July 10, 1877, for enlarged glands in the axilla and extreme debility. One sister had died of consumption, but the family history was otherwise good. He had been delicate up to five, about which time he was supposed to be suffering from some abdominal disease. He, however, completely recovered, and grew up to be a strong, healthy man, enjoying good health until the commencement of the present illness. He had never had syphilis. In the autumn of 1866 he noticed a lump in the right axilla, which gave him no pain or discomfort, and his general health was good. Towards the end of the year he began to ail; and in March, 1877, he suffered from a severe attack of eczema of the face and lower extremities. He had also severe pain in the hepatic region, extending ing through to the back; complete loss of appetite, with glazed and irritable tongue; diarrhœa—motions unusually offensive; great prostration of strength; urine scanty and deeply coloured with bile purpurates, but without albumen or sugar; almost total loss of sleep; and constant watery discharge from the nose. The skin over the enlarged gland in the axilla was thick and brawny, and of a dark plum colour; and a chain of enlarged glands extended up to, and above, the clavicle on the same side, the skin over the whole being so thickened that the clavicle could not be seen. The patient continued to lose strength till the beginning of June, when his appetite improved and his diarrhœa became less severe. In the beginning of July, however, as opiates began to fail to procure sleep, he rapidly beeame worse. He was now seen by Dr. Jones, who found him extremely emaciated, with the appearance of one suffering from malignant disease. The swelling in the axilla was the size of a Seville orange, freely movable and firm, and without pain; the skin over it was still of a dark colour and hard. The swelling and hardness of the tissues over the pectoral muscle extended as far as the clavicle, but no enlarged glands could be felt in this region. The hardness and swelling seemed to be due to œdema. No enlarged gland could be felt in any other part of the body. The skin was dry; the temperature in the morning was 100°, and 102° in the evening. He complained of chilliness, scarcely amounting to a rigor, and frequent action of the bowels; the motions were dark and offensive, but contained no blood or mucus. The liver and spleen were not enlarged. The abdomen was flat and free from tenderness, and all the other organs were found healthy. There was no hæmorrhage from gums or other mucous surfaces. His only complaint was extreme prostration of strength and almost total loss of sleep. Ten days later the blood presented the following microscopical appearances:—The fibrine seemed to coagulate unusually rapidly on the glass side. The white corpuscles, which were small and granular, were found to be greatly in excess—in one corner of the field as many as thirteen white to one red corpuscle being seen. The axillary tumour was now smaller, and the induration and swelling over the pectoral muscle were diminished. He was, however, weaker, and the general symptoms remained the same. Diarrhœa was constant, and the temperature was never lower than 100° in the morning and 102° in the evening. In the beginning of August, whilst in this almost dying state, a gland behind the left angle of the jaw became enlarged and tender without apparent cause, and rapidly attained the size of a hen's egg. The skin over it became red, and in about a week fluctuation could be felt. The temperature now became higher—never below 101° in the morning and 103° in the evening. He died exhausted on August 25—a year from the commencement of the disease in the glands. Post-mortem, the body was extremely emaciated. Two swellings, each about the size of a Seville orange, were found—one below and behind the left ear, from which pus was exuding; the other in the right axillary space. Both swellings were hard and unyielding to the touch, but the centre of the axillary swelling was soft, having the appearance of broken-down brain-substance. The right lung was completely capped by a dense layer of thick pleura, about one-eighth of an inch in thickness and cartilage-like in consistence. In the upper lobe of the left lung were one or two old cicatrices. In other places, small round masses of fibrous tissue, with black pigmented centres, were found in the lung-substance. The bronchi generally were much thickened, but the glands were not enlarged; the heart was slightly contracted, and on the right side were decolorised, partially decolorised, and recent coagula. There was total absence of fat in the omentum. The capsule of the liver was in places considerably thickened; otherwise the organ was apparently healthy. The spleen was shrivelled, but in size and appearance was quite natural. The intestines were examined throughout, and were found healthy. All the other organs were also healthy. Microscopical examination of the tumours showed that the swellings were apparently due entirely to hyperplasia of the gland-tissue. Scattered among the lymphoid cells were also seen large, flat, irregularly shaped cells, derived in all probability from proliferation of endothelial cells. These large flat cells were in many places seen in the field in considerable numbers, but especially in the neighbourhood of the capsule of the gland. Dr. Jones said that it seemed that lymphatic leukæmia was so rare a disease that even its existence was doubted by many good authorities. The liver and the spleen had not been examined microscopically, but they presented no naked-eye evidence whatever of any patches or even infiltration of adenoid growths. Clinically, the case was different from Hodgkin's disease with extensive growths in the lymphatic glands, liver, spleen, and other organs. Here the patient died rapidly of apparently malignant disease, and the only lesion that could be found was the comparatively slight enlargement of a few glands. It would have been difficult to explain the cause of death in this case if the blood had not been examined and found to be leukæmic. In this case, however, as in lymphadenoma, during the active growth of the glands the most marked and persistent symptoms were the high temperature and the diarrhœa. The fact that the glandular growths were so very limited in this case tended to support the view that leukæmia is not so much due to these growths as to some want of power in the lymph and white corpuscles to form red corpuscles. Or it might be that from some disease of the whole mass of blood, the white corpuscles might acquire some power of multiplying themselves in it. It would be important to examine not only the corpuscles, but the other constituents of the blood. In this case the fibrine appeared to coagulate with unusual rapidity.

Dr. Coupland showed a specimen of the intestines and abdominal glands from a case of lymphadenoma. The patient, a married woman of twenty-five, was admitted into the Middlesex Hospital on April 17, 1877. She had enjoyed good health till three years ago, when her youngest child was born, and since which time she had a constant uterine discharge. For eight months prior to admission she had been suffering from constant diarrhœa and frequent vomiting after food, and had emaciated considerably. Whilst in the hospital the case was chiefly marked by diarrhœa, for a time kept in check by astringents and opiates, occasional vomiting, and leucorrhœal discharge. This was accompanied by a febrile range of temperature, especially towards the close of the case, when there were marked evening exacerbations and morning remissions between 103° and 99°. Death occurred rather unexpectedly on June 3, the patient being worn out by the prolonged diarrhœa. The chief lesions were those exhibited, and might be summed up as consisting in a hyperplasia of the mesenteric glands and of the lymphatic tissue in the intestinal mucous membrane. The mesenteric glands formed a large conglomerate mass, each gland being distinctly encapsuled, and in size varying from a pea to a walnut, with a smooth homogeneous section, and no trace of softening or caseation. The duodenum, jejunum, and the greater part of the ileum appeared as if infiltrated by soft white medullary-looking material within the mucous membrane; the infiltration was in the upper portions of the bowel perfectly uniform, and caused not only thickening of the coats, but also general enlargement in the circumference of the gut; the valvulæ conniventes were prominent and thick. Lower down the infiltration was less uniform,

occurring in patches, generally but not wholly limited to the solitary and agminated glands. In several places the mucosa was ulcerated superficially, presenting a ragged villous aspect. In the stomach and in the colon there was follicular enlargement and ulceration. There was also enlargement of the cervical and inguinal lymphatic glands; but the mediastinal chain were of natural size. The tonsils and spleen were natural; and the other viscera showed no evidence of disease, with the exception of the uterus, where a small, soft, white, cellular polypus depended from the posterior os. Histologically the change in the mesenteric glands was an overgrowth of the cellular elements; a large number of large nucleated cells occurring, mingled with the smaller lymphoid cells. The capsules were thickened, and there was abundant and vascular fatty and fibro-cellular tissue between the glands. In the intestines the thickening was found to be due to a growth of small cells, which infiltrated the mucosa quite to the surface, passing between the Lieberkühn's glands, which were shrivelled and atrophied, and extending downwards between the muscular bundles. There was slight lardaceous change, both in the intestines and the mesenteric glands. Dr. Coupland referred to a somewhat parallel case figured by Cruveilhier in his *Atlas* (Livr. 34, plates 2 and 3), in which the lymphatic glandular affection was more widespread, and where the growth in the intestines was limited to the solitary glands, but where the gastric wall was thickened by a diffuse infiltration. The patient had been under the care of M. Briquet in 1839, and was regarded by him as being an instance of chronic enteritis with secondary inflammation of the mesenteric glands—a diagnosis disputed by Cruveilhier, who regarded the gastro-intestinal condition as independent of the general lymphatic glandular affection, which he thought partook of the characters of malignant disease. Respecting the intestinal affection in cases of lymphadenoma, Dr. Coupland considered it not to be very common; but in one of Dr. Murchison's cases (*Pathological Transactions*, vol. xx., page 193) a parallel condition, carried to an extreme extent, was met with in the duodenum. The present case appeared to him (using Dr. Gowers' convenient term) to be one of primary lymphadenosis of the gastro-intestinal tract.

Dr. Whipham brought forward a case of splenic leukæmia complicated by cancer. The patient, aged twenty-three, was an inmate of St. George's Hospital from February 21 until March 25, 1877, when he died. He had been a healthy man, with the exception of a tendency to constipation and profuse perspiration. During early life he had been engaged at a public-house, and had drunk beer and spirits, but not, so far as could be learned, to excess. He had lived during the first twenty years of his life in Northamptonshire, after that in Lincolnshire, and finally at Reading. In August, 1876, he noticed a lump on the right side of the abdomen, and a few weeks later another tumour on the left; but he suffered no pain, though the swelling increased in size. His general health was in no way affected, and he gained weight up to the date of his admission. While in hospital he suffered from profuse sweating, nausea and vomiting at intervals, headache, palpitation, and slight hæmatemesis. Originally admitted under the surgeons, he was transferred to the medical wards on March 23, when it was found that the blood contained an enormous increase in the number of white cells, and that a large tumour occupied the whole of the left side of the abdomen, and partly encroached on the right side of the lower part. The respirations were 37, and the pulse 104; but no urgent pulmonary or cardiac symptoms existed. On March 25 he became agitated, was attacked with giddiness, headache, and dyspnœa, and he died next morning. Post-mortem, the lungs were found congested, and in parts semi-solid; no fluid exuded on pressure, and the solidified portions did not sink in water. The blood-vessels throughout the body were filled with white coagulum; very little red blood was anywhere found. The liver was enlarged, but to the naked eye, beyond pallor, presented no abnormal appearance. The spleen was firm and large (seventy-eight ounces), and contained old and recent infarcts. No enlargement of the lymphatic glands existed. Dr. Whipham showed drawings of some of the microscopic preparations exhibited at the last meeting, in which it was seen that the liver, contrary to the naked-eye evidence, was extensively affected with cancerous growth, which had this peculiarity—that very many of the cells were columnar in shape, and that their containing loculi were somewhat tubular in form. With regard to the spleen, the microscope confirmed the naked-eye appearances as to the infarcts; in some places, however, a coarse fibrous reticulum was found, the fibrous tissue being denser around the arteries; it had apparently originated in their sheaths, and spread gradually into the tissue of the gland. In the meshes of this coarse reticulum were found occasionally flat cells of large size. The pancreas was found to be the seat of a growth precisely similar to that affecting the liver, and in other parts of it appearances were observed of the nature of an acinous gland, but in place of glandular elements a homogeneous, semi-transparent material filled the acini. This material, as was shown in the sections exhibited at the previous meeting, assumed a dark blue colour after indigo-carmine staining. It bore also a great resemblance to the contents of the alveoli of the lung, which were in many parts of the section absolutely full of a semi-transparent structureless substance, probably serum; but it was noticed as a remarkable fact that from such portions of the lung no fluid exuded as in ordinary œdema. The contents of the alveoli must therefore have been more or less solid at the autopsy—a condition probably due to the diseased state of the blood. The alveolar walls of the lung were much thicker than natural, owing to distension of the bloodvessels with leucocytes. The medullary spaces of a portion of the sternum which was examined were found to be filled with leucocytes. Traces of fat were extremely rare, and there were no giant-cells. The blood-clot was composed almost entirely of white cells, which varied in size, some being very large. The smaller cells contained one nucleus, the larger were polynucleated, as many as three and four being found in a few instances. Dr. Whipham observed that the question as to the connexion between leukæmia and cancer was suggested by this case. Was the cancer a local manifestation of the disease of the blood? Against this theory was the rarity of the co-existence of the two diseases. Secondly, there would, supposing the theory correct, be a difficulty in explaining the fact that so few organs were affected with the cancer, while the blood was so extensively diseased. Thirdly, it is impossible to suppose that the leukæmia was secondary to the cancer, and for this reason: that the cancer was apparently in an early stage, as was shown by the small size of the nodules in the liver, while the leukæmia was most advanced. As further tending to combat this notion was the fact that in advanced cases of cancer true leukæmia is not a prominent symptom. One fact, however, highly suggestive of a connexion between the two diseases, was the presence of the polynucleated cells in the blood. Clinically, the case was one of leukæmia; pathologically, of leukæmia and cancer combined.

Dr. Goodhart brought forward a series of cases as follows:—A child of fourteen months was admitted to Guy's Hospital with whooping-cough, which, after some months, terminated in tubercular meningitis. Post-mortem a large caseous mass was found in the bronchial glands, and a corresponding invasion of the adjacent lung by similar material. There was general tuberculosis. The second case was that of a girl aged three, with lymphadenoma on one side of the neck. This was excised, and the patient left the hospital well. The third case was that of a boy aged six with paraplegia, who died of pneumonia. Post-mortem there was found a large lymphomatous growth at the root of the neck on the right side, which infiltrated the adjacent textures, grew into the spinal canal, and caused paraplegia by direct pressure upon the cord. At the root of the lung on this side was a caseous gland. The fourth case was one of chronic disease of the knee leading to caseous changes in the femur, the inguinal and lumbar glands of the same side, and of the mediastinal, cervical, and axillary glands, and to general tuberculosis. The next was the case of Hodgkin's disease, afterwards related by Mr. Hutchinson. The last was an example of general enlargement of the glands and spleen associated with leukæmia, under the care of Dr. Frederick Taylor, in which the growth was an infiltrating one. These six cases, said Dr. Goodhart, were types which the members of the Society would recognise as well-marked examples of most of the diseases of the lymphatic glands. There was the local chronic inflammation, the local simple tumour, and the local malignant tumour; and parallel with the local series ran a general one, the diffused chronic inflammation, the generalised simple tumour, and the generalised malignant tumour; but there were also fine grades between the different members of the group. Allied

processes were seen in other tissues, such as skin, connective tissue, and bone. Experiments on the lower animals showed that by varying the intensity of local stimulus the result may be made to vary from an acute abscess through caseation to chronic induration, local and general tuberculosis. To this process the term infective had been applied by Dr. Sanderson and others, and Dr. Goodhart would apply the term infective to lymphadenoma. The clinical history was quite in harmony with this. The conclusion was that the leukæmia must be something quite independent of the process of growth; it might be owing to its occurrence, but it was in no case more than a superadded or late and non-essential symptom. Dr. Wilks had raised the question whether leukæmia did occur in these cases; and Drs. Wilks, Greenfield, and Gowers had all agreed upon this point, that the results of their observations were negative. His experience quite coincided with theirs after examining the blood in many cases of lymphadenoma. Yet there was sufficient evidence of the occasional occurrence of leukæmia in glandular disease. If this group of symptoms were found so seldom, it was because a large proportion of the lymphomatous growths tend to rapid caseation, another large proportion to fibrous induration, while others are so purely local after a time that they have no connexion with the general glandular system. These facts were in harmony also with the occasional occurrence of leukæmia in malignant tumours of other kinds, as mentioned by Dr. Whipham, and also with the occasional occurrence of suppurative leukæmia. Some observations were mentioned on the latter head made by Dr. Moxon and Dr. Goodhart on the blood of septic fever, which went to show that a slight excess of white corpuscles was occasionally present in fever and other conditions, but never such as to satisfy the definition of leukæmia insisted on by Dr. Wilks. Turning to splenic leukæmia, a case was given, and sections of the viscera were exhibited under the microscope, which went to show that leukæmia in splenic diseases also is no more than a late symptom. A child, aged ten months, at the Evelina Hospital for Children, presented for three months splenic enlargement and pallor only, then leukæmia (200 to 300 white corpuscles in each field) supervened; and the child soon died. It had long been thought that ague might have some action in causing leukæmia; and Dr. Gowers had showed that 25 per cent. of all the cases had suffered from ague. Still, splenic enlargement other than malarial was not uncommon, and the case narrated seemed to show that splenic enlargement, if sufficiently prolonged, might end in leukæmia. Chronic enlargements of the spleen, of whatever kind, if persistent, should be added to those produced by ague as possible factors in leukæmia. There were cases also, of which two were mentioned, where the spleen was very large, with some caseation of the glands and general tuberculosis. Dr. Goodhart regarded these as cases of leukæmia dying without any change in the blood. In fibrous conditions there would be but little tendency to discharge increased corpuscles into the blood. Such a state would be likely to occur in the more fleshy and pulpy conditions of the organ. With regard to the quantity of corpuscles to which the term leukæmia should be restricted, the term would not be wisely applied to only a small proportion of these corpuscles; but Dr. Goodhart thought that there might be many states earlier in leukæmia than the extreme state now satisfying that term; and that, if the slight excesses were carefully recognised, an earlier stage of the disease might be discovered. With regard to medullary leukæmia, in two cases out of eight only had anything been observed at all like true leukæmia. In these the masses were certainly pus-like in appearance and peculiar. But in these cases, like most of those recorded by Neumann and Mosler in Germany, the spleen being enlarged, the condition might have been, and according to Dr. Goodhart probably was, secondary. He did not think much would be learnt on the side of enlarged spleen. If any case ever came towards proving a medullary leukæmia, it must be in some such group as that of primary bone-tumour, diffused lymphoma of bones, etc., which were somewhat rare and difficult to diagnose during life.

The President said that the present exhibition of specimens of diseases of the lymphatic system illustrated well the utility of the new plan adopted by the Society of grouping their specimens. The exhibition had also brought out several most important facts. First, the distinction between splenic leukæmia and lymphadenoma or Hodgkin's disease had been re-established; it had been dwelt upon by Dr. Wilks, and was supported by Dr. Greenfield's evidence. Of the cases of lymphadenoma under his own care, the President said that in none had any marked increase of the white corpuscles of the blood been present. In lymphadenoma, again, there might be invasion of neighbouring tissues, which did not occur in leukæmia. Further, Dr. Gowers had pointed out a decided connexion between splenic leukæmia and malaria. Secondly, it had been clearly indicated in this discussion that a slight increase of white corpuscles in the blood did not constitute leukæmia, and that a decided leucocytosis occurred in febrile and other diseases, although it was also true that in cases of suppuration, erysipelas, etc., a great increase of leucocytes had also been observed. Lastly, with respect to the paroxysms of fever that occurred in lymphadenoma, he recalled a case of this kind under his own care, where the pyrexia was paroxysmal, and attended with an increase of the glandular growth. These phenomena might suggest that the growth was somewhat inflammatory in its nature, if it were not that similar paroxysms occurred also in idiopathic anæmia. This remarkable disease was so closely associated with diseases of the lymphatic system that he would request Dr. Dickinson to read an account of a case of the kind in which he had made the post-mortem examination.

Idiopathic Anæmia.

Dr. Dickinson related a case of idiopathic anæmia, including the post-mortem result. A gentleman of sixty-eight, in the highest social position, had enjoyed good health until a short time before his death in 1872. He was under the care of Sir William Gull, and his case, which was closely observed throughout, excited much attention. His illness commenced with weakness, dyspepsia, bloodlessness, and languor, and these symptoms increased till the end. There was no cough nor dyspnœa; the pulse was 80; the liver was not enlarged; the motions were normal, but frequent; the urine contained no excess of urates and no albumen. There was no pyrexia. Clinically the case was altogether negative. There was no special emaciation. The bloodlessness and debility increased, and death occurred in a faint. All kinds of tonics and food were tried. The case was diagnosed spontaneous bloodlessness. The post-mortem examination, which was made by Dr. Dickinson, was also chiefly negative in its results. The pallor of the surface was extraordinary, as after severe hæmorrhage. There was slight œdema of the ankles. Instead of emaciation, one inch of fat was found on the anterior abdominal walls, and much on the omentum, around the kidneys, etc. The lungs were slightly emphysematous and congested. The heart was flabby, and the muscular fibres were fatty; the ventricles had been arrested in diastole; the valves presented some fibroid thickening. The liver was natural, except that a cyst was found near the front of the left lobe; the gall-bladder contained four calculi. The stomach and intestines were natural. The kidneys contained a few minute crystals. The spleen was rather large, weighing ten ounces, and very diffluent. Its pulp contained many nucleated cells, fewer red corpuscles than normal, and abundant hæmatine granules. The supra-renal capsules were large, but not unnaturally so. The inguinal glands were free from disease. A specimen of blood taken from a coronary vessel contained six white corpuscles in a field. The coagula in the heart were few, small, rather pale and soft, and not decolorised. The blood on the whole was fluid, but the cavities were not blood-stained.

Sir William Gull spoke upon this case. He said he could add but little concerning it that was not already known. Light was still required upon this disease and the associated diseases of the lymphatic system. Of the group, leucocythæmia was the best marked disease, with the increase of white corpuscles. Hitherto examination had been confined to the microscopical characters of the white corpuscles; they should be examined chemically. Probably some of the white corpuscles passed into red corpuscles, but their relations to pus-cells or inflammatory white corpuscles were obscure. The pyrexia of leucocythæmia was certain, and the disease seemed therefore inflammatory, and it appeared to be also related to ague. Malignant anæmia was a negative condition. In the present case there was nothing ante-mortem and nothing post-mortem. These cases of anæmia in the adult were in this respect like anæmia in the girl—their history was "a blank." All kinds of food and drugs were given in vain. With respect to Hodgkin's disease, Sir William said that it was

probably not so common as represented. The glands were enlarged and soft; and yet he had seen them all disappear in twelve hours, death following. In investigating the nature of these diseases Sir William strongly advised pathologists to distinguish and individualise, and not to generalise prematurely.

Dr. Wilks said that the pathological anatomy of anæmia had advanced greatly during the last six years. In 1854 he had examined the blood in one hundred cases of pale persons. Quite recently German pathologists had described a necrosis of the white corpuscle in anæmia.

Mr. Hutchinson related a case of lymphadenoma, with growth in the brain and eye-symptoms. A single lady of forty-four, of hysterical temperament, suffered from occipital headache and failure of sight. Mr. Hutchinson found her suffering from severe pain in the back of the head, with impaired vision, irregular squint, optic neuritis, and symptoms of mental disturbance which might be called hysterical. Large masses of glands could be felt in the neck and axillæ. These growths had been present for years, while the patient had been decidedly ill for six months with nervous symptoms. Death occurred fourteen days after this observation. Post-mortem the enlarged glands were found not to be tuberculous. The brain contained masses of lymphadenomatous growth scattered through its substance. Mr. Hutchinson said that he was anxious to know how frequently the eyes were affected in lymphadenoma. A man under his care at the London Hospital had had double iritis, "steamy" corneæ, progressive chemosis, and complete loss of vision. One of the globes was excised, and found to be universally inflamed, with suppuration. The man died, after complaining of a feeling as of a tight cord round his waist. Post-mortem all the viscera were found to contain lymphadenomatous growth throughout. This was therefore a case of lymphadenoma and double panophthalmitis; the latter probably due to nerve-disturbance. The blood was not examined.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 4th inst., and when eligible will be admitted to the pass examination:—

Baker, James B., student of the Charing-cross Hospital.
Beales, Thomas W. L., of Guy's Hospital.
Burn, Henry C. R., of St. George's Hospital.
Clarke, Ernest, of St. Bartholomew's Hospital.
Collins, Octavius A., of St. Bartholomew's Hospital.
Collins, William J., of St. Bartholomew's Hospital.
Cumming, George W. Hamilton, of St. Bartholomew's Hospital.
Evans, Ebenezer D., of University College Hospital.
Havell, Charles G., of St. Mary's Hospital.
Marsden, James C., of University College Hospital.
Maudsley, Henry, of University College Hospital.
Phillips, Lawrence W. K., of Guy's Hospital.
Pittard, Marmaduke, of the Charing-cross Hospital.
Renshaw, Israel J. E., of the Manchester School.
Rogers, James McD., of the Middlesex Hospital.
Scott, Richard J. Herbert, of Guy's Hospital.
Spackman, Henry R., of St. Bartholomew's Hospital.
Thomas, John, of St. Thomas's Hospital.
Trott, Dudley C., of Guy's Hospital.
Webber, William W., of St. Thomas's Hospital.
Wyatt, William T., of St. Bartholomew's Hospital.

The following gentlemen passed on the 5th inst., viz.:—

Ashwell, Herbert G., student of Guy's Hospital.
Davis, Charles D., of the Middlesex Hospital.
Bedford, W. G. Augustus, of St. Bartholomew's Hospital.
Bennett, Deane, of the Charing-cross and St. Mary's Hospitals.
Clarke, W. Jenner, of the Charing-cross Hospital.
Evans, William G., of King's College Hospital.
Gaudin, George C., of St. George's Hospital.
Harris, U. A. Carpenter, of St. Bartholomew's Hospital.
Heelis, Robert, of St. Thomas's Hospital.
Hiddingh, William H., of St. George's Hospital.
Horsley, V. A. Haden, of University College Hospital.
Jackson, Mark, of the Middlesex Hospital.
Knight, A. Osborne, of the Middlesex Hospital.
Murray, H. Montague, of University College Hospital.
Parker, H. Sullivan, of King's College Hospital.
Pomfret, Henry W., of the Manchester School.
Sanders, John W., of Guy's Hospital.
Stonham, Thomas O., of the London Hospital.
Williamson, R. Isherwood, of St. Thomas's Hospital.
Wilson, John, of St. Bartholomew's Hospital.
Wills, J. P. Budgett, of St. Mary's Hospital.
Woodhouse, T. Percy, of St. Thomas's Hospital.

The following gentlemen passed on the 8th inst., viz.:—

Clark, William T. M., student of St. Bartholomew's Hospital.
Crane, Charles R., of the Charing-cross Hospital
Hawkins, F. D. Cæsar, of St. George's Hospital.
Hoare, Alfred, of St. George's Hospital.
Honeyburne, Richard, of the Liverpool School.
Howard, Heaton C., of St. George's Hospital.
Jones, William H. F., of the London Hospital.
Lindeman, Sidney H., of St. Bartholomew's Hospital.
Makeham, Henry W. P., of the London Hospital.
Millican, Kenneth W., of St. Mary's Hospital.
Morris, William A., of King's College Hospital.
Sherrington, Charles S., of St. Thomas's Hospital.
Starling, Edward A., of Guy's Hospital.
Sturridge, Peter F., of the Middlesex Hospital.
Towlson, Henry J., of St. Bartholomew's Hospital.
Watkins, Christopher J., of University College Hospital.
Weber, Charles A., of St. George's Hospital.

The following gentlemen passed on the 9th inst., viz.:—

Buxton, Dudley W., student of University College Hospital.
Donovan, Denis W., of University College Hospital.
Galpin, George L., of the Middlesex Hospital.
Gatley, Henry R., of University College Hospital.
Glassington, Charles W., of the Westminster Hospital.
Maguire, Robert, of the Manchester School.
Maitland, C. Bradley, of St. George's Hospital.
Marsh, Charles J., of St. George's Hospital.
Milnes, G. Hutchinson, of St. George's Hospital.
Phillips, John, of the Cambridge School.
Quicke, William H., of the Westminster Hospital.
Reid, Norman McB., of St. George's Hospital.
Renner, William, of the Liverpool School.

Twenty-six candidates out of the 162 examined having failed to acquit themselves to the satisfaction of the Board, were referred to their anatomical and physiological studies for three months. The pass or surgical and pathological examination for the diploma of membership commenced yesterday, the 12th inst.

Apothecaries' Hall, London.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 4:—

Claremont, Claude Clarke, Millbrook House, N.W.
Evans, James William, Trevaughan, Carmarthen.
Green, Albert Edward, Ashford-terrace, Hoxton.
Green, Charles, Eston, near Middlesboro'.
Matthews, Valentine, 35, Southampton-street, Strand.
Osborn, William Henry, Wheeley's-road, Birmingham.
Robins, Harvey, Park House, Notting-hill.
Swann, Alfred, Manningham, Yorkshire.
Wells, Alfred George, Cross-street, Horselydown, S.E.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Hare, Evan Herring, St. Thomas's Hospital.
Hawkins, Walter Robert Thomas, London Hospital.
Prince, Herbert, Charing-cross Hospital.
Shapley, Frank, London Hospital.
Steele, Warwick Charles, St. Bartholomew's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as carly as possible, information as to any new Appointments that take place.

Ampblett, Edward, M.B. Cantab., F.R.C.S. Eng.—Assistant-Surgeon to the Charing-cross Hospital, *vice* Bellamy, appointed a Surgeon.

Cantlie, James, M.B., C.M. Univ. Aberd., F.R.C.S. Eng.—An Assistant-Surgeon to the Charing-cross Hospital, *vice* Godlee, resigned.

BIRTHS.

Barnes.—On April 7, at 45, Lowther-street, Carlisle, the wife of Henry Barnes, M.D., of a son.

Deshon.—On February 20, at Yarra Bend, Melbourne, Victoria, the wife of Frederick P. Deshon, M.R.C.S., of a son.

Hamilton.—On April 3, at Oakthorpe, Windermere, the wife of Archibald Hamilton, M.D., of a son.

Hoar.—On April 2, at Maidstone, the wife of Charles E. Hoar, M.D., of a daughter.

Kidd.—On March 30, at Brooklands, Blackheath-park, the wife of Joseph Kidd, M.D., of a son.

Moore.—April 9, at 40, Fitzwilliam-square West, Dublin, the wife of John William Moore, M.D., of a daughter.

Odling.—On April 3, at Shiraz, Persia, the wife of T. F. Odling, M.R.C.S., Eng., of a daughter.

Thompson.—On April 7, at 33, Cavendish-square, the wife of E. Symes Thompson, M.D., F.R.C.P., of a daughter.

Turtle.—On April 4, at 35, High-street, Homerton, the wife of James H. Turtle, M.D., of a daughter.

Watson.—On April 5, at Tottenham, Middlesex, the wife of W. Tyndale Watson, M.D., of a daughter.

MARRIAGES.

Belton—Irwin.—On March 26, at Kilbarron, Ballyshannon, Albert H. R. Belton, youngest son of Thos. Belton, Esq., of Ederney, co. Fermanagh, to Mary, youngest daughter of William Irwin, M.D., of Clyhore, Belleek.

Folkard—Harrison.—On April 3, at St. Mark's, Notting-hill, Henry Tennyson Folkard, only son of Henry Folkard, M.R.C.P., of Bayswater, to Marian Harriett, third daughter of Robert Harrison, Esq.

Hutchison—Sadler.—On April 2, at the British Consulate, Nice, George Hutchison, M.D., H.M.'s Bengal Army, to Jessie, daughter of George Sadler, Esq., of Clapham, London.

Lambert—Courtenay.—On April 3, at All Souls, Langham-place, Walter Lambert, Captain Royal Marine Artillery, to Frances, only daughter of Francis Burdett Courtenay, M.R.C.S.E., of 2, Chandos-street, Cavendish-square.

McBaide—Graham.—On April 4, P. McBride, M.B., of Edinburgh, to Eleanor Crawford, daughter of Walter Graham, Esq., of Knock, Mull.

Russell—Tosh.—On April 2, at St. Andrew's, Burton-upon-Stather, Charles James Russell, M.D., of Messingham, to Louie, second daughter of George Tosh, Esq., of Eastholme, near Brigg, Lincolnshire.

DEATHS.

Atwood, William Alban, M.D., of Ladbroke-grove, Notting-hill, on April 7, aged 47.

Busch, Sampson Kingsford, M.R.C.S., at 239, Vauxhall-bridge-road, on April 3.

Hide, John, L.R.C.P. Lond., M.R.C.S. Eng., at 90, Park-road, West Brighton, on April 6.

Hoyland, Emily Priscilla, wife of Charles William Hoyland, F.R.C.S. Eng., at Hilden, Tunbridge, on April 2, aged 69.

Mack, J. Steele, L.R.C.S. Edin., at Colmonell, Ayrshire, on March 31, aged 35.

Maclagan, Jane Whiteside, widow of David Maclagan, M.D., F.R.S.E., Physician to the Forces, and Surgeon-in-Ordinary to the Queen for Scotland, at 14, Melville-street, Edinburgh, on April 4, aged 88.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

Eastern Dispensary of Bath.—Resident Medical Officer. Candidates must possess the diplomas of a Royal College of Surgeons and the Society of Apothecaries. Testimonials, marked "Eastern Dispensary," to Francis Savage, Esq., 10, Beaufort-buildings East, Bath, on or before April 16.

Great Northern Hospital, Caledonian-road, N.—Ophthalmic Surgeon. Candidates must be Fellows of the Royal College of Surgeons of England. Applications, with testimonials, to the Secretary, on or before May 6

Kent and Canterbury Hospital.—Assistant House-Surgeon and Dispenser (one office). Candidates, who must produce proof of being registered under the Medical Act as legally qualified to practise, and of being accustomed to dispense medicines, must be unmarried and not more than fifty years of age. Qualifications and testimonials to the Secretary, on or before April 25.

York Dispensary.—Resident Medical Officer. Candidates must be duly qualified and unmarried. Applications and testimonials to S. W. North, Esq., Castlegate, York, on or before April 18.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Cheltenham Union.—Mr. Charles Broom has resigned the Third District; salary £80 per annum.

Kingsbridge Union.—Mr. J. M. Puddicombe has resigned the First District; area 3332; population 735; salary £14 16s. 8d. per annum. Also the Second District; area 5586; population 1241; salary £25 3s. 4d. per annum.

Southam Union.—The Prior's Marston District is vacant; area 11,212; population 1494; salary £45 per annum.

Westminster Union.—Mr. W. E. Wright has resigned the Union School; salary £50 per annum.

APPOINTMENTS.

Barnstaple Union.—Albert Hind, L.R.C.S. Edin., L.S.A. Lond., to the Tenth District.

Caistor Union.—Benjamin D. Taplin, M.R.C.S. Eng., L.R.C.P. Edin., to the Swinhope District.

Depwade Union.—Charles A. Owens, L.R.C.S. Ire., L.R.C.P. Edin., to the First District and the Workhouse.

Houghton-le-Spring Union.—Walter Lyon, C.M. and M.D. Univ. Glasg., to the Houghton-le-Spring District and the Workhouse. Charles Tennant, M.R.C.S. Eng., to the Newbottle District.

Keynsham Union.—Robert W. Thomas, M.R.C.S. Eng., L.S.A., to the Marksbury District.

Louth Union.—Benjamin D. Taplin, M.R.C.S. Eng., L.R.C.P. Edin., to the Binbrook District.

Machynlleth Union.—James S. Mathews, L.R.C.S. Edin., L.R.C.P. Edin., to the Machynlleth Outlying District.

Pewsey Union.—Thomas Clarke, L.R.C.P. Edin., L.F.P.&S. Glasg., to the Second District.

Salford Union.—Charles A. Mercier, M.R.C.S. Eng., L.S.A., as Assistant Medical Officer at the Workhouse.

Southwell Union.—Charles E. Whitington, M.R.C.S. Eng., L.S.A., to the Laxton District.

Warminster Union.—James Bothwell, L.R.C.S. Ire., L.A.H. Dub., to the Longbridge Deverill District.

West Derby Union.—Robert M. Anderson, L.R.C.P. Edin., L.R.C.S. Edin., to the Walton District.

St. Mary's Hospital.—At a special meeting of the Committee of Governors of this institution, on the 8th inst., Mr. Walter Pye, M.R.C.S. Eng., Assistant in the Museum of the Royal College of Surgeons, and formerly House-Surgeon of St. Bartholomew's Hospital, was elected Assistant-Surgeon in the vacancy occasioned by the promotion of Mr. Morton to the full surgeoncy, vice Mr. H. Spencer Smith, who resigned, and has since been elected Consulting Surgeon. Mr. Pye was only lately elected the Lecturer on Physiology in St. Mary's Hospital.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Aberdon.—Savory and Moore.

The Harvey Tercentenary Memorial Fund.

We are pleased to learn that, in response to the appeal for further donations to the above Fund, which we published a short time since, the following subscriptions have been promised or received:—

£10 10s. each—Metropolitan Counties Branch of British Medical Association, Dr. Walter Moxon, and the Marquis of Tweeddale.

£5 5s. each—Mr. W. Allingham, Dr. R. L. Bowles (second donation), Mr. S. W. Bradnack, Mr. S. Eastes (second donation), Dr. G. S. Jenks, Mr. G. M. Scholey (second donation), and Dr. Wickham Legg.

£5 each—Boxes at Canon Jenkins's lecture, Mr. R. Benyon (per Dr. Bowles), Mr. H. A. Brassey, M.P., Mr. F. D. Brockman, a Friend (per Dr. Quain), Dr. F. B. Hawkins, Miss Philips (per Dr. Bowles), Mr. Russell Scott, and the Duke of Westminster.

£3 3s. each—The Earl of Glasgow (per Dr. Bowles), Alderman D. H. Stone, Mr. W. F. Teevan, and Dr. Hermann Weber

£2 2s. each—Mr. C. Bader, Mr. John Ball (per Dr. Bowles), South Wales and Monmouth Branch of British Medical Association, Dr. W. C. Begley, Mr. H. B. Bradley, Dr. Michael Foster, Dr. E. Furley, Mr. John Hart, Mr. F. G. Henriques, Canon R. C. Jenkins, Dr. T. Jervis, Mr. James Kelcey, Dr. Morell Mackenzie, Dr. W. J. K. Millard, Dr. Withers Moore, Professor W. Odling, F.R.S., Mr. E. Saunders, Mr. W. E. Springall, Mr. Frederick Symonds, Rev. C. J. Taylor, Mrs. Upton (per Dr. Bowles), Mr. G. Vaughan (per Dr. Bowles), Mr. Gerald F. Yeo.

£2—Mr. W. Deedes, M.P.

£1 1s. each—Sir J. Alderson (per Dr. Bowles), Dr. J. B. Allan, Dr. T. C. Allbutt, Dr. F. Beach, Mr. R. W. Boarer, Rev. C. Bosanquet, Dr. J. H. Bridges, Dr. Walter J. Bryant, Mr. Frank Buckland, Dr. T. Buzzard, Mr. E. Carver, Dr. W. Cholmeley, Mr. O. Clayton, Dr. W. F. Cleveland, Mr. T. Cobb, Mr. J. B. Collyns, Dr. S. Coupland, Dr. T. Davies-Colley, Dr. J. Hall Davis (second donation), Miss Day (per Dr. Bowles), Dr. J. B. Ditchfield, Dr. Allan Duke, Mr. C. F. Du Pasquier, Mr. F. Eastes, Dr. John Easton, Dr. R. Farquharson, Dr. W. Farr, F.R.S., Mr. John Fitness (second donation), Dr. T. B. E. Fletcher, Dr. J. G. Glover, Mrs. James Green, Mr. J. Hackney, Dr. T. Hawksley, Miss Hunter (per Dr. Bowles) Rev. E. Husband, Mr. Sydney Jones, Mr. W. H. Lamb, Dr. J. C. Laugmore, Mr. W. B. Laugmore, Mr. E. H. Lushington, Mrs. Joseph Maudslay, Dr. R. McDonnel, Dr. A. Meadows, Dr. A. G. Medwin, Mr. A. Medwin, Mr. J. C. Merriman, Dr. S. Mitchell, Dr. T. Moffatt, Mr. John Morgan, Dr. T. Morton, Mr. Albert Napper, Miss Ogilvie, Hon. G. Pepys, Mr. C. J. Pinching, Dr. W. L. Purves, Mr. J. Reid (per Dr. Bowles), Dr. F. T. Roberts, Dr. C. Royston, Mr. J. Rushforth, Lord Arthur Russell, M.P., Dr. H. J. Sanderson, Dr. G. H. Savage, Mr. L. Simon, sen. (per Dr. Bowles), Mr. Thomas Spencer, Mr. N. H. Stevens, Dr. J. Sherwood Stocker, Mr. H. S. Taylor, Dr. G. D. P. Thomas, Mr. R. C. F. Thomas, Mr. W. P. Thornton, Dr. J. C. Thorowgood, Mr. F. Toulmin, Dr. T. W. Trend, Dr. J. Underwood, Mr. R. E. Unthank, Mr. Francis Vacher, Mr. Osman Vincent, Mr. W. W. Wagstaffe, Dr. T. Whipham, Dr. H. C. Wildash, Dr. C. T. Williams, Dr. E. Williams, Dr. A. Wiltshire, Mr. G. L. Wood, and Madame Zaffé.

£1 each—Captain H. Alcock, Mr. John Dugdale, and Mr. E. Lowdell.

10s. 6d. each—Dr. G. M. Bacon, Mr. G. Brown, Mr. T. M. Butler, Dr. R. K. Casley, Mr. C. W. Chaldecott, Mr. G. Fisher, Mr. D. J. Francis, Dr. John Jackson, Dr. Norman Kerr, Dr. H. G. Knaggs, Dr. John Morton, Mr. A. A. Napper, Mr. R. J. Pye-Smith, Mr. T. J. Shollick, Mr. C. J. Sells, Dr. J. R. Stedman, Mr. J. H. Sutcliff, Dr. W. H. Tayler, and Dr. T. J. Walker.

10s. each—Dr. H. Harris, Mr. J. M. Hind, Mr. J. W. Howard, Mr. A. E. T. Longhurst, Mr. G. F. Naylor, Mr. R. Paramore, Mr. James Rose, Dr. J. C. Steele, Mr. Samuel Watson, and Mr. J. G. Westmacott.

Inquirer.—Mr. and Mrs. German Reed's entertainment will, we believe, be closed during Passion Week, and will re-open on Easter Monday with the new piece, *Doubleday's Will*, and Mr. Corney Grain's new sketch, *In a Country House.* Two extra morning performances will be given on Easter Monday and Tuesday, in addition to the usual ones.

An Old Foe.—In the financial year 1876-77, according to the official returns, the stoppages from the pay, etc., of soldiers under forfeiture for drunkenness was £17,935. The aggregate amount of these pecuniary punishments in the previous six years was higher in four years, and lower in two years, than the above sum.

MacL.—The principal medical collection of books in Boston, United States, is that of the Boston Public Library. It comprises standard works and periodicals, the latter containing files of the principal American and foreign publications. There is no separate printed catalogue of the medical section, nor of any of the medical libraries of Boston, which fact, no doubt, much impairs their practical usefulness. The rarest American medical journals are probably some of those printed in the West and South—for instance, the *Ohio Medical Repository* (1826-27) and the *Confederate States Medical and Surgical Journal* (1864-65).

F. R.C.S., Manchester.—The members of the Council of the College of Surgeons who will go out in rotation next July are Messrs. Holt, Lee, and Wilson; they will no doubt offer themselves for re-election. Professor Lowne is the honorary secretary of the Fellows' festival, to whom your request to be a steward should be addressed.

COMMUNICATIONS have been received from—

Dr. J. Mitchell Bruce, London; Dr. Thos. Barlow, London; Mr. John Chatto, London; Mr. T. M. Stone, London; Mr. W. E. Poole, London; Mr. B. R. Wheatley, London; Dr. Sullivan, London; Dr. Balthazar Foster, Birmingham; Dr. Dunglison, Philadelphia; Honorary Secretary of the Society of Medical Officers of Health, London; Dr. Gute, Amsterdam; Dr. J. E. Pollock, London; Dr. J. C. Bucknill, London; The Registrar of the Apothecaries' Hall, London; Dr. Jas. Russell, Birmingham; Mr. C. Nainstê, Naples; Dr. F. E. Jencken, Kingstown; Mr. H. Craigie, London; Mr. Pugin Thornton, London; Dr. Forbes Winslow, London; Mr. R. M. Gurnell, London; Dr. Semple, London; The Registrar-General, Scotland; Aberdon, Beauly; Dr. Meymott Tidy, London; Mr. C. J. Cullingworth, Manchester; Dr. Carter, Liverpool; Dr. Sparks, Mentone; Dr. T. Whipham, London; Mr. R. Clement Lucas, London; Dr. Metcalfe Johnson, Lancaster; The Secretary of the Naval Supplemental Fund.

BOOKS AND PAMPHLETS RECEIVED—

Edward John Waring, M.D., Bibliotheca Therapeutica, vol. i.—Drs. Leber and Rottenstein, Dental Caries and its Causes—Robert Bentley, F.L.S., and Henry Trimen, M.B., F.L.S., Medicinal Plants, parts 26 to 31—The London Water-Supply, by a Civil Engineer—August Wimmer, M.D., The Salt-Waters of Kreuznach—John Chiene, M.D., F.R.C.S.E., F.R.S.E., Lectures on Surgical Anatomy—John Williams, M.D., The Pathology and Treatment of Membranous Dysmenorrhœa—A. H. Newth, M.D., A Manual of Necroscopy.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Medicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Estndos Medicos—Medical Temperance Journal—Journal of the Scottish Meteorological Society—Practitioner—Birmingham Medical Review—Analyst—Westminster Review—Richmond and Louisville Medical Journal—Night and Day—Doctor—New York Medical Journal.

APPOINTMENTS FOR THE WEEK.

April 13. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Paner, "On the Clavecinistes of England, Italy, France, and Germany, and their Works (with Musical Illustrations on the Harpsichord and Pianoforte)."

15. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Mr. Owen, "Two Cases of Wry Neck." Dr. Drysdale, "On Syphilis as a Cause of Aphasia and Locomotor Ataxy."

Society of Arts, 8 p.m. Dr. B. W. Richardson, "Some Researches on Putrefactive Changes, and their Results in Relation to the Preservation of Animal Substances." (Cantor Lectures—II.)

16. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Pathological Society, 8½ p.m. Diseases of the Lymphatic System (concluded). Specimens by Dr. Hoggan, Mr. Porter (of Netley), Drs. Kesteven, Turner, Dickinson, and Garlick. Dr. Dickinson—Ulceration of the Bowel in connexion with Granular Kidney. Dr. Ord—1. Renal Calculi of Mixed Carbonate and Phosphate; 2. Specimens of Spontaneously Disintegrated Calculi.

17. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Association of Surgeons Practising Dental Surgery, 8½ p.m. Ordinary Meeting.

18. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

19. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 6, 1878.

BIRTHS.

Births of Boys, 1321; Girls, 1292; Total, 2613.
Average of 10 corresponding years 1868-77, 2366·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	981	896	1877
Average of the ten years 1868-77	812·6	754·0	1566·6
Average corrected to increased population ...	...	...	1676
Deaths of people aged 80 and upwards ...	...	...	78

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	10	5	9	...	17	...	2	1	...
North ...	751729	22	6	12	3	19	...	7	...	5
Central ...	334369	1	3	5	...	6	1	...	...	1
East	639111	7	5	3	...	43	1	6	2	1
South... ...	967692	15	11	13	5	61	2	5	2	2
Total	3254260	55	30	42	8	146	4	20	5	9

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·441 in.
Mean temperature	40·4°
Highest point of thermometer	56·7°
Lowest point of thermometer	26·9°
Mean dew-point temperature	34·1°
General direction of wind	S.W.
Whole amount of rain in the week	0·38 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 6, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending April 6.	Deaths Registered during the week ending April 6.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2613	1877	56·7	26·9	40·4	4·66	0·38	0·97
Brighton	103923	44·1	55	45	51·4	28·2	38·6	3·67	0·81	2·06
Portsmouth ...	129461	28·9	103	63	..	...	...	...	...	...
Norwich	84620	11·3	61	43	51·5	25·0	39·6	4·23	0·41	1·04
Plymouth	73599	52·8	40	40	53·5	31·0	41·4	5·22	0·84	2·13
Bristol	206419	46·4	155	108	55·3	28·4	40·0	4·44	0·46	1·17
Wolverhampton ..	74240	21·9	54	46	52·5	24·5	36·7	2·61	0·28	0·71
Birmingham ...	383117	45·6	344	188	...	...	...	...	...	...
Leicester	121473	28·0	109	68	54·8	26·5	39·5	4·17	0·31	0·79
Nottingham ...	165267	16·6	115	76	55·8	23·8	37·6	3·12	0·19	0·48
Liverpool	532681	102·2	445	320	51·9	32·5	39·7	4·28	0·09	0·23
Manchester ...	360514	84·0	244	235	...	...	...	...	...	...
Salford	170251	32·8	152	68	54·0	25·1	37·3	2·95	0·56	1·42
Oldham	107366	23·0	78	59	...	...	...	...	...	...
Bradford	185088	25·6	131	74	51·0	29·0	37·9	3·28	0·48	1·12
Leeds	304948	14·1	237	147	51·0	29·0	38·5	3·61	0·58	1·47
Sheffield	289537	14·7	245	158	53·2	28·2	38·7	3·72	0·86	2·18
Hull	143139	39·4	141	85	53·0	25·0	38·6	3·67	0·51	1·30
Sunderland ...	112459	34·0	88	68	...	...	...	...	...	...
Newcastle-on-Tyne	144570	26·9	125	78	...	...	...	...	...	...
Edinburgh	222371	53·1	144	123	51·1	28·4	38·7	3·72	0·67	1·70
Glasgow	566940	94·0	378	311	...	...	...	...	...	...
Dublin	314666	31·8	159	206	57·7	26·5	41·3	5·17	0·10	0·25
Total of 23 Towns in United Kingdom	8373953	37·9	6195	4473	57·7	23·8	39·0	3·89	0·47	1·19

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·44 in. The lowest reading was 28·99 in. on Monday morning, and the highest 30·03 in. at the end of the week.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

MEETING OF THE GENERAL MEDICAL COUNCIL.

HELD AT THEIR HOUSE, OXFORD-STREET, W.

FIRST DAY—WEDNESDAY, APRIL 10.

THE Council assembled at two o'clock, Dr. Acland in the chair.

The Minutes of the last meeting were read and confirmed.

Andrew Fergus, M.D., as Crown Nominee for Scotland, in place of Joseph Lister, M.B., resigned, was introduced to the Council by Dr. Andrew Wood.

Professor James Bell Pettigrew, M.D., as Representative of the Universities of Glasgow and St. Andrews, in place of Dr. Allen Thomson, resigned, was introduced by Mr. Turner.

Robert Scott Orr, M.D., as the Representative of the Faculty of Physicians and Surgeons of Glasgow, in place of John Gibson Fleming, M.D., resigned, was introduced by Dr. Haldane.

The PRESIDENT then delivered the Address on the opening of the twenty-fifth session of the Council, which we gave at length last week.

On the motion of Dr. ANDREW WOOD, seconded by Mr. Simon, the President's Address was directed to be entered on the Minutes.

Business and Finance Committees were then appointed.

A letter from the Lord President of the Privy Council, accompanying a copy of the proposed Bill to amend the Medical Act (1858) was then read, requesting to be favoured with any observations the Medical Council had to offer in regard to the provisions of the Bill.

A Report by the Presidents and Vice-Presidents of the Royal College of Surgeons of England, criticising the proposed Bill, was then read. With regard to Clause 3, providing for the necessity of double qualification for registration, and Clause 14, providing for examination rules for securing uniformity of examinations for qualifications, the Report stated that if Clause 3 became law, the now registrable qualifications of the College would no longer themselves be registrable, but would have to be accompanied by a medical qualification from some authority entitled to grant it; and if Clause 14 became law, the College would thenceforth not have authority to confer even a valid surgical diploma, except in subordination to such examination-rules as the General Medical Council, with the sanction of the Privy Council, might lay down. In the opinion of the President and Vice-Presidents the Bill did not offer any such promise of public advantage as to claim that the College should, on that account, make any considerable surrender of independence, and the reforms most wanted in the licensing system would be rather impeded than promoted by the passing of the Bill. For the Bill, if it became law, could hardly fail to be deemed an expression of indifference on the part of the Legislature to that which the largest and weightiest consent of skilled authority has long recognised to be the chief evil of the present system: the evil of nineteen uncombined and (in principle) competing examination boards in the three divisions of the United Kingdom, with the privilege allowed to each separate authority to grant registrable titles which shall be valid throughout the British Empire. The President and Vice-Presidents felt with much regret that they could only recommend to the Council to dissent from Clauses 3 and 14 of the Bill.

Resolutions adopted by the Council of the Royal College of Surgeons at its meeting of April 1, 1878, and confirming the Report of the President and Vice-Presidents, were also read.

A Memorandum of the Royal College of Physicians of London, with reference to the proposed Bill, was also read. It expressed the extreme regret and disappointment of the College that the Bill altogether failed to provide for the compulsory establishment of conjoint examining boards for each division of the United Kingdom, which had been recommended and urged on the medical authorities by the General Medical Council, for which the College had been strenuously labouring during many years, and which constituted the main feature of Lord Ripon's Bill of some years ago, and proceeded to comment upon the various clauses in detail.

A letter from Mr. Edward Waters, M.D., of Chester, Chairman of the Medical Reform Committee of the British Medical Association, was then read, submitting to the consideration of the President of the General Medical Council the Medical Acts Amendment Bill, approved and promoted by the British Medical Association.

In answer to Sir William Gull,

The PRESIDENT stated that he had received no information on the subject of what progress had been made in the matter of a conjoint scheme for a common examination in Scotland and Ireland.

The Duke of Richmond's proposed Bill was then read, and ordered to be printed as an appendix to the Minutes.

Dr. HUMPHRY moved—"In 1870 this Council passed the following resolution by a large majority and after much deliberation:—'That this Council is of opinion that a joint examining board should be formed in each of the three divisions of the kingdom, and that every person who desires to be registered under any of the qualifications recognised in Schedule (A) to the Medical Act shall be required, previously to such registration, to appear before one of these boards and be examined in all the subjects which may be deemed advisable by the Medical Council; the rights and privileges of the universities and corporations being in all other respects the same as at present.' The Council has subsequently sanctioned a scheme for an Examining Board for England, made in conformity with that resolution. The Council adheres to the principle of that resolution, and is of opinion that no medical legislation relating to examinations will be satisfactory which does not provide for the formation of an examining board in each of the three divisions of the kingdom, and direct that every person who desires to be registered under the Medical Act shall be required to appear before one of these boards and be examined in the subjects which may be deemed necessary by the Medical Council." He said the Council had originated the principle of conjoint boards, had endeavoured to carry it into action, and encouraged the medical authorities of the three divisions of the kingdom to act upon it. The medical authorities of England set to work to frame a scheme in accordance with it, and that scheme had been sanctioned by the Medical Council. They had also been engaged in framing a series of regulations for such examination, and those regulations were now almost complete. The English bodies had been taunted with the difficulties they had met with, and the slowness with which they had carried out their object, but the greatest difficulty which they had had to deal with was the apprehension that, after all, the great work which they were anxious to accomplish might fail for want of the co-operation of the other divisions of the kingdom. The question for the Council now to consider was, whether it would stand true to its colours, and support those bodies who had acted in conformity with its wishes, or whether, on the contrary, it would stultify itself by deserting those bodies. The circumstances which led the Council to adopt the principle were not different now from what they were in 1870. It was an anomaly which the public would not tolerate, that a licence to practise should be obtainable from any one of nineteen separate bodies. It might be said, perhaps, that the Medical Council possessed the means of rectifying this anomaly by the visitation of examinations, but that was an extremely cumbrous and costly process, and the Council had shrunk from carrying it out in an effective manner. Besides these difficulties, there were the imputations which had been cast upon the different corporate bodies. Students who were rejected at one examination quickly found their way to another part of the country and obtained diplomas. Such a state of things ought not to be allowed with regard to so grave a subject as the qualification of a man to practise. The recognition of qualifications for the medical profession ought to stand on ground beyond all these imputations. The objections to the principle came mainly from Scotland. It was said that the establishment of a conjoint board in each of the three divisions of the kingdom would not, after all, insure uniformity of qualification, but at all events it would increase the likelihood of insuring such uniformity sixfold. Instead of having to visit the examinations of nineteen boards it would only be necessary to visit three, and, moreover, those examinations would not be conducted by gentlemen who had financial relations with the examinations. It had been further said, somewhat contradictorily, that it would bring qualifications down to one

dead level, but that would by no means necessarily be the result. The Cambridge University had taken precautions so that their qualifications might stand quite aloof from the qualification which every man must have before he could practise.

Sir James Paget seconded the resolution.

Dr. Andrew Wood expressed his strong disapprobation of the scheme for the institution of conjoint boards, and pointed out that while the English bodies had, in reality, done nothing in the matter, in Scotland the medical authorities had combined together to some extent; and the combinations had worked smoothly, harmoniously, and inexpensively, without destroying the identity and individuality of the different bodies. England, however, had effected nothing in the way of combination from 1858 to 1870; but in the latter year the bodies here were roused to a degree fiery in proportion to their previous languor. They went in for a combination of all the licensing bodies in the country, and tried to force the same plan upon Scotland and Ireland. Scotland did not approve of it, and even the English bodies seemed to have some misgivings about it, for by Clause 12 of the scheme a *locus penitentiæ* was left open empowering any body, at the end of five years, to withdraw from the combination by giving one year's notice. But if the Conjoint Scheme were inserted in the Bill there would be no means of escape, even if it turned out as badly as he expected it would. No doubt a conjoint board appeared at first to be a very simple and effective plan, but in order to test it we must descend from the abstract to the concrete. How would it work? Would it actually establish the uniformity which was aimed at? If absolute uniformity were required it would be more rational to propose one conjoint board for the whole kingdom; but even that would not accomplish the purpose. He gathered from the Medical Register that there were about 1350 men examined every year. That number must be multiplied by four to obtain the number of examinations that would have to be provided for. Everyone must admit that to carry out 5400 examinations in a year would be a labour compared with which the twelve labours of Hereules were a mere joke. There must be a number of sections of the examining board, and in that case how could uniformity be secured? He wondered that the English bodies could agree to the proposed conjoint examination, for it robbed them of their *raison d'être*, and took from them the right of examining independently their own men. He thought they should think twice before parting with their identity, their autonomy, and individuality. He also feared that if the proposed agglomeration of bodies took place, the university degrees might either be reduced to a level of mediocrity, or be raised so high as to prevent the country being properly supplied with medical practitioners. That was the view of Dr. Lyon Playfair, with whom he had recently conferred on the subject. Dr. Christison had also begged him to denounce the conjoint examination, believing that nothing but evil would come of it. The experiment was a hazardous one and might lead to disastrous results:—

> "Facilis descensus Averni,
> Sed revocare gradum.....
> Hic labor, hoc opus est."

Sir Dominic Corrigan declared himself a supporter of Dr. Wood's views.

Dr. Rolleston supported the resolution, and had not concluded his observations when the debate was adjourned.

Second Day—Thursday, April 11.

The Minutes of yesterday's proceedings having been read and confirmed, the debate on Dr. Humphry's motion was resumed by

Dr. Rolleston, who thought that Lord Ripon's Bill was a substantial confirmation of what had been previously said, that the Government were exceedingly likely to take up the matter of a conjoint examination if they did not do it themselves; but he objected to that steam-roller called Government interference. The State had already done it to some extent as to soldiers and sailors, and what they had done for them they would undoubtedly do for the rest of the community. In his opinion it was incomparably better that it should be done by themselves, and he hoped the Council would not go back on itself. As to the objection that it was impossible for one conjoint board to examine 1000 candidates in a year, he appealed to Dr. Storrar, who represented the London University—probably the greatest examining body in the world—to say whether there would be any difficulty in securing a uniform standard for that number of candidates, and in assuring the world that they had put the same trade-mark on every one of them.

Mr. T. P. Teale could not say he was satisfied with Dr. Wood's speech in defence of the principle that Scotland should be allowed to continue her present mode of examinations, and that conjoint examinations should not be forced on her. The fact that Scotland had come under the Medical Act, which extended the privileges of those licensing in Scotland over the other countries, altered the position of Scotland entirely, and she must be regulated with reference to the other dominions. He therefore could not agree that the mere fact that Scotland was satisfied with its own examinations was sufficient to prove an obstacle to the formation of what should appear to the majority in both kingdoms to be most necessary. He felt that they had come to a very critical period in the existence of the Medical Council. For twenty years the Council had been working at registration and education. The registration was in a tolerably favourable condition, and might be done by a much smaller and less expensive body than the Medical Council; but could they say that the work that had been done as to medical education had been satisfactory? No doubt it was better than it was twenty years ago, when the Act came into force, but he thought the feeling of the majority of practitioners in the country was that the Medical Council had not had the effect on medical education that was expected of it. The fact that their recommendations had not very often been put in force no doubt took away from the earnestness with which the Council made them. The Bill professed to give the Council considerably enlarged powers, but what would be the effect of those powers if they were to be frittered away in supervising nineteen examinations instead of three. He must say that he shared the great disappointment which seemed to have been expressed on all hands by the College of Physicians, by the College of Surgeons, by the representatives of the British Medical Association, by the profession, so far as it was represented in the journals, and, so far as he could find, the almost universal disappointment in this country, that the Bill did not secure what the medical profession had been hoping and looking for for the last twenty years or more—a single conjoint entrance examination. He could not share in the numerous fears that had been felt about this conjoint examination. Sir Dominic Corrigan had suggested that it would be reduced to one dead level of examination. In the first place, there was no reason why that should be a low level. It would be the business of the Council to see that the examinations neither fell too low nor rose too high, the latter being as much to be feared as the former. He quite agreed with Dr. Humphry in what he had said about Cambridge; and with reference to Oxford, which he had attended several years, it would be a great boon to that University if they were relieved from the obligation to examine students for the qualification to practise, for it hampered their examination. The numerous entrance examinations under the present plan caused a tremendous waste of power. All these bodies would be getting their own experience by their own examiners; that experience would not be compared and brought to order, and would not be raised to such a tone as it would be if they had all these various bodies concentrated into one. If that were done they would then require either a smaller number of examiners to examine the thousand candidates, or else there would be a larger examination power available. He (Mr. Teale) felt convinced that unless there was some plan of this kind the hours of the Medical Council, as such, were numbered; it would decline in reputation with the profession, and eventually the public and the bulk of the profession would pronounce it of very little use; and then what Dr. Rolleston had threatened them with would happen, and they would be swept away and replaced by the State.

Dr. Storrar said, in answer to Dr. Rolleston's question, there certainly would not be any difficulty in the University of London in conducting examinations to the extent of 1000 a year. As an example of what could be done, Sir James Paget had just informed him that at the Royal College of Surgeons they examined annually 500 for the primary and about 300 for the final examination. Upon the general question he (Dr. Storrar) was quite prepared to

support the motion of Dr. Humphry, and also to cover with his perfect assent all the arguments adduced by Dr. Humphry. The Bill before the Council involved a principle on which it was necessary for a representative of the University of London to express an opinion. He cordially dissented from the principle of Clause 14, and as cordially agreed with the principle represented by Lord Ripon's Bill of 1870. The present Bill had been brought under the notice of the University of London, and had been referred to a Committee consisting of all its medical and legal members. That Committee had unanimously concurred in a Report, but as it had not been presented to the Senate it perhaps could not be said to represent the mind of the University; but no doubt the views of the Committee would be the view of the Senate. Dr. Andrew Wood had begun by saying that he thought this was an occasion on which there was ground for a new point of departure, and had gone back twenty years, but he (Dr. Storrar) knew something of what took place before the Act of 1858. Having reviewed the history of the passing of the Act of 1858, Dr. Storrar said that they had endeavoured to make the best of that Act, and had endeavoured to make Mr. Walpole's provision serve the purpose of the common examination, which had been proposed by the Committee of the House of Commons; they had been endeavouring to establish the same principle by means of conjoint boards. Even Lord Ripon's Bill was an attempt to bring matters to the same basis, only in a modified form, and was thought to be more acceptable to the examining bodies than the independent board put in authority over them. He therefore entirely concurred with Dr. Rolleston, that if they did not move on in the direction of Lord Ripon's Bill the probability was that the strong hand of the Government would step in and do the thing for them. With regard to conjoint boards, he was exceedingly surprised to hear Dr. Andrew Wood boast that the examining bodies in Scotland had been the first to avail themselves of the clause in the Act which enabled them to set up conjoint boards. When the Act of 1858 passed, it was thought by some of the Scotch medical boards that the Scotch universities were precluded from examining in surgery; and then all at once, very early in 1859, a proposal for a conjoint scheme of examinations was introduced. They could see very clearly what the effect of that conjoint scheme would be: if the corporations could only put the university graduates in the position that they could not get a surgical qualification to register without coming to them, they would get considerable results from it. Then the whole of this question came before the Privy Council, and it was decided that the universities were perfectly entitled to confer qualifications in surgery, so that the whole effort of the Scotch medical corporations failed. Then it was found that they had tied themselves up to the conjoint scheme, and that was thought to be a hardship; but it turned out that the Medical Council, being fresh to its work, had failed to insert a condition in the conjoint scheme that the single examinations should be discontinued. The result was that they had a conjoint scheme, but it was a scheme which added two examinations to those which already existed. In England they were endeavouring to consolidate seven examinations so as to have one entrance examination only; but the Scotch, in 1859, adopted a conjoint scheme, by which they had nine instead of seven. He could not at all agree with Dr. Wood's reasons for contentment with the present condition of things, though to say there had been no improvement would be a condemnation of the work of the Council, which was not deserved. He was aware that in what he was about to say he was venturing on somewhat delicate ground, but Dr. Andrew Wood had rather sought to impress on the Council that the examination in Scotland was altogether so good that it was not desirable to interfere with it. He (Dr. Storrar) had never taken any part in visiting the Scotch examinations, but he was frequently in communication with young men who had passed English and Scotch examinations, and from what he had heard he could not concur in the conclusions of Dr. Wood. The simple fact was, that the very pressure which was endeavoured to be put on the Council not to establish the conjoint boards was a declaration in another way that the present system of examination was not adequate. They were not seeking to impose on the Scotch bodies that which they were unwilling to impose on themselves, but England had established a conjoint scheme, first in the hope of inducing Ireland and Scotland to follow her example. The University of London had no need to go outside the work prescribed for it by its charter, but its Senate, occupying the position it did in the metropolis, had been led to consider, with reference to its Medical Faculty, what was demanded for the benefit, not only of the medical profession, but what was of far higher importance, the benefit of the public through the medical profession; and as soon as this question of the conjoint examinations was mooted by the College of Physicians of England, they felt it was their duty, even with some amount of sacrifice, to step out of the area of their own work and give their assistance to it for the common good of the empire. If it could be done effectively they would not be found wanting, but would give their most hearty assistance, and would resist any such pretensions to overrule their powers as are represented by the fourteenth section of the Duke of Richmond's Bill.

Dr. HALDANE thought that the idea of a conjoint scheme was a very seductive one, but it had never been tested by experience. It was all still in the realms of theory. The formation of such a scheme was more difficult in Scotland than in England, for only 14 per cent. of those who got qualifications in England got them from universities, whereas in Scotland the number of qualifications obtained from universities and corporations were almost precisely the same. Last year 307 got qualifications from the corporations and 305 from the universities. In Edinburgh a successful attempt had been made to unite the corporations; and an equal number of examiners on each subject were selected by each college, the College of Surgeons taking the entire charge as to surgery, and the College of Physicians taking the entire charge as to medicine. The examiners from each college always sat together, and unless a candidate satisfied both sets of examiners he failed to get his qualification. A large number came forward annually to obtain this double qualification, and the effect had been to diminish very largely indeed the number of single qualifications from the colleges; and the conjoint fee being less than double the single fee, there was consequently a considerable pecuniary loss to the colleges. It was not at all desirable, he thought, that the universities and corporations should be amalgamated in a conjoint scheme, for he looked upon their functions as entirely different. The degree of a university should be higher than the mere qualification of a corporation, and he looked upon it as unfortunate that degrees of universities were treated as licences to practise. That had not been the case formerly, and the degrees of the University of Edinburgh had been treated as standing altogether on a much higher level than a mere qualification; but since the passing of the Medical Act they had been placed on the same footing. Another great difference between Scotch and English universities was, that in England the universities were not, and could not be from their situation, great centres of medical teaching, as universities were in Scotland. The value of the medical teaching of the Scotch universities had been fully recognised, and was proved by the large number of students constantly resorting to them. Another point was with reference to the quality of their examinations. They did not wish to be treated tenderly, as Dr. Storrar had professed to treat them, but he (Dr. Haldane) wished them to be treated purely on their merits. The reports of the visitors from the Medical Council were, on the whole, satisfactory, and although he did not profess to say that the Scotch examinations were perfect, he believed they would contrast favourably with any examination in England. He could not see either how a conjoint scheme would tend to raise the character of the examinations. The same men would continue to be the examiners, and when the different bodies were advancing by themselves it was a pity to interfere. For his own part he should infinitely prefer the inauguration of a *Staats-Examen* to the institution of a conjoint board: he believed it would be far more satisfactory to the public, and would be the very best means of keeping up the character of the examinations before the other bodies.

Dr. QUAIN said that prior to 1858 there were various bodies scattered all over the country, giving unequal qualifications, and that this Act gave these unequal qualification equal rights to practise. Mr. Walpole expected by the union of the bodies to secure something like uniformity of qualification; but that uniformity had never been obtained. What was now desired was to secure uniformity and completeness, so that whether a man obtained a qualification in England, Scotland, or Ireland, he should be equally

qualified to practise. A former Government, the Medical Council, and the medical profession had all asked for something like this conjoint scheme. They had now the choice between what was given in the proposed Bill and Lord Ripon's scheme for an examining board. Dr. Haldane had proposed a *Staats-Examen*; but why should candidates be subjected to two examinations? The proposed system was to secure competent persons alone, and not to add to the funds of the licensing authorities. It was for the public good they were concerned, and the authorities would never listen to a proposal to examine people after they had got a qualification. The system of a conjoint board was far more simple than people thought; and what was more, it was easy to carry out. The delay in bringing it into operation in England had arisen from a desire to make the scheme complete, and the difficulty that had been experienced in getting the various bodies to give up certain privileges; but the scheme was now complete with the exception of a few verbal alterations, and in his opinion no better scheme of examination had ever been devised. If the scheme of a conjoint board were not adopted voluntarily, they might depend upon it that sooner or later the Medical Council and the corporations would be superseded by some such body as that which Lord Ripon proposed; for the Government could never sanction that the Council preferred the interest of any particular corporation to that of the public at large.

Mr. Turner thought that the course the Council were pursuing, in discussing an abstract resolution like Dr. Humphry's first, before proceeding to discuss the Bill which had been sent to them by the Lord President, was not altogether a courteous one; and he could not but think that it was an attempt to force the hand of the Council, and to commit it to an abstract proposition. He had always a great suspicion of abstract propositions, for they were very often "snakes in the grass" and traps to catch the unwary. He thought the resolution, on the face of it, required much more explanation than it had received. What did the formation of an examining board in each of the three divisions of the kingdom mean? It might be a *Staats-Examen*; and if they went to the Duke of Richmond with that simple abstract resolution, it might be interpreted by him in a variety of fashions. Dr. Humphry had stated that he carefully avoided using the term "conjoint board"; but what was meant by it?

Sir James Paget said he thought the meaning of Dr. Humphry was, that if the conjoint scheme could not be made compulsory in each division of the kingdom, then, sooner than have nothing, it would be better to have a State examination.

Mr. Turner thought that there was something which was understood between the mover and seconder of the resolution which had not been explained to the Council. A great deal had been said about the anomaly of having nineteen separate bodies, and that such a cumbrous scheme would not at the present time be proposed for introducing men to the medical profession; but they were to look at the matter from its historical aspects. A great number of the bodies were of great antiquity, and had always shown themselves willing to reform when the necessity for it was pointed out. Then why should it be said to them that they should no longer have the right to exercise the privileges conferred on them years ago by charter? There was no evidence that the various bodies had acted improperly, though Dr. Storrar, on the authority of certain unknown students, had insinuated that some of the Scotch bodies were not up to their work; but he (Mr. Turner) put before that the Reports of Visitors of the Council, which did not throw any such serious reflections upon them; and, beyond that, the Council had power under the Medical Act of causing a suspension of the licensing power of any body which did not do its duty. With regard to uniformity in the standard of examination, he thought it was not desirable; and, even if it was desirable, could they get it? Uniformity of examination was a phantom. They might chase it over Irish bogs, Scotch moors, or hard London streets, but they would not get it. If they introduced a conjoint scheme they would be practically introducing a series of examining boards which would leave the matter in the same position as it now occupied, and would not insure any greater amount of uniformity. Another difficulty in connexion with a conjoint scheme would be that it would introduce a system of centralisation which would be a great evil. Immediately a central examining board for any department was established, there clustered around it a number of men who made it their business to prepare candidates for examination, and to cram them with just that kind of knowledge which told in an examination; and therefore he thought a conjoint board, which would become a central one, would only operate as an encouragement to cram, and would interfere with the legitimate progress of medical knowledge. Another argument against conjoint boards was that all the candidates in any division of the United Kingdom would have to come before the same examiners, and that the time expended would be so great that the best men could not be obtained to act as examiners, and therefore the examinations would fall into the hands of men inferior to those whom they would like to see on the examining boards. Dr. Rolleston had suggested, in order to obviate this difficulty, that the questions and answers might be sent through the medium of the post. That was all very well for written examinations, but Scotch examinations were oral and clinical, and the telephone had not arrived at such a pitch of perfection as to enable examinations of that character to be conducted through it. They could not get over the fact that for oral examinations the candidates must either go to the examiners or *vice versâ*. Another difficulty he felt was that Dr. Humphry's motion proposed to make the system of conjoint bodies compulsory; but he did not think that was the spirit of modern legislation. The present Bill undoubtedly assisted them very materially to carry out a voluntary system of combination to the extent they might deem it advisable. Dr. Humphry had invited them to look at the question from a national point of view. He (Mr. Turner) had endeavoured to do so, and he felt that what he had urged constituted serious national grounds of objection to the resolution. But, in addition, there were certain local objections, which, as representing two most important Scotch universities, he thought it right to bring before the Council. Dr. Haldane had pointed out that the Scotch universities, unlike the English universities, were great training institutions for students of medicine, and therefore they had an enormous interest in this question. The number of students in and about the Scotch universities was not far short of two thousand, and there were enormous interests connected with these young men. The special objection of the universities was to its being made compulsory on their candidates, who went through the whole course of study and the complete examinations provided by the universities, to have to pass in addition an official examination. They took their stand upon there being no right to do that, and they said that their examination was altogether on a higher level than the minimum examination proposed. In addition, there was the fee for the conjoint examination, and the result would be practically to fine all the candidates for Scotch university degrees the amount of the fee. What had the universities of Scotland done that they should be fined in that way? But another more serious matter was, that under the present system diversity of examination was afforded, which, in his (Mr. Turner's) opinion, was an advantage, for the more able men would aspire to the higher qualifications. But if it was insisted that every man should go through this minimum examination in order to get on the Register, heaps of men would stop at the minimum, and in that respect great injury would be inflicted on medical education. Returning to the money question, that was to be looked at from a Scotch point of view. The Scotch universities, unlike the English, did not wallow in wealth. For instance, with regard to the University of London, the treasury found any balance of the expenses of the examiners which the fees from the students did not cover, but the treasury were extremely jealous of Scotland getting anything; therefore, the examination-fees received from candidates constituted a most important source of income. The University of Edinburgh last year received something like £3000 in fees, and it would be as well to observe that those fees did not go into the pockets of the examiners, but went into the general fund of the University. All that was drawn from the University till for the examiners was a miserable £350 a year. The whole profession benefited by these fees, because by means of them the teaching was improved. It was, therefore, a matter which excited earnest care and attention on the part of the Scotch universities, that the fees should not be diminished by legislative enactment; and it was because they

felt such would be the case, and that the number of their candidates would be materially reduced, that they protested so earnestly against anything like a compulsory foundation of a conjoint examining board.

Dr. Aquilla Smith had long been opposed to the introduction of a conjoint scheme, and had not heard one word during the present debate to induce him to change his opinion. He agreed with Mr. Turner in thinking that the proposal would tend to discourage young men from aspiring to high qualifications. With regard to the University of Dublin, up to the present time, though the curriculum of study had increased and the education was expensive, the number of young men seeking medical degrees had steadily increased; but he knew that the great majority of men in Ireland who sought to enter the profession had no other object than to pass an examination which would put them on the Register; and once on the Register their aspirations ceased. He thought it would be very injurious to the universities to amalgamate them with the corporations, inasmuch as it would tend to lower the standard of university education.

Mr. Macnamara thought the question under discussion was a most important one, and it was whether they should accept a conjoint scheme or should accept the Lord President's Bill. It appeared to him that if Dr. Humphry's resolution was passed it would be tantamount to saying they rejected the Lord President's Bill altogether; and the reason he said that was because he felt that the very backbone of the Bill was contained in Clause 3—viz., the necessity of a double qualification for registration. They had been accused of inconsistency in opposing this resolution, inasmuch as the Council some years ago had passed a resolution in favour of a conjoint scheme; but he appealed to the older members of the Council whether that scheme would have had so many supporters if the proposal contained in Clause 3 had been suggested for discussion. He was one of those who thought that the conjoint scheme must have a lowering tendency, for it must be a minimum examination, and would deteriorate the profession hereafter. He would ask them to contrast that with the proposal in the Bill that no man should be allowed to get on the Register unless he had a surgical qualification given by a surgical board and a medical qualification given by a medical board. He could only look upon a conjoint examination as giving a mongrel qualification. With regard to the charge that had been insinuated against the Scotch examinations, he had thought it his duty to inquire into it; and he was in a position to state, on the authority of Dr. Mapother, a distinguished member of the Council, that they were most creditable, and all that could be required by any State seeking for the services of good medical men. The principle of the proposed Bill, if it became law, would be of very great advantage, and the necessity of a double qualification before registration would go a long way in cheering them on to conjoint examinations, and that was a far better way than compulsorily insisting on them. If the English authorities believed that conjoint examinations were good for them, by all means let them introduce them; but they should not force them on the Irish and Scotch, who did not believe them to be the right method of solving the question. Let them settle their own affairs. Dr. Rolleston had said that if they did not adopt the principle of the conjoint scheme, a strong Government would come in and crush them; but he thought that was a reason for adopting the Bill, and rejecting Dr. Humphry's motion; for he did not believe the Lord President, having fixed next Monday for the second reading, would be able to modify the Bill in time; and, consequently, it would be thrown over the session, thus giving a chance for the strong Government to come in before legislation took place. Let them adopt the Bill as it stood, for there were many valuable things in it, and try and make it a good measure.

Sir William Gull wished he could only think that the mind of every member of the Council was not made up which way they were going to vote, for then he could address himself with more earnestness to the discussion which had taken place. Dr. Wood had commenced by telling them that there would be no insuperable difficulties in carrying out the conjoint scheme in Scotland; but Professor Turner ended by saying it was an impossible measure for Scotland. Any number of reasons had been given, but the real reason came out at last, and it was the pecuniary reason. It was no use beating about the bush—Scotland was dependent on the money paid by the students for examination; and if this conjoint scheme came into operation in Scotland, the fear was that all their historical institutions would dwindle and die away. But were they to perpetuate what every outsider would think was an evil, in order to save the pockets of the historical institutions? They had been told that a conjoint scheme would ruin the universities; but, as he understood, nothing would be so much in favour of a higher medical education in England as the establishment of a minimum examination in the institutions, because that would leave them entirely free to carry forward their instructiou to the very highest range of medicine and science. The Scotch bodies must be teaching down to a minimum, or how did they contrive to pass the number of candidates it was stated they did? The question was partly political and partly monetary, and that was how the Council must look it. It was partly political because a number of universities were involved, and no Government dared to touch them. It was no great secret that the Bill would have been much more strong for compulsory education; but the Scotch would not allow it. Dr. Wood had said if they did not keep where they were they would be going to Hades; but he (Sir William Gull) could see no ground for that. They had done much good, and why should they not do more? Their first duty was to regulate the qualifications of practitioners, and how could they do that unless they had the constant supervision of the examinations? That was their practical difficulty, and unless there was a conjoint board in each division of the kingdom the Council could not perform satisfactorily the duty which Government had imposed upon them. With regard to the political necessity, he thought they must strengthen the hands of the Government to overcome it. The Council had nothing to do with politics or money, but were chiefly concerned with the public good and the advancement of their profession, and their object would be advanced if the public were assured that every man entering the profession had on him what had been called the "guinea stamp." Several speakers had said that if a minimum examination were established the men would not go further; but was that their experience of the members of their profession in Scotland and Ireland? It was not his experience of the English members of the profession. Mr. Macnamara had said that if the resolution were passed they would be prejudicing the Duke of Richmond's Bill; but he thought that the Duke would only be too glad to have his hands strengthened as far as legislation went, if it was true and good legislation. That was exactly the duty of the Council, and if the present resolution had not been brought forward he (Sir William Gull) should certainly have proposed a resolution for the Council to go in a body and urge on the Duke of Richmond to insert the very thing that he had left out. He did not think the question had been fairly argued on its merits. Let them consider what was the duty of the Medical Council—not what was best for England or Scotland, but what was best for the whole.

Dr. Pitman said that as it had been stated a conjoint scheme had been in operation in Scotland for twenty years, it was essential to inquire what was meant in Scotland by a conjoint scheme? Referring to the representations made to the Council in 1859 by the College of Physicians and College of Surgeons, the proposal was that the examinations in surgery should be conducted exclusively by examiners from the College of Surgeons, and the examinations in medicine by examiners from the College of Physicians, and that the competency of the candidate in medicine and surgery should be decided separately by each set of examiners; and beyond that, they reserved to themselves the right to grant their qualifications singly for registration. That was not a conjoint examination in the view of the English board. The Bill provided that no single qualification should be registrable; that was to say, every person entered on the Register should be qualified to the fullest extent. If that was carried, they would get a little bit nearer to what was desired; but would that be the best way of doing it? All the corporations would still be left to frame their own conditions under which they would admit candidates for their qualifications; and, even if the Bill made it compulsory on the Council to prepare the examination-rules, what security had the public that the examinations when they were gone through would be a fair test of the knowledge of the candidate? These examinations might appear very strict on paper, but,

unless constantly supervised by the Council, it was impossible for the public to be secure against inefficient candidates entering the profession. To his mind, it had been truly said by Sir William Gull that if there was a conjoint board the universities would have the opportunity of raising their examinations. A great objection to the present system in Scotland was that the Scotch universities were not only examining bodies, but were, at the same time, educating bodies, and therefore he thought there would be a tendency to examine their own candidates. No examining body, in his opinion, should be an educating body as well, and it was one of the great principles in England that no person should examine his own pupils. What was wanted was uniformity of examination, and the only way in which that could be safely secured was by having a single board in each of the three kingdoms. Professor Turner had said that uniformity was not desirable, but he (Dr. Pitman) did not think anyone had ever gone so far as to say that uniformity with the same privileges was not desirable. He was quite satisfied that whatever vote the Council arrived at would not set the question at rest. It might be postponed for a time, but the day must come when, if the existing corporations did not combine voluntarily, they would be compelled to do so, or else would be superseded by some other examining board. Unless there was a fair majority in favour of Dr. Humphry's resolution, it would have very little influence on the present Bill, and the result would be that there would be no legislation, and they would be thrown back on a state of things with which he believed no one was satisfied. It was not a question for corporations only, but for the public, and the public had been left too much out of the question. The public would soon speak for themselves if the Council did not come to such a vote as would influence the Duke of Richmond to restore to the Bill that which was originally intended, but which, from some pressure or ill advice given, had been withdrawn.

On the motion of Mr. Simon, the further consideration of Dr. Humphry's motion was adjourned till to-morrow at two o'clock p.m.

Dr. Andrew Wood then called attention to the satisfactory nature of the returns from the Army Medical Department, which showed that out of a total of thirty-seven candidates examined in the first examination, and twenty-four in the second, there was only one man in each not sufficiently competent, and moved the following resolution, which was seconded by Dr. Aquilla Smith:—"That the Returns from the Army Medical Department be inserted in the Minutes, and that the best thanks of the Council be given to the Director-General of the Army Medical Department for his courtesy in sending these Returns."

The motion was agreed to.

A letter was then read from Mr. Edward Waters, the Chairman of the Medical Reform Committee, urging that the opinion of the Council should be taken on the subject of the distinct representation of the profession upon it.

Professor Turner asked the President if he could inform the Council whether the Medical Acts Amendment Bill, referred to in the letter from Dr. Waters read yesterday, as approved and promoted by the British Medical Association, had been approved and promoted by the general body of the members of the Association, or only by the Medical Reform Committee of that Association.

The President answered that no information had been received by him on the subject referred to in the letter of Dr. Waters, other than is contained in the communications laid before the Council this day and yesterday.

The proceedings were then adjourned.

Third Day—Friday, April 12.

The Council assembled at two o'clock, Dr. Acland, President, in the chair.

Sir Dominic Corrigan, in asking the President a question concerning the Conjoint Scheme in England, stated: "That it would be desirable to have the latest information as to the present state of the Conjoint Scheme in England, and that with this view the President be requested to furnish the Council, if in his power, with such information."

The President stated that he had communicated with the chairman of the Committee of Reference appointed under the medical authorities of England on the subject, who would be in a position to give an answer which would be satisfactory to the Council.

Sir James Paget said that, shortly after the Conjoint Scheme proposed by the English medical authorities received the sanction of the General Medical Council, the authorities appointed a Committee of Reference, by whom regulations had been framed for the education and examination of candidates for qualifications for registration. The regulations were now complete, and the copy of them which he had in his hand might be published, but that they required the sanction of the authorities. This sanction he had no doubt would be granted, and the Scheme could be brought into operation at the commencement of the next winter session in October. But whether it ever would come into operation might depend on the decision at which the Council would arrive to-day. He was not prepared to say what would be the decision of the College of Surgeons if the institution of conjoint examinations in all divisions of the kingdom were not made compulsory; but the College of Physicians, in the document just printed in the Minutes of the Council, had said that in that event the "Bill would compel them to abandon the Scheme and all hope of reaping any fruit from their labours" in its construction and in the preparation of the rules of education and examination.

Mr. Simon then resumed the debate on Dr. Humphry's motion, and said he would refer to some objections which had been made to the general principle of the motion. Professor Turner had objected to it because it was abstract, that propositions of that kind were traps for the unwary, and were snakes in the grass. It was a snake, no doubt, which he would like to kill, and which he would certainly lay claim to having "scotched." (Laughter.) Dr. Wood had frightened the younger members of the Council by saying that their course would be *facilis descensus Averni*; but their minds must have been afterwards relieved on finding that that, translated by Professor Turner, meant that the Scotch institutions were likely to lose money, and poverty had not hitherto been considered a particular qualification of that department of the future state. Then Mr. Macnamara objected to this abstract resolution that it would upset the backbone of the Bill; but that was their complaint, that it had no backbone—that it was molluscous—and they wanted to put a backbone into it. Sir William Gull had said that political reasons had made the Bill what it was, and that mere fact that there were such reasons made it important to take care to put before the Lord President, prior to the second reading, any strong opinion the Council entertained on the principle of the measure. It had been said that the spirit of modern legislation was opposed to compulsion, but he thought it was the province of the Legislature in necessary cases by penal sections to insure a thing being done, and if this was not a case for compulsory legislation then he did not think there was any necessity for legislation at all. It was a very general opinion that they suffered from permissive legislation, and they did not want the law to permit them to do things in themselves right. What was the problem before the Council? It was an extremely simple one—viz., to provide a guarantee that none but properly qualified persons should be able to call themselves legally qualified practitioners; and, further, that the standard of that proper qualification should be to the full as high as the circumstances of the time would permit. The question in the debate was, whether that guarantee could be given in such a way as the public had a right to demand under a system of multiple competing examining bodies. His personal answer to that question unhesitatingly was, "No, it could not"; and he expressed that opinion not as belonging to one particular division of the United Kingdom, but (if he might coin a word) as a "United Kingdomer." The present system could only have a tendency to favour the candidate who paid as against the public who did not pay, and to graduate downwards. No doubt there had been considerable improvements under the influence of the Council, but the chief improvements had taken place under pressure, and if that pressure were withdrawn there would be no security that the improvements would be continued. Among the objections to conjoint boards was an objection altogether to uniformity of standard, and it was said by Professor Turner that it was impossible; but the little differences that might arise, and which had been referred to, could not be regarded seriously. Dr. Andrew Wood had said that it would breed mediocrity; but the great objection of Professor Turner was the effect that this system would have financially on Scotch universities and corporations—that Edinburgh received last year

£3000 for its degrees, and none of that went to the examiners, but to Edinburgh as a school. How glad some of the English schools would be of such a small perquisite for the privilege of giving degrees to their own students which should have validity throughout the whole British Empire! The question was not to be looked at as a matter affecting local and personal interests, and he would ask in the nature of things whether there was not a chance of a privilege of the kind referred to being abused when it might be used as an attraction to the school. Everyone knew that it was used as an attraction in Scotland, in the sense that while the Scotch minimum university test was not above the minimum test of the English corporations, yet it gave a man passing it the title of "doctor," which had a particular marketable value in England in the eyes of people not knowing the rights and wrongs of the subject. It had been said that it would be injurious to amalgamate universities and corporations. In a certain sense he agreed that it would, but it seemed to him that amalgamation for the particular purpose of measuring minimum qualifications might be so managed as to preserve to both their distinctive features. The general question was how to give a national guarantee to this minimum qualification, and that was a question between the public and the profession. It seemed to him very disadvantageous that they should go on in the way they were doing, each practitioner attempting to suggest that the qualification he held was a more important title than that of his neighbours. In conclusion, he hoped that the resolution would be passed, and that it would sufficiently strengthen the hand of the Lord President to put into the Bill that which, in his opinion, would be the backbone of it.

Sir James Paget was afraid, so much having been said against the Bill, that it would go abroad as the opinion of the Council that it was altogether unfit for passing; but he did not think for one moment that that was the belief of the Council. Though they might think there were several clauses requiring amendment, yet there remained a number of provisions which would be of great general advantage to the public and the profession. He thought they had wisely commenced with the discussion of that part of the Bill which admitted of the most dispute—namely, as to the introduction of the Conjoint Scheme. In relation to that there were two distinct points in the Bill, on the desirability of which they were all but agreed: first, the necessity for a double qualification; and secondly, that there should be examination-rules for securing uniformity of examination for qualification. However much they might discuss the methods by which uniformity could be attained, it was that to which they looked and hoped with reference to a minimum qualification; and it was that which simple justice demanded. The question really was, how was it to be attained? He would first deal with the necessity for a uniform qualification which should be as nearly alike as possible in the three divisions of the kingdom. The public seemed to have had a natural instinct on the matter, and to have thought that if qualifications were not uniform it must be because some were too low. The University of Edinburgh maintained that their qualification for registration was higher than was necessary for practice, but it must be admitted by them that any qualification materially lower would be too low. He doubted very much whether any of the bodies granting a large number of qualifications would reject a man if fit for practice because he did not acquire a higher knowledge such as they would wish for. It was done in the University of London with the result of great honour but no pecuniary advantage. The other universities were complaining that while they wished to raise their examinations to the highest point, yet they were almost under compulsion to pass persons inferior to what they wished for, because they could not say they were unfit for practice and ought not to be registered. If the University of Edinburgh said they required a higher standard of qualification, not for the honour of the degree but for registration, then it came to this, that either they did their students an injustice or they convicted the other bodies of passing on too low a standard. Then what was wanted? Why, that the higher should combine with the lower and lift them up; and that was a conjoint examination. Whether they liked conjoint examinations or not, they were in that position that the public would claim to have them in some form or other for their safety. The Council had, year after year, declared the necessity of it, and though there was, according to Professor Turner, a strong feeling in Scotland against it, there was an equally strong feeling in England the other way. The English authorities for years past had done their best to bring the Scheme into operation, and their delay and uncertainty had been scoffed at as implying the impossibility of it; but there was the proof that they would have it eventually, and it was better to have it with their own assent than to be put under compulsion. Year after year the same objections had been adduced as they had heard from Dr. Andrew Wood and Professor Turner, but they had always been beaten down by the strong conviction that it was a necessity for the public good. The Conjoint Scheme was perfectly ready to be put into operation, but alas, it was now placed in greater peril than ever it had been before by what might be the vote of the Council. Dr. Andrew Wood said they wanted to see the result of the experiment in England. That was really a most admirable device, for it was nearly sure to fail, as the intention was to raise the qualification necessary in order to pass the conjoint examination; and if the minimum examination remained the same as at present elsewhere, students would pass everywhere else but in England. What chance, then, was there for its success? Why, absolutely none. If a compulsory conjoint scheme were not adopted by the Bill, what would be the result of the proposed legislation? The necessity for a double qualification practically disfranchised more than three-fourths of the authorities in all the divisions of the kingdom, for it compelled each of the authorities granting a single qualification to say to its candidates passing its examinations—"You have done exceedingly well, but you are not fit for registration till you have passed the examination of some other authority; we can give you a qualification for surgery, but we cannot put you on the Register." That was as complete a disfranchisement as these several bodies would entail on themselves by the Conjoint Scheme, because under the Scheme each body resigned its own authority to grant diplomas which would place on the Register, on condition of entering into conjoint schemes with others. The question was, would they establish this system with their own authority and after their own fashion, or would they have it forced on them with other people's rules? The clear result of the Bill, then, as it stood was this: that a Doctor of Medicine of the University of Cambridge could not be registered unless he was also a Master in Surgery; and a Doctor of Medicine of Oxford could not be registered at all, because they had no qualification for surgery. Then, as to Clause 14, he could not understand the reason for its insertion, unless it was in the expectation of there being a Conjoint Scheme. If all bodies were combined under one set of rules, then it would be reasonable that the Privy Council should take care that they did not make themselves too exclusive; but that was altogether unreasonable if the bodies were to give qualifying diplomas. Clause 14 was to secure uniformity of examinations for the necessary double qualification, and it provided that the General Medical Council should from time to time frame—and when framed might revoke, alter, and add to—rules for regulating the examinations of candidates; that was to say, every person admitted to a double qualification by any two of the bodies in England must be admitted under rules framed by the Medical Council and approved by the Privy Council. Could that be done under a conjoint scheme? Clearly not. The University of London could no longer grant its degrees, except under rules framed by the Medical Council and approved by the Privy Council. What would Oxford and Cambridge say to the interference of the State with the rules under which they should grant their degrees? The rules were made necessary by the provision for the necessity of a double qualification which was to be under the guidance of the Privy Council. Dr. Andrew Wood had designated the Bill as a very mild one. It would be mild if that sting were taken out of it, but otherwise it was a Bill which would be calamitous to all the bodies there represented. If they did not have conjoint schemes they must have some authority in the Privy Council to determine what was to be the lowest qualification. Then it was said that they should have a State examination, and Dr. Haldane had said it would be a very easy matter, when the several authorities had given their diplomas, that a State examination should be held before the person was put on the Register; but what would that imply? They were in the habit of thinking in England that a diploma did grant something pertaining to an honour to a person, but the plain meaning of a State examination after the

obtaining of a diploma would be that the public would say, "Here are a considerable number of gentlemen with half the alphabet after their names, but before we can be quite sure that they can practise on her Majesty's subjects we must submit them to the minimum test." That would be to reduce what were regarded as honours to *dis*-honours. Not one of the authorities of this country could grant a degree which would imply common fitness to practise. The Army and Navy Medical Examination had been mentioned, but that was simply an examination before they could become candidates for appointments, and not to discover whether a man was fit to practise on soldiers and sailors. Another proposal was, that the candidate before he received his diploma should pass through an examination instituted by the Medical Council and approved by the Privy Council. That was, indeed, the essence of Lord Ripon's Bill, and what had been, but with considerable disfigurement, adopted. Contrast that with what would happen under the Conjoint Scheme! The design of Lord Ripon's Bill was, that a person passing such an examination would be entitled to a licence to be registered; but under the Conjoint Scheme sanctioned by the Medical Council the person passing would receive not the licence, on which he could be at once registered, but what was called a qualifying certificate, which would enable him to proceed to the several authorities under whose guidance he had been examined, and receive from them the diploma under which he could be registered. That was a contrast much to the advantage of the combining authorities. Supposing a man on passing a State examination received at once a licence to be placed on the Register, it followed that the whole of the qualifications granted by the authorities of the United Kingdom became simply nugatory, and would have no legal privilege whatever. All the members of the Council were sitting there (with the exception of the Crown nominees) as the representatives of some body which had some sort of legal right and authority to grant permissions to practise; but admit a State examination with a right previous to anything that could be granted by those authorities, and what became of their special right to sit in that Council, when they would only represent bodies having no legal right to grant licences to practise? Looked at carefully, the only reason they represented the profession there was because they had legal rights of admitting to the practice of medicine. Remove those rights, and where was their right to represent the members of the profession? He saw nothing else but calamity to follow if conjoint examinations were not made compulsory in the kingdom. It might be said there would be some loss of prosperity or power to each one combining, but that was as nothing compared with the loss they would sustain if they fell under the Bill unaltered, or into a State examination. No one felt more than he did that the matter ought not to be discussed as if the authorities alone were concerned in it; but if he was anxious to maintain the authority and support the privileges of all the authorities, it was from his conviction that it was for the public good. The Bill was indeed a mild Bill, but if it were passed it would be a distinct indication for all time to come that conjoint schemes were impossible, and that the Government did not care for them to be established. Following on that would come the collapse of many of the authorities represented at the Council, and a great loss of the power now exercised for the good of medical examination.

Dr. FERGUS said that, having looked at the Bill, he could find nothing preventing a conjoint scheme; it was perfectly permissive. He had not heard any reason why the English Conjoint Scheme could not be carried out, except that it was feared students would be sent away north of the Tweed; and as Professor Turner and others had been twitted with making this a money question, he supposed that fear did not involve money, or it would not have been enlarged upon. A matter of great importance was fixing a higher grade of preliminary examination. He thought it was a disgrace to the profession that there should be so many rejections, and he held that the preliminary examinations should be so extended—not diluted—that those men should be filtered out so as never to enter a profession for which in the long run they were absolutely unfit. Then they were told that if they did not pass the resolution a kind of whip—whether of scorpions or snakes he could not tell—would fall into the hands of the Privy Council; but for his part he would rather fall into the hands of the Privy Council than the hands of the Houses of Legislature. He believed the Privy Council meant to do the best they could for the profession at large and for the community. He could not help thinking that the course that had been taken of discussing Dr. Humphry's resolution was an attempt to shunt the consideration of the Bill.

The PRESIDENT thought it his duty, as chairman of the Executive Committee, to state that the course which had been pursued was only decided upon after the Committee had bestowed much attention on the subject of how the Bill could be discussed with the least waste of time.

Dr. HUDSON having stated that he should support the resolution,

The PRESIDENT said he wished to inform the Council that various circumstances made him think it was his duty to record his opinion on the resolution, and therefore he should vote upon it. Having paid the most serious attention to the subject before the Council met, and to the admirable, and he would presume to say temperate, discussion of what he considered the gravest issue that had ever been before the Medical Council, he saw no reason for altering the opinion he had formed many years ago, or for changing the vote he had given on every occasion the subject had been before them. He wished to reaffirm once more that he believed the continuance of nineteen separate licensing bodies in Great Britain to be inconsistent with the best interests of medical study and education. It was within his knowledge that the Lord President had sent the Bill to the Council in order to receive their opinion upon it and any amendments which might be submitted by them; and he was satisfied that the Government had sent it in that form because they believed it would be the best form for their discussion. He should vote for Dr. Humphry's motion, in the belief that by passing it they would be furthering the real interests of professional study of the highest kind in Great Britain, and if they lost that opportunity what might happen, in the way of collapse of the various institutions which up to that time had raised the science and practice of medicine and surgery in Great Britain to what it was, he did not himself know; but he did not doubt that that would happen, and he should be sorry to take part in it.

Dr. HUMPHRY then proceeded to reply, and in the first place repudiated the idea that his motion was brought forward for the purpose of shunting the Bill. The object of the resolution was simply to get reinserted in the Bill that which they had reason to know was not in the Bill in consequence of the opinions which had been pressed on the Government by the Scotch. One of the difficulties which had been experienced by those who had advocated the resolution, was to come to close quarters with the gentlemen taking the opposite view, and he confessed that for a long time he began to fear that there would be no clearly defined argument against the resolution and the principle which it involved, and that the opponents would stand upon the simple unassailable rocks of "I can't!" and "I won't!" against which the argumentative billows of the supporters of the resolution would be fruitless. Then certain arguments began to transpire in Mr. Turner's speech, many of which he thought were quite unworthy of Mr. Turner. He (Mr. Turner) said there could not possibly be uniformity. Of course there could not be exact uniformity. They might as well expect uniformity in individuals as the exact uniformity which Mr. Turner seemed to suppose they expected. What they were striving for was that fair reasonable uniform standard of examination which the public were entitled to expect, and nothing more than that. Mr. Turner had also remarked that it would give great facility for the work of cram, but he had given no reason whatever to show why an examination which would be conducted by different persons selected under a Committee of Reference, coming from different parts, and holding office for a limited period, could be more easily prepared for by cram than an examination which was conducted by certain gentlemen throughout the whole period of their lives, and for whose examination he (Dr. Humphry) should have thought it would have been much more easy for the students to be prepared. But after a time the real point came out. The Scotch Universities were successful and were prosperous; they were doing well; their coffers were full. *Beates possidentes*; far be it from him to grudge the Scotch universities their prosperity and welfare—and he would certainly, as one cause, attribute that prosperity to the excellence of their teaching;

but, nevertheless, they must bear in mind that there were two thousand medical students in Scotland, and England had a considerable interest in them. They knew well that the road to England from Scotland was a well-travelled road; and not only that, but the road to Scotland was in like manner freely and very easily trod because Englishmen appreciated the good education of Scotland. It was well known that he had no low estimate of the examinations in the Scotch universities, but the fact remained that Englishmen went to Scotland for the purpose of acquiring their wings, and that they flew back winged and fledged, and endeavoured to soar above the ordinary level of the English practitioners. That was a considerable grievance to Englishmen. They must bear in mind the position of the English universities. It was owing to their position in the main that the degree of Doctor was held in such high estimation, and that the Scotch universities did to a considerable extent profit by that which was to the injury of the English universities. The comparative number of degrees granted by the Scotch and English universities had been brought out as rather disparaging to the English universities; but the small number of English degrees was owing to the difficulty of obtaining them, and the large number of Scotch degrees was partly owing to the facilities for obtaining them: and in that the grievance lay. The object of the resolution was, while it was yet time to induce the several corporate bodies to take the matter into their own hands in each division of the kingdom, and frame such a scheme as they in their wisdom should feel to be best suited to their own division. England had framed a Scheme which suited itself. Let Scotland do the same. Let Ireland frame the measure best suited for Ireland. They individually would know far better than the Privy Council or the Medical Council what was best for themselves. That really was all —that they should simply be compelled to form a voluntary combination. (Laughter.) There was nothing more worth fighting for in this world than freedom, and let them retain freedom. Let them have three systems, but let them combine together for that one purpose. The sole object of the resolution was to give such a feature to the Bill as would prolong the liberty of the several corporations, and regulate the examinations and education under the Bill.

The Council then divided, when the motion was declared to be carried by a majority of four, fourteen (including the President) voting for the resolution, and ten against.

Dr. Pitman then moved the following resolution:—"That the duties of the Medical Council in relation to the various medical authorities (whether in separate or in joint action) should not be extended to the initiation of the examination-rules under which qualifications are to be granted, but should in general remain restricted, as now, to duties of superintendence and control, with power of making representation to the Privy Council in cases of default." He said that Clause 14 of the Act proposed to give to the Council further powers with regard to the examinations, but in reality it simply increased their duties without giving any very great increase of power. Under the Act of 1858 the duties of the Council were simply those of revision to ascertain what courses of study were required, and what education the students had to go through. Then, in case of the recommendations of the Council not being attended to, they were to appeal to the Privy Council, which might then suspend the right of registration in respect of qualifications granted by any college or body. It did not seem to him that the powers of the Council for the performance of those duties were in any way benefited or increased under the Act. Their increased duties were—first, the laying down of rules for regulating the examinations; secondly, the determination of the subjects thereof; thirdly, the standard for passing; and fourthly, to lay down rules for the method of conducting the examinations. He would venture to ask how long the Council would have to sit to frame regulations for the examinations of all boards throughout the country. Those who had sat on the conference which had prepared the regulations for the English Conjoint Scheme, which were stated to be some fifty in number, would have some idea of what would be required of the Council if it undertook that duty. Then was it at all desirable that it should do so? First of all, it implied that the twenty-four gentlemen sitting round that table were more competent to lay down regulations, for instance, for the course of study for surgery than the twenty-four gentlemen constituting the Council of the Royal College of Surgeons—which he very much doubted. He did not think, however willing the corporations might be to give up certain rights, provided conjoint boards were established for the public good, that they would be prepared to set their seal on qualifications to be issued by them without having some voice in the conditions under which they were to be granted. Looking at the clause, and remembering the arguments which had been adduced against the introduction of conjoint boards, he was much struck with the manner in which it resembled certain resolutions of the Branch Councils for Scotland and Ireland, and he thought that the wind which blew from the north some few days back had brought with it very bad advice, for he did not think that the introduction of the clause was at all likely to improve the condition of the profession. It did appear to his mind that it was such a cumbrous and costly mode of procedure that even if the Council were willing to undertake it he doubted whether it would be possible to carry it out.

Dr. Rolleston, in seconding the resolution, said that he thought the Medical Council were fit for higher duties than regulating examinations, and the proposal of the Bill would lead to a great extension of the session, and consequent increase of expense.

Dr. Andrew Wood said that whatever the blast from the north had brought with reference to the Bill, it certainly had not brought the clause under discussion, and he should with great pleasure have seconded Dr. Pitman's motion. He had always thought that to institute regulations and laws with reference to a matter of that kind would be an undue interference with the functions of the examining bodies.

Sir Dominic Corrigan supported the motion.

Sir William Gull said it was clear that Section 14 itself was framed for the purpose of producing a conjoint scheme for the United Kingdom, and the objection was rather to the sub-clause of the section. The section itself was most important for them, and the only thing they wanted to bring before the Government was the manner in which the clause was proposed to be carried out. It showed that they must have a conjoint scheme for each division of the kingdom, or the Act could not be carried out.

The motion was then unanimously agreed to.

On the motion of Mr. Simon, seconded by Dr. Andrew Wood, the Council went into committee on the proposed Bill.

Dr. Andrew Wood then moved, seconded by Sir James Paget, that Clauses 1 [construction and short title] and 2 [as to date of commencement of Act] be approved.

The motion was agreed to.

Dr. Andrew Wood moved, and Mr. Turner seconded, that Clause 3 [necessity of double qualification for registration] be approved.

Mr. Macnamara said he had been requested to suggest an alteration in this clause: that instead of a double qualification it should be a triple qualification, and that before a candidate could be put on the Register he should acquire a qualification in midwifery. He should therefore move accordingly.

This motion did not find a seconder, and was consequently dropped.

Mr. Simon then moved the following amendment:—"That the Council so far approves of the intention of Clause 3 as to be of opinion that none but persons whose qualifications have been tested in medicine, in surgery, and in midwifery, should in future be admitted to the Medical Register; but that, as regards the manner in which effect should be given to this intention, the Council refers to its previous votes on the subjects of conjoint boards and examination-rules."

Dr. Humphry seconded the amendment.

The Council then divided, and the amendment was declared to be carried by thirteen against ten.

The Council then resumed.

The President announced that he had received a letter from Dr. West, the President of the Obstetrical Society of London, enclosing copies of the amended regulations proposed by the Society for the examination and registration of midwives, and pointing out that the Bill affirmed the principle for which the Society was anxious, leaving the details and control of its working in the hands of the Council. It also contained a suggestion that the Obstetrical Society should be allowed an opportunity of explaining their scheme and of answering objections which might occur to the Medical Council as to its details.

The communication was ordered to be entered on the Minutes.

Sir James Paget then moved, and Dr. Andrew Wood seconded—"That the request of the Obstetrical Society be complied with, and that they be informed that the Council has agreed to admit them to an interview on Tuesday, at two o'clock p.m."

The resolution was put, and carried.

Moved by Dr. Andrew Wood, seconded by Dr. Aquilla Smith, and agreed to—"That the annexed table, showing the results of professional examinations for degrees, diplomas, and licences granted in 1877 by the bodies named in Schedule (A) of the Medical Act be received and inserted in the Minutes."

This table showed that out of a total of 2496 candidates for the final examinations, 534 were rejected and 1902 passed. Out of this number the Royal College of Physicians of London passed 120; the Royal College of Surgeons of England, 439; the University of London, 34; the Royal College of Physicians of Edinburgh, 115; the Royal College of Surgeons of Edinburgh, 56; the University of Edinburgh, 108; King and Queen's College of Physicians in Ireland, 175; Royal College of Surgeons in Ireland, 115; and Queen's University, Ireland, 79.

The Council then adjourned.

Fourth Day—Saturday, April 13.

The Minutes of the previous meeting were read and confirmed.

Dr. Storrar asked for an explanation of the grounds upon which a petition from the University of Glasgow to the Lords spiritual and temporal should be put upon the programme. It was not addressed to the Medical Council, as far as he could see. If it was made a general practice to put public petitions on the programme, it would drain very seriously the finances of the Council. He had previously called attention to the cost of printing.

Dr. Andrew Wood remarked that previously amendments had been put upon the Minutes.

Dr. Storrar said that such petitions had been addressed to the Council.

Dr. Andrew Wood said that the object of putting this petition on the programme was to show what the University of Glasgow thought of the Bill. He could not see why they should suppress the defence of these Scotch universities. They had been very hardly treated.

Mr. Turner thought that something depended upon the exact form in which the petition reached them. He presumed that it had been addressed to the President.

The President said that it came addressed to the Registrar. He (the President) agreed with Dr. Storrar as to the necessity of keeping down the expenses of printing. The insertion of the document in question was a question of judgment. When it came into his hands, he must either lay the single document before the Council, which was impossible, or put it on the programme for their perusal, and he had taken the latter course. He was inclined to think that it would be very undesirable, when such a document as this reached the President, that he should hinder their having it in their possession. It was quite another question whether it should go upon the Minutes.

Sir William Gull agreed with Dr. Storrar that, as the petition was not addressed to the Council, they ought to have nothing to do with it.

Dr. Quain thought that the Council should be vindicated from the charge that it wished to suppress anything. The Council did not wish to suppress anything.

Dr. Pettigrew said that, as representative of the University of Glasgow, seeing this difficulty, he would take upon himself the privilege of presenting a copy of the petition in question to the Council, in the hope that it would be accepted. The petition was as follows:—

Petition of the Senatus Academicus of the University of Glasgow.

Medical Act (1858, *Amendment Bill.*

Unto the Right Honourable the Lords Spiritual and Temporal of the United Kingdom of Great Britain and Ireland, in Parliament assembled,

The Petition of the Senatus Academicus of the University of Glasgow, under the Corporate Seal of the University,

Humbly Sheweth,—That a Bill is now depending before your Lordships' House, intituled "An Act to amend the Medical Act, 1858."

That your petitioners, as representing the interests of the large and important medical school of the University of Glasgow, view with much satisfaction the introduction into your Lordships' House of this measure.

That your petitioners especially approve of its main provisions—viz., first, that which renders a double qualification a necessary condition of registration; and secondly, that which empowers the General Medical Council to prevent the registration of a qualifying licence by any medical authority in respect of an examination lower than a fixed minimum, to be determined by the Council.

That your petitioners are further glad to have this opportunity of expressing their satisfaction that the element of compulsory conjunction of medical authorities forms no part of this Bill. Your petitioners have always been, and still remain, of opinion that such conjunction would tend to lower the standard which the medical schools of the Scottish universities have maintained under the existing system, whereby the examinations are conducted by a board consisting partly of professors and partly of other examiners unconnected with the University, who are elected by the University Court in respect of their special fitness for the office.

That your petitioners, while thus cordially approving of the main features of the Bill, venture at the same time to advert to one point in which it appears to them that the language used is open to misconstruction. Section 9, sub-section 7, seems to your petitioners to be expressed in a way which might imply the conferring on the Medical Council of a power to interfere with the right of a medical authority to exact a higher degree of knowledge than the Council might think necessary for a qualifying licence, inasmuch as it provides that the Council may, from time to time, make orders for the registration and *the removal from* the Medical Register of any diplomas "which appear to the Council to be granted after examination by any of the medical authorities, in respect of a higher degree of knowledge than is required to obtain such qualification as entitles the holder to be registered." The Section 14, sub-section 1, might also, in its present form, imply a similar control over a medical authority exacting a higher qualification than the Medical Council might think necessary. Your petitioners cannot suppose that it was intended that either of these clauses should bear such a construction, but their phraseology seems to require amendment. Your petitioners would also represent that the exercise of any large power of control conferred on the General Medical Council should be subject to the revision of the Privy Council.

That, for the reasons above stated, your petitioners humbly pray that the essential principles of the Bill introduced into your Lordships' House by the Lord President of the Privy Council may become law.

And your petitioners will ever pray.

Signed in name and by appointment of the Senatus Academicus of the University of Glasgow, and sealed with the Common Seal of the University, at Glasgow, this 9th day of April, 1878.

John Caird, D.D., Principal.

Mr. Simon had much pleasure in moving that the foregoing petition be accepted and entered on the Minutes. He did not think that this question was raised by Dr. Storrar with the desire to suppress anything; but it was simply as a matter of precedent, and on the subject of precedent they ought to be prepared to consider whether petitions for or against a Bill should appear upon the Minutes. If all documents of this kind were put upon the programme, their treasurer's funds would soon be brought into a state of collapse.

Dr. Storrar said that it was monstrous to suppose that he was influenced by any hostility to the University of Glasgow. All that he desired was to save the purse of the Council, which had been most grievously afflicted by an amount of desultory matter which had been introduced from time to time.

The motion for the acceptance of the petition was seconded by Mr. Bradford, and carried.

The President announced that the Lord President of the Privy Council was prepared to receive members of the Council on Monday, at one o'clock; therefore it would be necessary to set apart the time after half-past three, in order to decide who would go, and in what form, and also what should be the communication to be made.

Mr. Simon moved that the resolutions already passed by the Council with reference to the Medical Bill be laid before the Lord President. With regard to any that might be passed that afternoon, they would be probably only on details, and those details would be of importance to communicate to his Grace before the House went into committee.

Dr. Andrew Wood said that if they went to the Privy Council with those resolutions which had been passed already, and which were objections to the Bill, it would appear that they wished to prevent the Bill from being passed. There was a good deal in the Bill that was good, and it would be well to help the Government in it.

Dr. Rolleston said that it was agreed that they should address themselves to-day to the clause relating to the dentists, the midwives, and the women questions; and he thought that they had better do so at once.

Mr. Simon said that if it was thought desirable not to go into his motion now, it could be postponed until the latter part of the afternoon.

The President said that he understood that the wish of the Council was that they should proceed from where they left off yesterday.

The following letter from the President of the Dental Reform Committee was read:—

To the President and Members of the General Council of Medical Education and Registration of the United Kingdom.

Gentlemen,—With the authority and in the name of the Dental Reform Committee,(a) I beg to be allowed to bring to the notice of the Medical Council the following facts:—That the Committee had its origin in a meeting of dental practitioners publicly convened and held at Manchester, August, 1875. That the Committee consists of fifty-six members, chosen with the view of a fair representation of practitioners from all the great towns of the United Kingdom, the number representing London being ten. That the Dental Practitioner Bill has been framed at the instance and under the instruction of this representative Committee. That before its introduction to Parliament by Sir John Lubbock it had been submitted to and received the approval of the surgical corporations of the United Kingdom, the Edinburgh College of Surgeons only taking exception to one or two of its clauses, as shown in the correspondence. (Paper A.)

Since the Bill has been in Parliament, upwards of eleven hundred dental practitioners have petitioned the Legislature in its favour. (Papers B and No. 9.)

Of the dental practitioners who hold medical or surgical qualifications (we believe they do not exceed ninety in number), sixty-eight have memorialised members of Parliament individually in favour of the Bill. (Papers C and No. 9.)

At the Dental Conference, held in Edinburgh, October 6, 1875, the majority of the Scotch dentists were present and unanimously voted in favour of dental education as organised by the College of Surgeons of England, and of its extension (Paper No. 6). The dental practitioners of Glasgow, to the number of thirty-eight, all, I might say, have memorialised their members; and the majority of the dentists of Edinburgh and of Greenock have also memorialised their respective members of Parliament in support of the Bill.

Thus it will be seen that the majority of the dental practitioners of the United Kingdom have individually approved the Bill and urged upon the Legislature to make it law. (Paper No. 9.)

As respects the Government's view of the question, Lord Sandon at the second reading, March 19th, said (I quote from a *verbatim* report):—

"On behalf of the Government, I may say that we are happy to assent to the second reading of this Bill, on the ground that the general object is a good one; but we must reserve to ourselves great freedom to introduce such alterations in committee as we may think fit. There are many things we desire to alter, but we agree to the general principle, and are ready to assent to its second reading."

In the name, therefore, of the Dental Reform Committee and of the majority of dental practitioners, I earnestly solicit a favourable consideration of a Bill the principles of which have been approved by the Government, by the surgical corporations, and the details of which have been approved by the majority of dental practitioners, and by a very large proportion of those holding medical qualifications. (Paper No. 9.)

The aim of the Bill is to establish and make general one uniform education for the dentist, to be tested by examination and attested by registration; and the Committee consider the dental education originated by the College of Surgeons will, if rendered compulsory, fulfil that end very completely; and the Bill seeks, therefore, to extend to the surgical corporations of the United Kingdom the powers which have been exercised with acknowledged public advantage by the English College. (Papers Nos. 4 and 5.)

I may point out that, since the Bill was submitted to the Council in November last under strong pressure a clause has been accepted exempting qualified medical practitioners from the operation of Clause 3; and also that at the instance of Dr. Lyon Playfair a clause extending the power of granting dental degrees to those universities of the United Kingdom which grant surgical degrees has been agreed to by the Committee. (Paper No. 8.)

In respect to the several clauses of the Bill, the Committee attach great importance to the upholding of the constitution of the boards of examination in dental surgery as ordered in the Dental Charter; namely, that the boards shall consist of surgeons and registered dentists in equal numbers, and that the whole number shall not be less than six. The Committee would be strongly opposed to any proposition for altering the designation licentiate in dental surgery, save so far as the term dentistry may be proposed as synonymous by boards not yet constituted. In respect to the use of designations, it cannot be denied that a person who is pronounced by a board, consisting of surgeons and dental surgeons, competent to practise dental surgery, is, in fact, when so practising, "a dental surgeon," and that, as such, may describe himself. The Court of Queen's Bench has decided that a person practising as a dentist is at liberty to call himself a surgeon-dentist without infringing any existing law. In the case of Ladd *v.* Gould the Lord Chief Justice said:—"Why, dentists have always called themselves surgeon-dentists; custom, immemorial usage, have sanctioned it; everybody understands what it means, and knows them as such." And this is confirmed by the testimony appended of many practitioners, who declare that they have not been regarded by the public as surgeons, but as dental practitioners only. This list, had it been thought necessary, might have included the signature of hundreds instead of tens of dental practitioners. (Papers No. 7, page 10; and 10, page 14.)

Could it have been maintained that the term dental surgeon means dentist and surgeon, then the term veterinary surgeon must have been also held to mean veterinarian and surgeon, and action must have been taken against the veterinary as well as the dental practitioner.

It would not be consistent with justice to deprive existing practitioners of a legally justified privilege by prohibiting the use of a title sanctioned directly and indirectly by "immemorial usage"; and as the Bill provides for the full education in dental surgery of future practitioners, it would be inconsistent with usage—justice is not too strong a term—to attempt to prohibit their using the truly descriptive designation of dental surgeon. Again, the Bill contemplates registering foreign dental qualifications. The title of doctor is uniformly used throughout the United States by qualified dental practitioners, the qualification being doctor of dental surgery (D.D.S.) or doctor of dental medicine (D.D.M.); and these titles, acquired at less cost of time and money than the licentiateship in dental surgery, would give the American an advantage over the English practitioner if the latter were debarred from the use of the title of dental surgeon or surgeon-dentist, and force the student to cross the Atlantic for his dental education and qualification. (Paper No. 3.)

The Bill has been drawn on the lines of the Medical Bill of 1858, and the great majority of the clauses are but adaptations from the latter; such have been noted in a copy of the Bill in the hands of the President.

For the reasons put forward and supported by the evidence contained in the papers handed in, and for many other obvious reasons which do not need enumeration, the majority of dentists of the United Kingdom, and a very great majority of those dentists who hold registered medical qualifications, earnestly hope the General Medical Council will approve and support with the full weight of its influence the Dental Practitioners Bill.

But should the Government ultimately require that the Dental Bill shall be embodied in the Medical Bill introduced by the Duke of Richmond and Gordon, 1878, or should the Medical Council think it desirable that the Dental should be embodied in the General Bill, then, on behalf of the Dental Reform Committee, I beg to suggest that, in the presence of the well-matured and very efficient system of dental education of the College of Surgeons of England, it is not desirable the Medical Council should be required to undertake to originate a new scheme of education as proposed in the Medical Bill, Clause 23 (1), but that the Council should have full power to approve, modify, or refuse its assent to the educational details from time to time proposed by the surgical bodies authorised in the Bill to grant dental qualifications; also, that all boards of examiners in dental surgery, Clause 23 (2) shall consist of at least six persons, and that one-half of whom shall be surgeons, and the other half qualified dental practitioners; otherwise the board might consist wholly of surgeons, the half of whom, without any practical knowledge of dental surgery, might under Clause 23 (3) enter their names in the Dentists' Register on the payment of a fee, and very imperfectly represent dentists upon the board. Throughout the Clause 23 and in Clause 22 the terms "dentistry" and "dental surgery" are used as though there was or might be some difference in their meaning. The Committee urge that the text should be made quite clear, so as to show that the terms are really synonymous. The same observation applies to the titles used by dental practitioners, and the Committee urge in this case also that the terms "dentist," "dental practitioner," "dental surgeon," and "surgeon-dentist" shall, as heretofore, and for reasons already stated, mean a person who is registered as in practice as a dentist before the passing of the Act, or a person who holds a registered dental or medical qualification.

Clause 24 of the Dental Practitioners Bill, exempting registered persons from serving on juries, etc., and also Clause 31, "provision for certain students," are omitted from the Medical Bill, 1878, and both of which the Committee are strongly of opinion should be inserted.

The draughtsman of the Dental Practitioners Bill has prepared amendments for insertion in a copy of the Medical Bill, which would secure to the dentist the before-mentioned results sought to be obtained in the Dentists Bill, to which I beg to direct the attention of the Council.

In conclusion, I may justly state that much time, labour, and money have been spent in bringing the Dental Practitioners Bill into its present favourable position, and on this ground ask that even though the Medical Council may think fit to recommend to Government its absorption into the Medical Bill, yet that the Council will not recommend that the Committee should abandon the Dentists Bill until it is quite certain that the Medical Bill will become law. (Signed) John Tomes,

President of the Dental Reform Committee.

(a) Meeting of the Dental Reform Committee, held March 30th, 1878: "That this meeting, recognising the necessity of readiness in reference to the prospective action of the General Medical Council and of the Government towards the Dental Practitioner Bill, and towards the Bill to amend the Medical Act of 1858, hereby empowers the President, John Tomes, to use his discretion in acting between these two bodies in behalf of the Dental Reform Committee in reference to the Dental Practitioner Bill."

The Council then resolved itself into a committee of the whole Council for the adjourned consideration of the Medical Act (1858) Amendment Bill.

Dr. Rolleston said, with reference to the dental question, that if the Council referred to the latter part of the letter which had just been read they would find the following:—"But should the Government ultimately require that the Dental Bill shall be embodied in the Medical Bill introduced by the Duke of Richmond and Gordon, 1878, or should the Medical Council think it desirable that the Dental should be embodied in the General Bill; then, on behalf of the Dental Reform Committee, I beg to suggest that in the presence of the well-matured and very efficient system of dental education of the College of Surgeons of England, it is not desirable that the Medical Council should be required to undertake to originate a new scheme of education as proposed in the Medical Bill, Clause 23 (1), but that the Council should have full power to approve, modify, or refuse its assent to the educational details from time to time proposed by the surgical bodies authorised in the Bill to grant dental qualifications." This was precisely in the same spirit as that which was unanimously agreed to by their Irish, Scotch, and English friends, and he proposed that they should accept it. He would not pledge himself strictly to it, but he put it forward on the general ground that the work would be much better done by a body like the Medical Council, which was practised in dealing with such questions as the supervising of these examinations. He hoped that they would go on exercising the same supervising functions, and extend them in that direction. Another argument for their doing this was that unless they took this dental business into their own hands, they might succeed for the time in persuading the Government to drop this question, and then they would have, as a result, more Medical Bills and more State interference. The less the medical profession had to do with the State, the better. Let the Council get into this Government Medical Bill all the

occasions which could call for Government interference at all. Let them, therefore, get this dental matter settled, and have an end of Government legislation, and then let them set to work and regulate their own affairs for themselves with as little Government interference in the future as might be possible. The resolution he wished to propose was—"That it is not desirable the Medical Council should be required to undertake to originate a new scheme of education as proposed in the Medical Bill, Clause 23 (1), but that the Council should have full power to approve, modify, or refuse its assent to the educational details from time to time proposed by the surgical bodies authorised in the Bill to grant dental qualifications."

Mr. Turner proposed, and it was agreed to by Dr. Rolleston, that the words "medical bodies" should be substituted in the resolution in place of the words "surgical bodies." He (Mr. Turner) also suggested that Dr. Rolleston should preface his resolution by a statement, on the part of the Medical Council, that provision should be made in the Medical Bill for the registration of dentists.

Mr. Simon suggested the insertion of the words "or otherwise" after "Medical Bill."

Dr. Rolleston said that he would accept Mr. Turner's proposal, and would move those words first as a separate resolution. He was sorry that he could not take Mr. Simon's words. He (Dr. Rolleston) was anxious that the Bill should deal with everything together. They required to have the whole medical question settled once and for all. He would move, as his first resolution—"That it is desirable that provision should be made in the Medical Act (1858) Amendment Bill for the registration of dentists."

Mr. Bradford seconded the resolution.

Dr. Andrew Wood said that the question for the Council to decide first was, whether it was desirable that the dentists' question should be settled in the Medical Bill of the Duke of Richmond, or in the Bill which had been brought in by Sir John Lubbock. He (Dr. Wood) believed that some of their bodies did not much care about the registration of dentists; but, however, if they were to be registered, the question was, whether it should be provided for in the Medical Bill, or in a separate Bill? His own opinion was that it would be better to deal with it in the present Bill. He agreed with Dr. Rolleston, that it was better to gather up these different matters, such as dentistry, midwifery, lunacy, and so on, into one Bill, rather than have them spread over a number of different statutes.

Mr. Simon said that he was strongly of opinion that the form in which the thing was proposed in the present Bill was not so good a form as that proposed by Sir John Lubbock. The general proposal he did not object to.

Sir Dominic Corrigan thought the resolution quite unnecessary. He agreed with Mr. Simon's proposed amendment, namely, that provision should be made in the Medical Bill or otherwise. The Council was already hampered with so much work that it was idle for them to take up this subject. He ventured to say that there was not a man upon that board who was competent to pronounce an opinion upon dentistry; and for them to take up dentistry would be to deal with a subject about which they knew nothing. He should, therefore, support Mr. Simon's proposed amendment—that it was desirable that provision should be made for the registration of dentists, either in this Bill or otherwise, so as to leave a fair and open field for discussing all the cases in which registration may be enforced; but he should object to throwing the labour upon the Medical Council, which had already too much to do.

The motion of Dr. Rolleston was then carried.

Dr. Rolleston then moved his second resolution, altered as follows:—"That it is not desirable that the Medical Council should be required to undertake to originate a new scheme for this purpose, but that it should be entrusted with the same supervisory powers as regards the educational details from time to time proposed by the medical authorities authorised in the Duke of Richmond's Bill, as it already exercises with regard to other examinations."

The following amendments were suggested by Mr. Simon, and accepted by Dr. Rolleston:—"That instead of the words 'the same,' before 'supervisory powers,' there should be inserted the words 'some such': and that after the words 'new scheme' there should be added the words 'of examination rules.'"

Sir Dominic Corrigan thought that the Council had now succeeded in making itself utterly ridiculous. They were going to supervise the examination and education of dentists in some such plan as had been exercised upon other medical subjects. According to this resolution, they were to exercise some such power as in a midwifery examination; so that when an old lady was having a new set of artificial teeth, some members of the Council would have to go and supervise the process. They had left the question of pharmacy to a separate Bill, and it would have been better to do the same with regard to dentistry.

The motion was then carried.

Dr. Aquilla Smith thought that in Sub-section *b* (Section 4), clause 23, the words "dental surgery" were very objectionable. A great deal of objection had been taken to men calling themselves surgeon-dentists who were not surgeons. He thought it very desirable that the word "surgeon" should not occur in this section. Sub-section 6, letter *a*, clause 23, was: "The registration of a person in the Dentists' Register shall entitle that person to practise dentistry, but not any other branch of medicine or surgery." Good care was, therefore, taken to exclude dentists; and he thought that it was very desirable that the words "dental surgery" should be omitted in the sub-section which he had mentioned.

Mr. Simon hoped that that question would not be gone into. It was a merely etymological question. He might remind the Council that the College of Surgeons might be presumed to be a reasonable judge of what was the meaning of the word "surgery," and that the licentiates of the College of Surgeons for dentistry were licentiates in dental surgery.

Dr. Andrew Wood thought that it was a matter of great principle. They had been altogether opposed to the idea that dentists should be registered as dental surgeons, because the object of registering dentists was to enable the public to know who were registered dentists, and who were not; but if they were to register them as dental surgeons, how were the public to know whether a man was simply a deutist, or whether he had a surgical diploma? He (Dr. Wood) would have no objection to a man's being registered as a dental surgeon if he held a diploma; and if he did not hold a diploma he should not be entitled to take the title of dental surgeon. That was the view of his own college. He was persuaded that if dentists could call themselves dental surgeons without going in for the diploma of the College of Surgeons, then they would be content with the mere dentist's certificate.

Mr. Simon said that it would be quite open to the College of Surgeons of Edinburgh to provide that the qualification which it gave was called simply a qualification of dentistry. He wished to protest against an attempt to tyrannise over the popular use of words. ("No, no.") The influence of this Council would be wasted, and ridicule would attach to its proceedings, if small matters like this were permitted to occupy its time. To pretend that the use of the word "surgeon" was to be protected in this extreme way was an outrage on the common sense of language in this country. The term "surgeon-dentist" had been recognised as a special term for dentist by Lord Chief Justice Cockburn in the Court of Queen's Bench. Let them not attempt to vote against judgments of that sort. This matter was a mere northern crotchet. ("No, no.")

Dr. Storrar supported the view taken by Mr. Simon. It would be a piece of Quixotism on their part to attempt to reverse the ordinary accepted term which had been hitherto applied to persons practising dental surgery; and by endeavouring to cut off the word "surgeon" they would be inflicting some kind of possible degradation upon a class of practitioners whose education had now taken a distinguished place before the public, and upon a profession which had become really essential and useful to the public. For, after all, they did not contemplate that dentists should have the full education for practising as surgeons, but such an amount of education and examination in surgery as would qualify them for the general exercise of their special department. Seeing that the term was well established, it would be a most improper proceeding on their part to endeavour to alter it. In a case which occurred nearly nineteen years ago, a man was prosecuted for using the term "surgeon-dentist," and, in summing up, the Lord Chief Justice Cockburn—who was scarcely more remarkable for his distinguished legal attainments than for his profound common sense—said, "Why, dentists have always called themselves surgeon-dentists; custom, imme-

morial usage, have sanctioned it. Everybody understands what it means, and knows them as such." He (Dr. Storrar) thought he need add nothing more.

Dr. ANDREW WOOD said that if that were the case it was clear that there should be no registration of dentists; for if a man passed the examination and was put on the Register, if they were to have dental surgeons at all every man should be put on as dental surgeon. The case of a veterinary surgeon was very different. He was educated as such, and he operated upon the whole body of the horse. He (Dr. Wood) thought that it would be far better that the registration should be confined to dentists.

Dr. AQUILLA SMITH moved—"That in paragraph (*a*) of clause (4) of Section 23 of the Bill, the words 'or in dental surgery of' be omitted." He thought it would be more dignified and more creditable to the dentists themselves to be registered in a separate list according to this Bill, which would prevent them from practising in medicine and surgery. It was very essential to the interests of the dentists that there should be no confusion between that body and surgeons.

Sir DOMINIC CORRIGAN seconded Dr. Smith's amendment. He (Sir Dominic) thought it exceedingly important. To register a certain class of men as surgeon-dentists would be to introduce among the dentists men whom the dentists would be very glad to get rid of. It would be very much more satisfactory to them to stand forward as a properly educated class of men than as a sort of hybrids. With regard to the observation made by the Lord Chief Justice, on which Dr. Storrar had placed such reliance, he (Sir Dominic) did not attach to it the slightest value in the world. Generally speaking, lawyers and judges were, on medical matters, profoundly ignorant. The Lord Chief Justice, in stating that the term "dental surgeon" had been in use years before, showed his utter ignorance of the Medical Act which was passed in 1858. For them to leave in the word "surgeon," and apply it to those dentists who were not surgeons, would leave the dentists in mid air, like Mahomet's coffin.

Dr. ROLLESTON said that he should be sorry for it to go out from the Council that they were going to do such an ungracious thing for this most valuable class of practitioners called dentists, who had done as much as any branch of the profession to raise themselves during the last few years.

Sir JAMES PAGET said that the term "licentiate in dental surgery" had been adopted by the Royal College of Surgeons under its charter for those who had passed examinations within one year of the passing of the Medical Act. In 1858, doubtless with due consideration, the Medical Act was passed. In 1859 the College of Surgeons in England obtained a charter to grant licences to practise dental surgery. There was no objection then made to the use of the term. To propose the abolition of the term "dental surgery" would be to propose that it would be illegal for these persons, who had received licences under the royal charter, to use the very names then conferred upon them. It would be to abolish the royal charter, and to put under a penalty of £20 anyone possessing a licence in dental surgery if he should use it; and to set aside the judgment of the Court of Queen's Bench, which had never been impugned.

Mr. SIMON suggested that Dr. Smith should withdraw his motion. It would be open to the College of Surgeons of Edinburgh and the College of Surgeons of Ireland to use any language which they thought proper. They might call their dentists by any name they pleased; but the words which Dr. Smith proposed to strike out were in the daily use of the Royal College of Surgeons of England, and that term which the College was empowered to use by its charter could not be abolished.

A division was then taken on Dr. Smith's motion, three hands being held up in favour of it, and twelve against it. The motion was therefore lost.

Sir JAMES PAGET moved—"That the Medical Council approves the portion of the Bill that relates to the registration of dentists."

This motion was seconded by Dr. WOOD, and agreed to.

On the question of the registration of foreign and colonial dentists, it was moved by Dr. ROLLESTON, seconded by Mr. SIMON, and carried—"That the Council suggests the adoption or Clause 11 of Sir John Lubbock's Bill, viz.:—'The General Council may, if they see fit, establish in the Register of Dentists distinct sections for the registration of persons (not being British subjects) resident in the United Kingdom, and possessing such foreign qualifications as in the opinion of the Council are a sufficient guarantee for the possession of the requisite knowledge and skill for the efficient practice of dentistry, and for the registration of persons so resident and possessing such colonial qualifications as in the opinion of the Council are such guarantee as aforesaid: any person registered in either of such sections shall be deemed for all purposes to be registered under this Act'; instead of Clause 5, Section 23, of the Government Bill, viz.:—'There shall be also entered in the Dentists' Register, in separate alphabetical lists, such colonial and foreign dentists as are authorised by the scheme to be so registered, and the scheme shall make the like provision for the registration of colonial and foreign dentists as is made by this Act with respect to the registration of colonial and foreign practitioners in the Medical Register.'"

The Council then proceeded to consider the question of the registration of foreign and colonial practitioners. The first portion of Clause 7 was read by the Registrar, as follows:—"The medical diploma or diplomas granted in a British possession or in a foreign country, which are to be deemed recognised medical diploma or diplomas for the purposes of this Act, shall be such medical diploma or diplomas as may be recognised for the time being by the General Medical Council as entitling the holder thereof to practise medicine and surgery in such possession or country, and as representing at the time of the grant thereof a degree of knowledge, as tested by examination, equal to or greater than that which at the same time was required to obtain in the United Kingdom such qualification as entitles the holder to be registered in the Medical Register."

Mr. SIMON said that it would be seen that there was a distinction drawn as compared with what was proposed; and the alteration was not for the better. What was strongly in the minds of the Council last year was that foreign qualifications should not be spoken of in exactly the same manner as they should speak of their own. Their own examinations were visited, but these foreign ones they could not visit. It was felt that unless the Council actually attended the examinations, it would be inconvenient to say "representing positively an equal amount of knowledge"; and the language which last year the Council thought it would be better to employ was sufficient guarantee of the possession of the requisite knowledge and skill for the efficient practice of the profession. He should propose to substitute words to that effect in Clause 7 in the form of the following resolution:—"That in Section 7, lines 7 to 11 of the Government Bill, for the words 'representing at the time of the grant thereof a degree of knowledge, as tested by examination, equal to or greater than that which at the same time was required to obtain in the United Kingdom such qualification as entitles the holder to be registered in the Medical Register,' there should be substituted the following words:—'furnishing, in the opinion of the Council, sufficient guarantees of the possession of the requisite knowledge and skill for the efficient practice of medicine and surgery.'"

The motion was seconded by Dr. ANDREW WOOD, and carried.

The Council then proceeded to discuss Clause 5 with regard to the registration of colonial practitioners with recognised diplomas. The clause runs—"Where a person who either is not domiciled in the United Kingdom, or has practised medicine or surgery or a branch of medicine or surgery for more than ten years elsewhere than in the United Kingdom, shows that he holds some recognised medical diploma or diplomas (as hereinafter defined), granted in a British possession, and that he is of good character, such person shall, upon payment of the registration fee, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the Medical Register."

Mr. SIMON observed that a qualification had been introduced into this clause which was not last year adopted by the Council, namely, that a man should have practised for ten years in the colony. It did not seem to him either necessary or desirable to impose such a restriction. The case of a man running away to the colonies to procure a diploma which he could not obtain otherwise was one scarcely likely practically to arise. If they put three years they would then shut out all tricky acquisition of diplomas. It was not a question of foreign diplomas, but of British diplomas in foreign parts recognised here as sufficient.

Dr. Andrew Wood referred to the provision in Lord Ripon's Bill, Clause 22 of which was—"Where any person proves to the General Medical Council that he holds a medical diploma granted in any British possession or in any foreign country, and that such diploma represents the like degree of knowledge, as tested by examination, to that which is required for obtaining a licence under this Act, and entitles the holder thereof to practise medicine and surgery in the British possession or foreign country where the same was granted, and that he is more than forty years of age and has practised medicine and surgery for *not less than ten years* out of the United Kingdom, or, in the case of persons practising in the United Kingdom at the time of the passing of this Act, for not less than ten years in the United Kingdom or elsewhere, it shall be lawful for the General Medical Council to direct such person to be registered under the principal Act without examination, but upon reasonable proof of character and upon payment of such fee not exceeding the ordinary fee for registration as the General Medical Council may from time to time prescribe." He (Dr. Wood) thought that there was a reason for having a certain period of probation, but he thought, with Mr. Simon, that ten years was too much. A man's character had to be judged of, and this could not be done in one year. He (Dr. Wood) would propose—"That with respect to Clause 5 of the Bill, colonial practitioners must have practised five years after obtaining their diploma, or shall be required to pass the final examination of one of the medical authorities of the United Kingdom. In the latter case he should be entitled to be placed upon the General Medical Register."

Sir Dominic Corrigan thought the matter ought to be decided by the number of cases a man had had. He might have been practising for five years, and have had no patients. (Laughter.)

Mr. Teale seconded Dr. Wood's motion.

Mr. Simon moved, as an amendment, the substitution of the words "one year" in place of "ten years" in Clause 5. The resolution which was passed on the subject last year was in these words—"That medical qualifications granted under legal authority in any part of her Majesty's dominions outside the United Kingdom, and entitling to practise in such part, should be registrable within the United Kingdom on the same terms as qualifications which are granted within the United Kingdom, but in a separate alphabetically arranged section of the Register." Why should they require a man in this country to go through a separate education and examination here, as a condition for registration, when he had got that sort of diploma which they declared, by a general rule, to be satisfactory? He should even be inclined to make his amendment read—"or who has *bonâ fide* practised in the part where his qualification was obtained."

Dr. Storrar supported Mr. Simon. He (Dr. Storrar) thought that a great object was to be secured in treating their colonial possessions generously, and avoiding any possible complaint. He was inclined to go even farther than Mr. Simon suggested, and say that if a separate register was kept, the question of residence might be disregarded.

Mr. Simon: I should have preferred that.

Dr. Rolleston supported Mr. Simon's view.

Mr. Simon referred at some length to the report made last year by the Medical Acts Committee, consequent upon which the resolution had been carried that he had just now read. To limit that resolution now by the obligation of residence would certainly be acting against the sense of what the Council did last year.

Dr. Storrar suggested that the resolution of last year should be embodied and re-affirmed.

Mr. Turner thought it necessary that there should be some *bonâ fide* guarantee, such as was afforded by residence. The Council had no knowledge of how diplomas were given in the colonies, nor did it know how far the candidates might come up to what was required in this country. A probationary period, however, of ten years was, he thought, too long; but he thought there should be a certain *bonâ fide* residence.

Dr. Humphry thought that there should be either such evidence of *bonâ fide* residence, or that there should be evidence that he possessed the practical information required from a candidate in the United Kingdom—namely, that he should pass one of the final examinations required for admission to practice. A five years' residence would be really no hardship upon a man who had just passed.

Dr. Aquilla Smith supported the motion.

Mr. Simon proposed, as an amendment—"That the Council is of opinion that Sections 5 and 6 of the Bill should be brought into conformity with its resolutions of last year."

Dr. Rolleston seconded the amendment. He observed that it was of little use to require a term of practice. The question was whether he had practised well, and this they could not certify. They could say whether he possessed the requisite knowledge, but they could not say that he had used his knowledge. They could not prove that any patient had been wise enough or foolish enough to go to him. He therefore hoped that Mr. Simon's amendment would be accepted, and no mention made of any time.

After some short further discussion, a division was taken on the amendment, when there appeared in favour of it seven, and against it eleven. The amendment was therefore lost.

Dr. Andrew Wood said that as it had been decided that the Council should rise at half-past three in order to arrange for the deputation, he therefore begged leave to move that the consideration of this important question be adjourned, and that the motion which he had moved be taken as a notice of motion for Monday.

Mr. Simon asked that in the meantime the amendment might be taken back, and that it be not considered that there was a proposal before the Committee. He thought it indispensable that the subject should be discussed *de novo*.

Dr. Wood agreed to the proposal.

On the motion of Dr. Andrew Wood, the further consideration of the subject of foreign and colonial degrees and diplomas was adjourned till Monday.

Dr. Rolleston said that on Monday he should be prepared with an amendment to the following effect:—"That Section 5 of the Bill run thus—'Where a person who has not been domiciled in the United Kingdom for a period of three years shows,' omitting the other words in the first three lines of that section."

The Council then resumed.

A short discussion ensued as to the constitution of the deputation which was to wait upon the Lord President at one o'clock on Monday. It was eventually agreed that the deputation should consist of the President, Dr. Wood, and Dr. Humphry.

The President: When your President goes as representing the Council, the only thing which he can possibly do is to represent what the Medical Council has resolved upon. With regard to answering any questions in the way of explaining under what circumstances those resolutions have been passed, that will be entirely unnecessary, because I know that the Lord President has had explanations from every side, possible and impossible, and is likely to have more. That is the fact; so that the only thing that can be done is to hand in the resolutions.

Mr. Simon: Then is it your opinion that that purpose would be answered by simply transmitting the resolutions?

The President: I could not quite say that, because the Lord President understands that it is the wish of the Council to see him, and an appointment has been made for Monday, at one o'clock, for that purpose, in order that he may know the result of what has taken place in the Council. We must tell him that the time has been insufficient to thoroughly discuss the whole Bill.

Mr. Simon: Of course, it will be explained that a further representation will be made to him before the Bill goes into committee?

The President: Yes; I think the Council thoroughly understand the position of business, namely, that the second reading of the Bill is to be taken on Monday in the House of Lords; and I suppose that, in all probability, in the present state of affairs, that Bill would be likely to be read the second time on Monday. No one can answer for that; but I conclude that it is probable that such will be the case; and then, after that, I presume that the result of all the observations which the Council desire to make by way of suggestions on the Bill, great or small, when the Bill has been fully discussed, will be made known at some later period. This is hardly the proper time for that. Perhaps before Monday the Council will be pleased to consider how long it will sit. I think there is a general feeling that there will be no sitting after Wednesday. Then, probably, the members of the Council will be so good as to be prepared,

before that day, with their opinions as to what course will be best to be adopted after we break up on Wednesday. That appears to me to be the real difficulty—the way in which you would like this business to be carried on during the next three months. Parliament will meet a fortnight or three weeks after Easter. Subsequently it will go into committee. In that state of things it will be quite three months before we can have the slightest opinion of what can happen. Perhaps before Monday the Council will make up its mind as to what condition it will leave the matter in, and whether they will wish to meet again before the Long Vacation.

Dr. Andrew Wood said that it would be desirable not to delay the appointment of the Executive Committee beyond Monday. He would therefore propose that at four o'clock on that day the election of the Executive Committee should take place.

On the motion of Dr. Andrew Wood, the standing orders were suspended till the business now before the Council should be completed.

The President referred to a communication which had been received from Dr. Waters, under date of April 12, in which he said that he was happy to hear that the views of the British Medical Association would be submitted to the General Medical Council during its present session; and that he hoped that the Council would give the Medical Reform Committee an opportunity of defending the proposals which had been made.

Mr. Simon said that it struck him that it was quite inevitable that the Council should meet at a later period for the consideration of parts of the Bill; but they could not possibly know when they should do so until they knew in what state the Bill left the House of Lords. Supposing that the Bill kept alive, and reached the House of Commons, it would be quite indispensable that the Council should then proceed to consider it in the condition in which it would then be. That would be the moment for entering into any consultation which they might think desirable with the British Medical Association on the subject of the constitution of the Council. That subject was no part of their present business, and the Bill which they were discussing had no reference to the question.

The President said that he was much indebted to Mr. Simon for having spoken so clearly and definitely upon the matter. He thought that those persons were very much mistaken who considered that, because the Medical Council were not hasty to reply to questions concerning their constitution, they therefore failed to pay attention to the subject. The subject was one of such great gravity that it ought not to be lightly handled; and he felt sure that whenever it was discussed by the Council it would be discussed with care and consideration. He was very glad that the subject was not in the present Bill.

The Council then adjourned until Monday.

Death of Dr. Blessig.—Among those who have been recently carried off by typhus in St. Petersburg is Dr. Blessig, Surgeon to the Ophthalmic Hospital of that city, into which typhus had been carried by one of the patients operated upon. Born at St. Petersburg, and highly educated under von Graefe, Virchow, and other German celebrities, he had established himself in his native city as a highly successful and scientific oculist, having attained a large practice, when he was carried off in the forty-seventh year of his age.—*St. Petersburgh Med. Woch.*, March 30.

Belgian Midwives.—In the discussion which is taking place at the Belgian Academy of Medicine upon the proposition which has been made to allow midwives to employ the forceps, Dr. Warlomont strongly opposed it. So far from extending their powers of doing mischief, he would abridge those which they already possess, and withdraw from them their present permission to employ version and perform vaccination and venesection. "I would prefer," he says, "to see one woman die for the want of the necessary attentions, than to see one hundred perish from too much of their ministrations. As to vaccination, it is losing its character in their incapable hands; and the time has come to restore its prestige by restricting its employment to medical men. Midwives can only be justified on the ground of the necessity of having labours attended at a low charge, and the sooner a substitute for them can be devised the better."—*Gaz. Hebd.*, April 12.

ORIGINAL LECTURES.

ON THE NAILS AND THE DISEASES TO WHICH THEY ARE LIABLE.

By JONATHAN HUTCHINSON, F.R.C.S.,

Senior Surgeon to the London Hospital and to the Hospital for Diseases of the Skin, and Surgeon to the Moorfields Ophthalmic Hospital.

Uses of the Nails—Their Structure—Names given to Different Parts—The True Nail-Root—Various Modifications in Nutrition—Enumeration of the Principal Diseases to which the Nails are Liable.

Gentlemen,—The nails are modifications of the skin at the ends of our fingers and toes, which adapt them to special purposes, or perhaps it might more accurately be said that they are the modified remains of structures which served special purposes in our shoe-less and tool-less progenitors. The nails are of comparatively little use to us; for, however great might be the loss in beauty to the fingers, the substitution of a firm pad of tactile skin in the place of the nails would probably be a decided gain to a considerable proportion of our highly civilised communities. To many quadrupeds, however, the hoof is of the utmost consequence as a protection for the foot, and to other animals the claw and talon serve very obvious purposes in the acquisition of food and the construction of dwellings. Thus, as might be expected, we find very considerable modifications assumed by these appendages in different classes of our "poor relations."

In man the nails consist of curved plates of horny epidermis, which are firmly attached to the upper surface of the ends of the fingers and toes.(a) They are to a considerable extent transparent, and allow the colour of the parts beneath to be seen through. The sides of the end of the digit are not completely covered by the nail, nor is the nail attached to the digit quite up to its end. Excepting at their free ends the nails are everywhere embedded in the surrounding skin, and at their root a thin narrow band of modified epidermis is prolonged forwards on their surfaces. Under the nail is a florid papillary layer (modified *rete mucosum*) to which is due the colour that, in a state of health, is seen through its transparent substance. According to the colour and abundance of the blood in this layer will be the tint of the nail, and it may vary, as the lips do, between extreme pallor or dusky lividity, and the bright pink hue of health. I am not aware that it ever becomes pigmented, or that it ever shows any other changes of colour excepting such as are to be explained by the state of the circulation. When other peculiarities of colour are observed they are probably always in the nail-substance itself.(b) An exception to this statement occurs, however, at the roots of the nails, where a narrow crescent of the papillary structure is much whiter than the rest, and this whiteness being seen through the nail gives origin to the appearance known as the *lunula*. The lunula is largest in the nail of the thumb, it decreases on each succeeding digit, and is often scarcely to be found in the nail of the little finger. It differs much in size in different persons and in different races. In the Negro it can with difficulty be identified.

We must next, for convenience sake, give names to the different parts of the nail. The term *body of the nail* is a convenient expression for the nail itself; the part of the finger on which it rests is the *nail-bed*; the part from which it grows is the *matrix*; the part first produced is the *root* of the nail; its anterior projecting part is its *free edge*; lastly, the overlapping layers of skin which in part conceal its root and sides are the *nail-folds*.

It is convenient to think of a nail as a gigantic flattened hair, the walls of the follicle of which are wanting on one side. Imagine the folds of skin which overlap the borders of the nail so prolonged across it as to meet and conceal all excepting the free edge, and you will then form a clear conception of what is meant; the nail would then resemble a hair which had been cut off close to the mouth of its follicle. Just as hairs grow only from their papillæ, and not at all from the sides of the follicle, so it is with nails; the papillæ at the root of the nail—*i.e.*, at the point just behind

(a) The nail-substance consists of epidermal scales modified in form and firmly cemented together; all the scales are nucleated.
(b) The nail-bed is pigmented in the Negro.

the lunula, and for the most part covered in by the posterior nail-fold—are the structures by which alone the nail is formed. Over its bed it slides gradually on, adhering pretty firmly, but receiving but little addition to its substance.(c) This physiological fact is of much importance in reference to diseased conditions, and more especially must the surgeon keep it in mind in certain cases in which it is desired to entirely prevent the reproduction of a nail. It is absolutely necessary under such circumstances to cut out the papillary root, and it is not necessary to do more. Removal of the nail-body and nail-bed will not prevent its growth if the root be left, whilst removal of the nail-root will cause the nail to fall and wholly prevent its re-growth even although the body and bed be left *in situ*.

We have now cleared the way for the more easy examination of the morbid conditions which the nails present. As might be expected, they share in the changes of health which the body undergoes, and more especially are they likely to suffer when the skin, of which they are parts, becomes diseased. The same influences which cause skin-diseases produce also changes in the nutrition of the nails. They share in the tendency to inflammation of the skin which occurs in the exanthem, or secondary stage of syphilis, and are probably, though in a much slighter and more transitory way, affected during the short-lived skin-affections which characterise small-pox, measles, and the other specific fevers. In eczema of the hands we usually have eczema of the nails; with common psoriasis we find psoriasis of the nails; and in the rare disease known as pityriasis rubra the nails never escape. There are also certain other cases in which the nails alone are diseased, and in some of these we find it difficult with any degree of confidence to infer a constitutional tendency. Not a few of this latter group are probably for all practical purposes local maladies—*i.e.*, they are excited and, indeed, caused by local influences, although, like all other local diseases, when once evoked they are, of course, modified by the pre-existing peculiarities in the health of the patient. In this latter category I have to mention onychia maligna, the various forms of ungual whitlow, some of which approach closely to that disease, certain persistent thickenings and alterations of structure of single nails which occasionally follow slight injuries. These local affections of the nails may be known to be local only, as we know other local maladies, by the fact that they are often single, and that even when multiple they are rarely, and, as it were, only by chance, symmetrical, whilst in all truly constitutional diseases a tendency to symmetry in their local manifestations is the rule.

There remain yet unmentioned certain symmetrical and general nail affections which have not been associated with any special diathesis. Respecting these we shall have to examine evidence in favour of the belief that they are manifestations of the dartrous (psoriasis) diathesis, that they are, in fact, examples of psoriasis of the nails without psoriasis of the skin.

It may perhaps be convenient if we here delay for a while before proceeding to a description of the various diseases mentioned, in order to enumerate the several different types of change by which the nails may display the results of disturbance of their nutrition. The first and simplest of these is perhaps a loss of the normal transparency, which may occur in patches or over almost the whole body of the nail. Its commonest form gives rise to the conspicuous white spots so often seen in the nails of children and delicate persons who are in the habit of picking the nail at its root, and thus injuring its soft structures. These white patches, known popularly as "flowers" or "lies," travel onwards with the growth of the nail, and finally emerge and are cut away at its free edge. Next we must notice changes in the surface of the nail as regards its smoothness, and resulting either in n increase of the natural longitudinal fluting(d) or in the ormation of transverse lines. The latter are often seen after illnesses, and they mark probably slight arrests of growth or very temporary attacks of congestion at the root f the nail. These transverse markings, like the white spots, are carried forwards with the growth of the nail. Sometimes the presence of several at one time may denote the occurrence of repeated relapses of febrile action during an illness. Both the conditions just described are superficial, either on the surface of the nail or just below it, and are due to causes acting on its surface. When, however, the matrix is diseased the whole substance of the nail suffers, and it may be changed into a thick, rough, opaque, fibrous-looking structure, with probably the accumulation of more or less epidermis under its free end in the form of dirty-grey flakes. With these changes the nail almost always loses its firm hold on the nail-bed, and becomes detached in more or less of its extent. In describing cases of disease of the nails it is important to note where the changes begin, whether at the free edge, at the sides, or at the root. It is more usual for disease to begin at one corner of the free edge than anywhere else, and to extend thence along one side to the root. In some cases accumulation of epidermis under the nail, chiefly, of course, at its free border, is the principal feature; the nail is detached by it and lifted up, and, as a result of being separated from its bed, becomes opaque, dense, and fibrous. Non-adhesion of the nail to its bed is a not infrequent consequence of inflammatory attacks, or it may be the first indication of disease, as in psoriasis affections. When this happens the nutrition of the nail always suffers; it becomes opaque and malcurved. As its source of growth lies almost entirely in the matrix, the nail may still advance forwards almost as quickly as usual, but it cannot maintain its healthy state.

I shall conclude this lecture by a *seriatim* enumeration of the diseases of the nails. Some of these I must be content to mention briefly in this place, but the more important we will consider in greater detail in the next lecture.

1. *Onychia, Ungual Whitlow*, or suppurative inflammation of the nail-bed, is often seen after injuries, but may occur without known cause. It is usually single, and whenever multiple a constitutional cause, syphilis for example, must be suspected. It is not uncommonly the result of contagion of some pus secretion or of slight injuries to the edge of the nail from pricks with (poisoned ?) pins and the like. It is common on the fingers of nurses who have to dress children suffering from porrigo. The "foot-rot" of sheep (not the "foot-and-mouth disease," which is a totally different thing) is a form of ungual whitlow originating usually in over-walking on hot roads, and then transmitted from foot to foot, and from sheep to sheep, by direct contagion. It often causes the hoof to exfoliate. It is curable by acting upon the theory of its causation here suggested—isolation of the affected animals, paring of the hoof, and the application of some pus-destroyer. Ungual whitlows never become epidemic amongst ourselves, because the conditions favouring contagion do not exist.

2. *Onychia Maligna.*—A partially specialised form of ungual whitlow, met with chiefly in strumous or syphilitic children (particularly in the latter). In this form of disease much inflammatory expansion of the finger-end occurs, and a very painful and irritable sore results. The nail is much enlarged, especially in width, and becomes loosened in parts, whilst it adheres in others. It is easily cured by any remedy which destroys the vitality of the cell-layers on the surface. Thus a single dressing of the acid nitrate of mercury or of liquor arsenicalis is often enough if efficiently applied to every part; the removal of the diseased nail being an essential preliminary. The two facts that onychia maligna is never curable by constitutional medication, and is never multiple, are against the belief that constitutional states take any chief share in its production. The morbid action never spreads far beyond the margins of the nail-bed. After cure by the means suggested a good nail is reproduced.

3. *"In-growing Toe-Nail."*—In this we have another modification of ungual whitlow, which is met with almost exclusively on the nail of the great toe. It is, no doubt, commonly due to pressure from the boot causing the side of the nail to irritate the adjacent skin. As soon as any degree of inflammation has been set up the conditions aggravate

(c) It, I believe, is to Biesiadecki that we are indebted for this distinction between the true *matrix* and the *nail-bed* ("Stricker's Histology," New Sydenham Society's Translation, vol. ii., page 262).

(d) Let it be observed that this longitudinal fluting begins at the matrix of the nails, and is caused by the arrangement of the papillæ there; it is not due to the rows of papillæ on the nail-bed. Healthy nails show signs of a fibrous structure, the fibre-bundles running in the length of the nail, and being recognisable by a slight degree of whitish opacity. These lines are much more easily distinguished in the free part of the nail. Whoever will examine his thumb-nail with a lens will observe that as soon as a nail leaves its bed at its free end a number of fine lines becomes visible, like the teeth of a very fine comb; these may be traced backwards into the body of the nail, where, however, they are much less conspicuous Whenever in disease the nail becomes opaque and loosened this fibrous arrangement is exaggerated.

each other, the inflamed nail expands and grows laterally against the raw surface now unable to tolerate any pressure. No doubt, also, as in onychia maligna, the secretion produced is in itself a source of irritation; and since to these conditions we must in many cases add the continued annoyance of the boot, and not seldom the occurrence of other accidental violence, a combination of influences is produced which may well account for the troublesome nature of the malady. But the picture is not yet complete, for I must still add that this condition rarely happens to those who are in good health, and that very often there is a history of syphilis. The treatment must be conducted with reference to all the several factors of causation.

4. *White Specks in the Nail-Substance.*—These, as already noted, are usually caused by injury to the surface of the nail near its matrix. Picking back of the nail-fold is a common cause. It is certain, however, that they depend in part upon peculiarity in the state of health of the individual. They are common only in the young, and are often coincident with similar white spots in the teeth. Those who show them in unusual degree and number are, I think, seldom in robust health.

5. *Transverse Lines on the Surface of the Nails after Disturbances of General Health.*—It has been observed that during febrile ailments and various other more or less acute derangements of health the nutrition of the nail suffers. A record of each relapse or exacerbation, permanent during the life of the nail, is left on its surface in the form of a transverse furrow. As the age of an oyster may be reckoned by counting the ridges on its convex shell, so in these cases may the number of relapses and the relative duration of the intervals be estimated.(e) Dr. Wilks, in his original short article on this subject (*Lancet*, January 2, 1869, page 5), infers from the known rate of growth of the nail being equal to two full lengths a year, that furrows on the middle of the nail indicate an illness three months before. He mentions the case of a gentleman in whom the furrow formed on the nails as the result of a very severe diarrhœa attended by much prostration. Another patient with heart disease showed the markings after the occurrence of an illness. A third showed some distinct lines on his nails a few weeks after an acute attack of chest disease, which ended in phthisis. The markings are caused, writes Dr. Wilks, "by a slight furrow, which is found more especially on the middle of the nail, and more distinct on that of the thumb. They point, no doubt, to a sudden arrest of the nutritive process during the time of the illness, and herein lies the interest of the observation." My colleague, Dr. Langdon Down, in 1870 communicated to the Pathological Society the case of a gentleman on whose finger- and toe-nails two distinct sets of transverse *white* lines appeared after he had been twice much out of health from severe overwork; the symptoms were great prostration, intermittent action of the heart, and ulceration of one cornea. The nail-marks corresponded in position to the respective dates of these two attacks, which occurred within a few weeks of each other.(f)

6. *Psoriasis of the Nails, or Psoriasis-Onychitis.*—This condition presents several forms, chiefly distinguished from each other by reference to their several causes—1. Psoriasis of nails in association with like disease of the skin. 2. Psoriasis of nails without psoriasis of the skin actually extant, but with probably a predisposition to it. 3. From an inherited taint of syphilis. 4. From an acquired taint of syphilis. Psoriasis being one of the most important of the diseases of the nails, I shall leave its detailed consideration to next lecture.(g)

7. *Chronic Onychitis in association with Eczema of the Fingers.*—This is very common, and consists, as might be expected, in changes which are chiefly on the surface of the nail. The nail-fold at its root is implicated in the eczema, and hence a roughening in pits and lines of its upper surface. As a rule, eczema of the nails is always secondary to eczema of the skin. A case in which it seemed probable that we had to do with eczema of the nails without eczema of the fingers was under my care in August, 1872. The patient was a publican, in excellent health, thirty-four years of age. He himself attributed it to irritation to his fingers in his occupation, which chiefly consisted in "mixing beer," yet he had never had any eczema of the hands. The disease began by irritation under the fold of skin at the nail-root. Only three nails were affected—those of the two little fingers and of the left forefinger.

8. *Chronic Onychitis in association with Pityriasis Rubra.*—This association is well illustrated in one of the plates published by the New Sydenham Society, of which I show you here the original drawing. Pityriasis rubra is a rare and very peculiar malady. We know nothing of its causes, and most of what we know of its course may be summed up in the following statements:—In certain adult persons a state of persistent congestion of the whole integument with exfoliation of epidermis may occur, the patient becoming everywhere of vivid red colour, and the epidermis peeling off in large flakes. Where the skin is thick, as in the palms and soles, the epidermal flakes may accumulate in layers like the leaves of a book, sometimes making up a thickness of half an inch or even more. The disease is chronic, prone to relapse, and often attended by great debility. For our present purpose we are concerned with this malady only because in it there is usually much disease of the nails. The changes consist in opacity of the nail, with deposit of epidermis between it and its bed. When the skin disease subsides the nails participate in the benefit. In these cases the nails are implicated as parts of the general integument, the whole skin being affected. It is, however, remarkable that they should suffer so severely. I have rarely seen nails so much thickened and deformed as in some of these cases.

9. *Chronic Onychitis in association with Pityriasis Palmaris.*—It is only in certain peculiar forms of psoriasis (or pityriasis) palmaris that the nails suffer. When the disease of the skin is confined entirely to the palm, it is, I think, rare to find the nails in any way involved. Thus in the common forms of syphilitic palmar psoriasis they escape. There is, however, a severe form of this malady, occurring chiefly in elderly persons, which involves both feet and hands, and which often affects the fingers as well as the palms, and may even extend to the backs of these parts also. In these cases the nails often suffer severely, becoming thickened and uplifted by epidermal accumulations much as in pityriasis rubra. An excellent cast showing this state of things is in the museum of the London Hospital. It was taken from the foot of an elderly gentleman in whom this state of things had come on in association with certain nervous symptoms. It is perhaps not improbable that in such instances, although the skin of the trunk and limbs with the exception of the hands and feet is unaffected, yet that the malady is closely related to pityriasis rubra.

10. *Syphilitic Psoriasis of Nails.*—When nail disease occurs in connexion with syphilis, it is most frequently in the secondary stage—*i.e.*, the stage at which the skin-rash is present; and, like the skin-rash, it is generally, I believe, a transitory affection. Although it is by no means a common manifestation of secondary syphilis, I could quote to you a tolerable number of cases in which the nails suffered at this period of the disease. The sketch which I now show exhibits the finger-nails of an old woman, who at the time the portrait was taken had a general syphilitic rash and iritis, her primary disease having occurred six months before. Almost all her nails were affected, and, as in other forms of psoriasis of the nail, the disease began at the free border and spread towards the root of the nail. You will see that the sketches show the anterior two-thirds of the nails opaque, rugged, thin, and broken, whilst the lunula and adjacent parts are almost healthy. Cases such as this make it evident that the nutrition of the nail can be very materially interfered with by influences which do not primarily affect its matrix.

11. *Parasitic Disease of the Nails—Tinea Unguium.*—Under this head are comprised diseases of the nails in

(e) M. Beau, Dr. Wilks, Dr. Hillier, Dr. Hilton Fagge, and Dr Down have all recorded interesting observations in reference to this subject.

(f) *Path. Transactions*, vol. xxi., page 409, 1870.

(g) Dr. Richardson, in his "Asclepiad," has given us an excellent description of the symptoms and appearances in different stages of psoriasis of the nails. His patient was a woman, aged forty-seven, the subject of common psoriasis. The nail disease did not come on till her psoriasis had been out for nearly three years. The skin disease and the nail disease were both rapidly cured by a course of arsenic, apparently without local treatment. An excellent chromo-lithographic plate accompanies the case. He narrates another case in which the internal use of Fowler's solution effected the cure of a disease of the skin and nail of one finger of a man aged thirty-eight; the disease was apparently an eczema. In both these patients local treatment had previously failed. He concludes that "the evidence in respect to the treatment of this disease of the nails is thus strongly in favour of arsenic as the remedy. This view in some measure removes the hypothesis of the invariably syphilitic origin of the disorder, and shows, at all events, that there may, as in lepra, be two sources, one of which is not directly of venereal growth."—("On a Diseased Condition of the Nails," Richardson's "Asclepiad," vol. i., page 30, 1862.)

connexion either with favus, ringworm, or other forms of tinea of the skin. Sometimes masses of growth accumulate under the nail, and bear some resemblance to a favus cup; but more usually, both in ringworm and favus, the nail substance is infiltrated and made opaque and fibrous. Tinea of the nails may occur at any age, but is far more common in early childhood than later. In all cases of chronic thickening of nails in children the microscope should be used. I shall on a future occasion devote a lecture to this group.

ORIGINAL COMMUNICATIONS.

CLINICAL REMARKS ON THE TREATMENT OF ACUTE LARYNGITIS.

DELIVERED AT ST. GEORGE'S HOSPITAL.

By T. WHIPHAM, M.B.,

Physician to the Hospital, and in charge of the Department for Diseases of the Throat.

In by far the larger number of instances laryngitis subsides with ordinary precautions, and without any treatment: at the same time it must ever be borne in mind that it may speedily become a serious affection, and may rapidly run on to a fatal termination (Dr. Mackenzie has seen a case terminate fatally in twenty-four hours; and Dr. Wood another in seven hours). It is, however, not merely for this reason that treatment is a matter of importance in this disease, but because acute inflammation of the larynx, if prolonged, or supplemented by recurrent attacks, becomes in the end chronic, and then not uncommonly resists almost every variety of treatment.

In dealing with inflammatory affections of the larynx we have one great advantage, viz., that we are able to treat the disease both constitutionally and, by the aid of the laryngoscope, locally. In the selection of any particular method of treatment, in this as in other allied diseases, the habit of the patient must be duly taken into consideration, whether he be weak or robust; for although in the case of a strong and vigorous person powerful remedies may be employed promptly and energetically, in debilitated subjects anything which may tend unnecessarily to depress an already enfeebled constitution should be used with the greatest caution.

With the means at our command of treating laryngitis thus constitutionally and locally, it follows, almost as a matter of course, that the best results are obtained from the simultaneous employment of both methods, and I shall endeavour to point out to you briefly in what those methods consist.

In the first place, the patient should be confined to a room in which the temperature can be maintained at 65° to 70° Fahr., and of which the air can be rendered moist by a steam jet from a convenient vessel placed on the fire.

Of the drugs in our pharmacopœia, that on which most reliance can be placed is tartarated antimony. Neligan, in his work on medicines, states that "tartar emetic, when administered in full doses, frequently repeated, acts as a direct sedative or contra-stimulant, this effect being most manifest in inflammatory diseases: that the force and frequency of heart's action are lowered, and local inflammation is arrested." In acute inflammation of the larynx the pulse is greatly accelerated, and there is much fever, while at the same time the laryngoscope shows intense hyperæmia of the mucous membrane, and frequently a very considerable amount of swelling of the subjacent parts, such as the tissues covering the arytænoid cartilages, those forming the aryepiglottic folds and ventricular bands—the earlier stages, in fact, of acute laryngitis. It is in these early stages that tartarated antimony so frequently produces the beneficial results described by Neligan; it is in them that it is so necessary (to quote again from the same author) "to produce a powerful impression on the system, and at the same time to lower the circulation." Administered under such conditions, tartar emetic appears to possess the power of cutting short the disease, and its action under such circumstances cannot be too highly estimated. At the same time, it cannot be too strongly urged that if the drug fail in thus producing a resolution of the inflammation, and that to the redness and swelling of the parts œdema succeed, it should be at once withheld. For œdema of the larynx is speedily attended by impediment to respiration, and consequent imperfect aeration of the blood: the patient then requires all his strength to withstand the effects of his disease; any depressing remedy is therefore at such times most clearly contra-indicated.

Tartar emetic is no less efficacious by reason of its diaphoretic action, upon which it is scarcely necessary to dilate, as the beneficial results of copious perspiration in febrile diseases must be familiar to all of you; but in inflammation of a part so intimately connected with the function of respiration, reliance should not be placed solely on the action of one drug, and the action of antimony may with great advantage be supplemented by that of purgatives and diuretics. The efficacy of these remedies is often proved to demonstration in inflammatory affections of other organs, such as the skin, and it is no less manifest in the case of the larynx. By their administration increased action is induced in the intestines and kidneys, whereby hyperæmia of other parts is reduced, and resolution of any local inflammation may be looked for. A convenient form of combination of antimony and diuretics I have frequently found in the following:—Vin. antimon. ʒss., vin. ipecac. ℥x., potass. acet. ʒj., sp. ætheris nitros ʒj., potass. nitrat. ʒss.; to be given every four hours until the physiological action of one or more of the drugs is obtained. In place of these aconite may be employed as a vascular depressant, as suggested by Dr. S. Ringer, in minim doses of the tincture repeated at short intervals.

The early stage of acute laryngitis may frequently be cut short, and especially in the case of robust children, by the application of leeches either to the throat or to the upper part of the sternum, and the bleeding from the bites may subsequently be encouraged by the application of poultices, provided the patient show no signs of exhaustion. In such cases, however, it is rarely prudent to dispense with internal treatment altogether.

The effect of free purgation is seldom more manifest than in acute inflammatory affections of the larynx, and those which promote elimination of the watery contents of the blood are, for obvious reasons, the most powerful for good. A dose of calomel combined with colocynth or followed by sulphate of magnesia is the best, and should be repeated until a free evacuation of the contents of the bowels is produced. If constipation has existed previously to the attack, a large enema containing castor oil may be administered in the case of robust or plethoric persons, in addition to purgatives by the mouth.

It may occur to you that the treatment advocated is extremely violent, but I would remind you that laryngitis is a disease in which untoward symptoms manifest themselves often with alarming rapidity, and that it is impossible to predict of any one patient that the inflammation will not speedily give rise to most dangerous complications. It is better therefore to run the risk of somewhat excessive depletion at first, than to contend with acute swelling or œdema at the last.

Having thus briefly pointed out to you the internal remedies most efficacious in acute uncomplicated laryngitis, let me pass on to consider the different local applications which should be employed in conjunction with them.

Dr Duncan Gibb, in his work on Diseases of the Throat and Windpipe, gives a remarkable instance of the efficacy of local treatment which occurred in the case of his own person. One evening, in the month of May, 1861, he was exposed on a public conveyance to the full force of a strong wind; on reaching a friend's house, about a mile and a half distant, he found to his surprise that, on making an effort to speak, his voice was almost entirely gone, that he could only converse in a hoarse whisper. Next day aphonia was complete, and he then examined the condition of his larynx. He found that the parts were red and congested, and thereupon applied to his throat a sponge saturated with solution of argento-nitrate of mercury, which was followed by spasm and dyspnœa of about twenty seconds' duration. Next day there was a marked improvement in the voice, and the redness of the laryngeal mucous membrane had diminished. In a couple of days later the voice was quite restored, and the larynx had resumed its normal condition. In the same work he relates a still more striking case, in which a woman was "cured in ninety minutes" by an application of a solution of nitrate of silver (ʒij. ad ℥j.): the local treatment in this patient being combined with a mixture of tartar emetic, nitrate of potash, and acetate of ammonia. "In an hour and

a half after the local application her voice returned in full power and compass, and without any pain," and laryngoscopic examination made eleven days later proved the larynx to be in a normal condition.

The above cases, though perhaps somewhat exceptional in the rapidity with which amelioration in the symptoms was effected, are in reality two instances out of many which might be adduced as showing the great benefit to be derived from local remedies, and it is by no means uncommon in out-patient practice for persons to volunteer a statement as to the speedy relief which they have derived from such treatment.

As regards any decided virtue possessed by nitrate of silver Dr. Morell Mackenzie is sceptical, and he states in a foot-note of the "Throat Hospital Pharmacopœia" (page 518), that he has never found the silver salt of more service than the mineral astringents, and that it is more likely to cause spasm and nausea. Of the former we had an instance some time since, in the out-patient room, in the case of a woman who was suffering from catarrhal laryngitis. The application of the nitrate was followed by intense spasm, and she jumped up from the chair clutching at her throat and gasping for breath; in a few seconds, however, the spasm passed off, was immediately followed by "crowing" inspiration, and the patient was herself again.

Following Mackenzie, and with this case ever present to my mind, it is my habit to apply locally in such cases a solution of chloride of zinc. In the formulæ for topical remedies in the above-mentioned "Pharmacopœia" two solutions are recommended, one containing half a drachm, the other fifteen grains to the ounce; and, thinking that the former was perhaps needlessly strong, I some time since made several experiments on patients whose laryngeal affections were as nearly as possible identical, commencing with the weaker solution. I found that although a certain relief to the symptoms was obtained, the amount of relief was not nearly so great as with the stronger; that on the next laryngoscopic examination the congestion and redness were far less after the application of the strong solution; and that the difference in the extent of the temporary discomfort occasioned by the strong solution was but trifling. Other applications have been employed with good effect. Time, however, forbids me to do more than indicate to you the best remedies at our command in the treatment of this disease.

So far we have been discussing applications made topically with the laryngeal brush; but there is another method—viz., inhalation—by means of which we can apply remedies directly to the larynx.

In all cases of local inflammation—and this remark applies equally to local treatment either by the laryngeal brush or by inhalation—any treatment which can be directed at once to the seat of the disease has a more immediate, and usually a more lasting effect, than that which operates by the medium of the general circulation. Inflammation of any portion of the skin, for example, due to *external* cause, is far more successfully treated by poultices, lotions such as lead and opium, or even by cold water, than by diaphoretics, diuretics, or depressants alone.

Now, inhalations have this decided advantage over the laryngeal brush, that they are less alarming to the patient—a matter of no slight importance when the aperture of the glottis is diminished either by swelling or by paralysis of its muscles; that by them the topical treatment can be maintained for a much longer period, and can be repeated at frequent intervals; that in the case of vapours the soothing effect of heat is combined with the specific action of the drug.

Various drugs have proved beneficial when so administered; but it must suffice on the present occasion to mention one or two of those which have brought about the more satisfactory results. Of medicated inhalations, perhaps the most grateful to the patient are those of benzoin and acetic acid, the formulæ for which are given in the "Throat Hospital Pharmacopœia"—viz., for the former, a drachm of compound tincture of benzoin in a pint of water at 140° Fahr.; for the latter, half an ounce of acetic acid and of glacial acetic acid are to be mixed together, and of this mixture two teaspoonfuls are to be poured into a pint of water at the same temperature, of which the vapours should be inhaled, either from a narrow-mouthed jug or from an ordinary inhaler. The sedative action of these drugs in many cases gives speedy relief to the symptoms. If much spasmodic cough trouble the patient, the vapours of acetic ether, hydrocyanic acid, and conium produce excellent results. These preparations may be used at frequent intervals during the prevalence of the more urgent symptoms, due caution being exercised with regard to that containing hydrocyanic acid. In the event of there being great irritability of the fauces, etc., in consequence of which any application by means of the laryngeal brush is distressing to the patient, local remedies, such as chloride of zinc, may be employed in an atomised form in Siegle's inhaler, or the hand-ball spray-producer. A solution of this salt or of the sulphate may be employed in the proportion of two to five grains to the ounce of distilled water, but should be used more sparingly than the above-mentioned inhalations. One caution should be given to the patient in this method of treatment—viz., that he should avoid all undue exertion in the act of respiration. As a rule, a person who is directed to inhale literally sets to work to perform as many deep inspirations as possible during the time the inhaler is before him. In the first place, this is unnecessary in laryngitis, where the application is merely required for the upper part of the air-passages; and in the second, he adds greatly to his trouble by wearying himself in the process.

In the intervals between the inhalations, topical remedies may still be continued by means of lozenges, but this method can only be employed when the patient's breathing is, comparatively speaking, tranquil. If there be any dyspnœa, it is obvious that lozenges would be utterly out of place, and probably dangerous, as being liable to be drawn into the larynx. Those composed of extract of lettuce as a sedative, or of citrate or tartrate of potash as a sialogogue, in cases where a dry, hot condition of the mucous membrane of the mouth or throat is a prominent symptom, I have found extremely serviceable. Being made up with black-currant paste, they are more or less pleasant to the taste. Should the patient be harassed by constant cough, efforts should be made to allay it, as it tends to keep up the existing hyperæmia; in such cases the morphia ipecacuan-lozenge (B.P.) frequently has the desired effect.

So far we have dealt with laryngitis in its early stages, when danger to the patient's life is, to a certain extent, remote. The majority of cases recover, either by rest under suitable conditions, or as the result of treatment; in other cases, however, one symptom is rapidly succeeded by another of graver import, and we are, sometimes actually in a few minutes, brought face to face with a most formidable malady. To the hyperæmia of the mucous membrane is added swelling of the submucous tissues, and of parts such as the aryepiglottic folds, the epiglottis or ventricular bands, where even a moderate amount of tumefaction produces great distress. It is in this stage that treatment must be prompt and energetic, or the disease may shortly prove fatal. In order to relieve the patient, the swollen parts should be freely scarified with a laryngeal lancet, or if this be impossible, a similar result, as Mackenzie directs, may be obtained from a series of punctures. By this operation any serum finds exit, and the bleeding, which is often free, relieves the tension of the over-distended vessels.

The patient should then inhale as often as possible (care being taken to avoid any exhaustion induced by the inhalation) the vapour of water simply, while a large poultice, consisting of linseed-meal and mustard, should, if this have not been already done, be applied to the neck, and should be kept on as long as the patient can bear it. Thus the swelling will often subside, and the dyspnœa, the most prominent symptom of this stage of laryngitis, become gradually less urgent. At the same time his bed should be surrounded by a tent, into which a jet of steam can be conveyed; and in cases where the tent can be kept well filled with aqueous vapour, inhalation may be advantageously dispensed with, and the patient left completely at rest.

There are, however, cases in which such methods of treatment are powerless for good, so rapid is the progress of the disease, and in spite of external and topical applications, inhalations or scarifications, urgent dyspnœa, the result of tumefaction of the soft tissues, quickly supervenes. In such cases the only remaining resource is laryngo-tracheotomy; and the necessity of resorting to this operation early cannot be too strongly urged. It should not be postponed until the patient is actually *in articulo mortis*, for if operative interference be delayed until the respiration is so impeded that the face has become blue or dusky—till the patient, in a cold clammy sweat, sits upright in his bed gasping for breath—

laryngo-tracheotomy, so far as any ultimate benefit is concerned, is well-nigh useless: by this time his blood has become charged with effete products, the functions of his viscera are deranged, and the action of his nervous system is in great measure destroyed. The patient, even if he does not actually sink under an operation which, if performed earlier in the disease, is frequently the means of saving life, dies in a few hours because his tissues have become irreparably damaged; because his blood has been too long deprived of the needful supply of oxygen.

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Medical Times and Gazette.

SATURDAY, APRIL 20, 1878.

THE GENERAL MEDICAL COUNCIL.

It will be recollected that when we went to press last week the General Medical Council were still engaged in discussing Dr. Humphry's motion, the gist of which is, that the Council adheres to the principle of a resolution passed "by a large majority, and after much deliberation," in 1870, in favour of the formation of a Joint Examining Board in each of the three divisions of the kingdom; and "is of opinion that no medical legislation relating to examinations will be satisfactory which does not provide for the formation of an Examining Board in each of the three divisions of the kingdom, and direct that every person who desires to be registered under the Medical Act shall be required to appear before one of these Boards and be examined in the subjects which may be deemed necessary by the Medical Council." The debate on the resolution begun on Wednesday, the 15th inst., was continued on Thursday and Friday, and on the last day the resolution, was carried by fourteen votes to ten. In the majority all the representatives of the English bodies voted, together with Dr. Leet, the representative of the Apothecaries' Hall of Ireland, and all the Crown nominees excepting Dr. Fergus; while the minority consisted of Dr. Fergus, all the Scotch representatives, and all the Irish excepting Dr. Leet. That this would be the result was, we suspect, well known before the debate, and it would, in all probability, have been precisely the same had the division been taken immediately after Sir James Paget seconded Dr. Humphry's motion. Dr. Humphry pointed out that the resolution passed in 1870 was carried by a decisive majority of the representatives of each of the three divisions of the kingdom, and that the question before the Council was—would it stand true to its own colours, and support the licensing bodies which had acted in conformity with its wishes; or would it stultify itself, and desert those bodies? He dwelt, of course, on the "intolerable anomaly" of a state of things in which examining powers were given to nineteen various bodies throughout the kingdom, any one of which could grant diplomas to practise in every part of the kingdom. Some good, he allowed, had been done by the visitation of examinations, but the process was a cumbrous and costly one, and the Council had acknowledged that it cannot carry out the visitations in a thoroughly effective manner. He alluded to the imputations of "competition downwards," and observed that there ought not to be even a possibility of such imputations being made in so important a matter. He urged the great importance of uniformity of examination and of qualification, so far as the minimum qualification to practise is concerned, and remarked that if it should be said that the scheme of one joint board in each division of the kingdom would not after all insure uniformity of qualification, it would at any rate increase the likelihood of it sixfold. But we need not state with anything like fulness the arguments that may be adduced in favour of joint examining boards; they have been put forth, with various degrees of clearness and force, over and over again, and are well known. On the other side it was argued that men need not fear being charged with inconsistency should they not think now on this matter as they had thought in 1870; that, owing to the continued exertions and influence of the Medical Council, the state of the profession has been very greatly improved during the last twenty years, and is still improving. Every student has to pass an examination in general education before entering on his professional studies, the curriculum of study has been extended, and the character of the examinations has been greatly improved. Dr. Andrew Wood maintained that, in consequence of all this, the skill and ability of the profession generally had increased in immense ratio since the Medical Council was established. What need then was there for any great measure of legislation? He held there was none, and thought the Duke of Richmond had acted wisely in refusing to introduce a radical and revolutionary measure. He asserted that combinations which worked smoothly, harmoniously, and inexpensively had been formed in Scotland many years ago, and the pity was that neither England nor Ireland had formed similar combinations. But in England, where nothing had been done in the way of combination between 1858 and 1870, at the latter date "the bodies were roused to a degree fiery in proportion to their previous languor," went in for a grand combination of all licensing bodies in the country, and wished to force the same thing upon Scotland and Ireland. The English bodies, nevertheless, seemed to have misgivings about the success of their plan, for they had secured a *locus penitentiæ*, by a clause empowering any body at the end of five years to withdraw from the Scheme on giving one year's notice. He considered that if absolute uniformity be desirable, the most rational plan would be to appoint one Conjoint Board for the whole kingdom; but even then the purpose could not be accomplished. About 1300 men must be examined every year, and each man must undergo four examinations. How could any board conduct 4000 and odd examinations? There must be a number of sections of the Examining Board, and in that case how could uniformity of examinations be secured? The experiment of joint boards, as proposed, would be a hazardous one, and

might lead to disastrous results. He added that Sir Robert Christison had begged him to denounce the Conjoint Scheme, believing that nothing but evil would come of it. We do not think that much was added to these arguments by any of the subsequent speakers on the same side. Professor Turner's speech was indeed very ingenious; but we think it more a defence of the Scotch bodies, and especially of the Scotch universities, than an argument against the principle and the practical carrying out of the Conjoint Boards Scheme. Assuming, as did Dr. Wood, that absolute literal uniformity of examinations was the essence of the plan, he derided it as an impossibility; and, alluding to Dr. Rolleston's observation, that questions and answers could be sent from and received by a central board through the post, he said, "That may do for the written examinations; but Scotch examinations are oral and clinical, and the telephone has not yet arrived at such a pitch of perfection as to enable examinations of that character to be conducted through it." He asserted that the uniformity principle would foster cramming; and he dwelt much on the money question from the Scotch point of view. The University of Edinburgh last year received something like £3000 from examination fees, and only about 10 per cent. of that sum went into the pockets of the examiners, all the rest going into the University till, and the University could not afford to lose it. It was not difficult to answer all these arguments, and it must be admitted, we think, that the honours of the debate rest with the English representatives. Dr. Storrar said that there would certainly not be any difficulty in the University of London conducting examinations to the extent of 1000 a year, and he pointed to the fact that the London College of Surgeons examined annually 500 for the primary and about 300 for the final examination. He, therefore, could not admit that the number of examinations would be an insuperable difficulty. Sir William Gull, replying to the latter part of Professor Turner's speech, observed that "it was no use beating about the bush—Scotland was dependent on the money paid by the students for examination; and if this Conjoint Scheme came into operation in Scotland, the fear was that all their historical institutions would dwindle and die away. But were they to perpetuate what every outsider would think was an evil in order to save the pockets of the historical institutions? They had been told that a Conjoint Scheme would ruin the universities; but, as he understood it, nothing would be so much in favour of a higher medical education in England as the establishment of a minimum examination in the institutions, because that would leave them entirely free to carry forward their instruction to the very highest range of medicine and science." The Scotch bodies, he added, must be teaching down to a minimum, or how could they contrive to pass the number of candidates it was stated they did? Dr. Storrar and Dr. Pitman replied with much force to Dr. Wood's boast about the Scotch combinations. Dr. Storrar gave a curious bit of history about the combination between the Scotch medical corporations, and showed that the result of their combination was to add two examinations to those which already existed; and Dr. Pitman, referring to the representations made to the Council in 1859 by the College of Physicians and the College of Surgeons in Edinburgh, observed that "the proposal was that the examinations in surgery should be conducted exclusively by examiners from the College of Surgeons, and the examinations in medicine by examiners from the College of Physicians, and that the competency of the candidate in medicine and in surgery should be decided separately by each set of examiners, and beyond that they reserved to themselves the right to grant their qualifications singly for registration. That was not a conjoint examination in the view of the English Board." Dr. Pitman also observed that what was wanted was uniformity of examination: "Professor Turner had said that uniformity was not desirable, but he (Dr. Pitman) did not think that anyone had ever gone so far as to say that uniformity with the same principles was not desirable." Sir James Paget remarked that, "however much they might discuss the methods by which uniformity could be obtained, it was that to which they looked and hoped with reference to a minimum qualification, and it was that which simple justice demanded. The public seemed to have had a natural instinct in the matter, and, in his view, thought that if qualifications were not uniform it must be because some were too low. The University of Edinburgh maintained that their qualification for registration was higher than was necessary for practice; but it must be admitted by them that any qualification materially lower would be too low. He doubted very much whether any of the bodies granting a large number of qualifications would reject a man if fit for practice because he did not acquire a higher knowledge, such as they would wish for. It was done in the University of London, with the result of great honour but no pecuniary advantage." But we cannot attempt to give any sketch even of his most able speech; we must be content to recommend, if that be necessary, to our readers the excellent speeches made by him, by Dr. Storrar, Dr. Quain, and Dr. Pitman, and Dr. Humphry's reply. The result of the debate we have mentioned: it will not serve to much encourage the Government to strengthen their Bill by the introduction of a clause making joint boards compulsory; and it seems highly probable that the Bill, as it is, will be lost. If it is, we can hardly suppose that any other attempt at medical legislation will be made again, by any Government, for some years; and when a fresh attempt is made, is it not almost certain that it will not be an attempt to make the existing licensing bodies combine, but that it will introduce a State examination for a qualification to practise? Do the licensing bodies desire that?

On Friday, the 12th, the Medical Council also agreed to a resolution, with reference to Clause 14 of the Bill,—"That the duties of the Medical Council in relation to the various medical authorities (whether in separation or in joint action) should in general not be extended to the initiation of the examination-rules under which qualifications are to be granted, but should remain restricted, as now, to duties of superintendence and control, with power of making representation to the Privy Council in cases of default." The Council then went into committee of the whole Council on the Bill, and approved of Clauses 1 and 2; but, on Dr. Wood and Professor Turner moving that "Clause 3 be approved," Mr. Simon and Dr. Humphry moved, as an amendment, that the Council approves the intention of the clause so far "as to be of opinion that none but persons whose qualifications have been tested in medicine, in surgery, and in midwifery, should in future be admitted to the Medical Register; but that, as regards the manner in which effect should be given to this intention, the Council refers to its previous votes on the subject of conjoint board and examination-rules." And the amendment was carried by thirteen votes to ten.

On Saturday, April 13, the Council resolved—"That it is desirable that provision be made in the 'Medical Act (1858) Amendment Bill' for the registration of dentists"; and—"That it is not desirable that the Medical Council should be required to undertake to originate a new scheme on examination-rules—Clause (1) of Section 23; but that it should be entrusted with some such supervisory power as regards the educational details from time to time proposed by the medical authorities authorised in the Duke of Richmond and Gordon's Bill, as it already exercises with

regard to other examinations." The portion of the Bill that relates to the registration of dentists was approved of; and the Council suggested the adoption of Clause II of Sir John Lubbock's Bill, providing for the registration of dentists not being British subjects. We must, however, reserve all comment upon this subject, as well as upon the resolutions of the Council relating to the midwives clause of the Duke of Richmond and Gordon's Bill, for a future occasion.

On Monday, the 15th inst., the President stated that, in accordance with the instructions of the Council, Dr. Andrew Wood, Dr. Humphry, and himself had had an interview with the Lord President that morning. They informed his Grace that the Council had taken into consideration the fact that the Amendment Bill, introduced by him, contained the permissive principle of combination of boards of licensing bodies, and they handed to him the resolution passed by the Council in favour of compulsory conjoint boards of examiners in the three divisions of the kingdom; and they also informed his Grace of the resolutions come to by the Council on some other matters dealt with by the Bill. The Lord President said that he would give the fullest attention and consideration to all those particulars upon which the Council had already resolved, and to any further resolutions which the Council might pass at any time before the Bill goes into Committee of the House of Lords. His Grace added that "he had every reason for hoping that the Bill would pass the second reading, and that in that case he would introduce the Bill in committee for the consideration of all the amendments which had been presented to him, and for their full discussion, at the earliest possible period at which it could be done. Considering the other arrangements of the Government, and the work before the House, the earliest day at which he could undertake to do this would be on May 20 next; and, in his Grace's judgment, if the discussion could not successfully take place on May 20 or thereabouts, there would be no chance of the Bill passing this year. That he would give his best attention to all amendments which should come before him before May 20, and on that day he would proceed with the consideration of the Bill in committee." We may add that on Monday evening, after an able speech from Lord Ripon on some of the defects of the Bill, the second reading was agreed to without opposition.

The Council afterwards went again into committee upon the Bill, and the subject of Clause 5, providing for the registration of colonial practitioners with registered diplomas, was discussed at great length; the question being how best to provide, on the one hand, that no person should be able to practise in this country with a diploma of lower qualification than would be required here; and, on the other hand, that no wrong should be done to properly qualified men from the colonies by placing unnecessary difficulties in the way of their practising in Great Britain. Much unnecessary word-questioning and difficulty-making discussion took place, but in the end it was resolved to recommend that the first part of the clause shall be as follows:—"When a person who has been *bonâ fide* resident in a British possession outside the United Kingdom shows that he is of good character, and holds a recognised diploma or diplomas (as hereinafter defined) granted in a British possession, such person shall," etc. Clauses 6, 8, 9, 10, 11, and 12 were "in substance approved of." But the Council agreed that "questions relating to the erasure of names from the Medical Register, for infamous or disgraceful conduct in a professional respect, ought to be reserved for decision by the general body of the Council," though it is desirable that the power of erasing "the name of any person who has been convicted in a court of law of a felony or misdemeanour, be deputed to a committee of the Council;" and it was recommended that Clause 13 be amended in conformity with these resolutions.

The consideration of the Bill was continued on Tuesday, and again adjourned to Wednesday, on which day the Council hoped to conclude this special part of the business before them, and to close the present session.

THE REPORT OF THE SCOTTISH UNIVERSITIES COMMISSION.

No. II.

We have already indicated the catholic nature of the training required for the degree of M.A. in a Scottish University, and the Commissioners themselves admit that it was becoming more popular, because, as we think, it was becoming more esteemed and more valuable. It was a kind of stamp that was unmistakable. It meant attendance for four years on a varied series of classes, and in certain instances at least the passing of regular examinations at stated periods, altogether independent of the final test. But the Commissioners would make this time-honoured and valued degree more popular. They think that its conditions ought to be altered so as to suit modern wants, and so they propose a new scheme, or rather alternative schemes, which they think will suit everyone.

They began by saying that to secure a basis of general culture, every student proposing to proceed to the degree of M.A. should be required to pass a "First Examination" in Latin, Greek, mathematics, English, and, when the state of education in the schools renders it practicable, in elementary physical and natural science. This examination, slightly modified, they propose also for those desiring to qualify in Law and Medicine; and, say they, it may be passed at the beginning of the summer or winter session. As to which session—first, second, or third—this test is to be taken, they do not say. It may take place at the end of the first session or before the student enters the University at all. But if the same examination is to do duty in all the faculties with only slight modifications, we, speaking from the medical standpoint, know what that means. It is merely an entrance examination, such as is now passed by all candidates for a medical qualification. After this, each young man a candidate for the degree of M.A. is to follow the bent of his own imagination as to the nature of his special powers—the bent of his genius. Thus a man may go out after passing this preliminary examination in any one of the following subjects:—

I. Literature and Philology.
II. Philosophy.
III. Law and History.
IV. Mathematical Science.
V. Natural Science.

I. Literature and Philology should comprise the subjects of Latin, Greek, and English literature, together with one of the following subjects, viz.:—Comparative philology, Sanskrit, Hebrew, a modern language, Gaelic with Celtic philology. Questions on history and geography incidental to each subject should form part of the examination.

II. Philosophy should include logic and metaphysics, ethics and psychology, and the physiology of the nervous system. The first two subjects are understood to embrace the history of philosophy.

III. Law and History should include civil law, either constitutional law or international law, and political economy, together with the history of any one of the following groups, viz.:—Greece and Rome; modern Europe; Egypt, Syria, Palestine, and Arabia; India; ancient and modern America.

IV. Mathematical Science should embrace mathematics, pure and applied; natural philosophy; and physical astronomy.

V. Natural Science should comprehend four groups, viz.: —(1) Applied mathematics, natural philosophy, and chemistry; (2) Natural philosophy, chemistry, and physiology; (3) Physiology, botany, and zoology; (4) Natural philosophy, chemistry, and geology. A candidate should be allowed to take any two of these four groups, and the practical working of the arrangement would be that natural philosophy and chemistry would be compulsory, while an option would be given between the mathematical and the morphological sciences.

Can any reasonable man, still more one who is interested in maintaining the old standard of education in Scotland, read such propositions unmoved? By the Scottish Education Act the teaching in the parochial schools was in many respects deteriorated. Now, in the same way, it seems to be the object of some to reduce University education in a similar fashion. In certain counties of Scotland there were valuable bequests which subsidised the salaries of the schoolmasters, but these were only granted to schoolmasters who came under certain regulations, and who taught up to a certain standard. The consequence was that these schoolmasters were men of high attainments; and it was just as usual for a man to go through such a period of probation on his way to the pulpit, as it has been in England for a man to be a successful head-master before he becomes a bishop. Now, says one of the inspectors who used to examine on behalf of the trustees of these bequests, subjects which can be ground-up in a week or two have been substituted for those which imply years of training in the schools above alluded to, with the result that might be anticipated.

The same system is to be applied to the Universities. Can any man of sober judgment look on the list of subjects proposed in any one division as commensurate? If we take them altogether we should say that the proposals with regard to Natural Science are the most reasonable; the most absurd those relating to History. Compare the history of ancient and modern America with that of Greece and Rome, or modern Europe, as a subject to be studied for training the mind. But when we look at Mr. Froude's ideas on this subject, as embodied in his own peculiar note, we surely find the *reductio ad absurdum* of the proposition if such a mode of proof was ever applicable. Mr. Froude would set each student to study for himself the domestic annals of Scotland, in the shape of its Acts of Parliament, for his own individual behoof, and as a part of his student's career. It would be difficult, we think, to bring a more conclusive instance of the ignorance of one, at all events, of these Commissioners of the wants of Scottish education and the food Scotsmen seek from their Universities.

Now, we do not seek to decry the use of such studies as are indicated in the many and various lists provided by the Commissioners; neither do we hold that the course for the degree of M.A. should be too rigid; but we certainly do hold that for a man to pick up a little Latin and mathematics, and straightway devote himself to the perfunctory study of subjects of a totally different character from those set down in any M.A. curriculum with which we are acquainted, is not good. By all means let them come out as graduates in Philology, Letters, or Natural Science, just as they graduate in Medicine; but to confer on all alike the title of Master of Arts is an absurdity. Just as well let them call themselves Masters in Surgery or Doctors of Medicine on similar conditions.

It may seem to some of our readers that those things are foreign to the scope of our journal. Not so. We have ever been admirers of classical learning, and we belong to a profession which is still called "learned." We ardently desire to see the breadth of culture which so well becomes all men still a characteristic of our profession. Therefore we hold that, as far as possible, men should be encouraged to undertake a period of study such as would fit them for the degree of M.A. as it still exists in Scotland, subject to certain modifications. Thus, as it seems to us, he ought to direct his attention during three years to Greek, Latin, Mathematics, Logic, and Philosophy, together with Elementary Physics. For the fourth year the student ought to have a choice, especially in certain subjects, notably we should say Advanced Physics, Chemistry, and Natural History. Such a course, whilst amply entitling a man to a degree in Arts, would furnish, as we have long maintained, the best portal to the study of Medicine, especially in its higher walks, for it cannot be supposed that all could pass through *this* "one-portal" system.

One more point, and for the meantime we have done with this portion of the Report. The Commissioners say:—"At present, in each of three of the departments for honours established by the Commissioners under the Universities Act—viz., Classical Literature, Mental Philosophy, and Mathematics—there are two grades of honour, a first and a second class, while in the fourth department, that of Natural Science, there is only one grade. Several witnesses have expressed a decided opinion that it would be an improvement to have three grades of honour in each department, on the ground that a second class, which is really a mark of honourable distinction, is now looked upon by the students as a failure, and that many who might be expected to come forward for honours, but who are afraid they may not succeed in reaching the high standard properly reserved for the first class, prefer to take the ordinary degree rather than run the risk of being placed in the second class, to which this supposed slur attaches. These difficulties, however, arise from the existing classification of honours. If there were, as we venture to recommend, only one class of honours of a high character, and if the successful candidates were placed in alphabetical order in that class, there would probably be a desire to enter it." We do not try to comment on this proposal: we shall only attempt what used to be called, in Scottish sermons, "the application." Fancy the same system applied to Cambridge—imagine the pleasure it would give the Senior Wrangler to be bracketted with the Wooden Spoon when the name of both was Smith!

THE WEEK.

THE ROYAL COLLEGE OF PHYSICIANS, LONDON.

The meeting of the Royal College of Physicians, which was held on the 15th inst., was very numerously attended, the chief business of the day being the election of a President. Before vacating his office of President, Dr. Risdon Bennett delivered a short but interesting and eloquent address, passing in review the events of the past year, and giving brief notices of the Fellows whose names had disappeared from the roll of the College during that period, summing up this part of his address by the remark that of most, at least, of them it could be said that though the labourers were mortal, their work for the good of mankind and the advancement of medical knowledge is enduring. The President was able to report that the College is in a prosperous condition in all points. It contains, taking all grades, more than 2000 members, of whom 1172 belong to the comparatively new class of licentiates; and its financial condition, already satisfactory, will be benefited by a legacy of £1000 left to it by the late Dr. Lampert, who was elected into the old order of licentiates so long ago as in the year 1806. On the motion of Sir Thomas Watson, a unanimous vote of thanks was passed to the retiring President for his able services during the past year, and for his address; and then Dr. Risdon Bennett was unanimously again elected

to the high and honourable office he had just vacated. Some other business was also transacted. Dr. Bäumler was admitted a Fellow of the College; and licences to practise physic were granted to twenty-one out of twenty-four candidates who had presented themselves at the late final examinations for the College licence. The College received from the India Office a Report, by Surgeon-Major T. Gillham Hewlett, on the Distribution and Causation of Leprosy in the Bombay Presidency; and the paper was ordered to be laid on the reading-room table for a fortnight, in order that members of the College may have opportunities of studying it. The Treasurer reported that two of the volumes of the new edition of the College Roll are completed, and the third one will be ready very shortly; and the Roll Committee were authorised to take the necessary steps for the publication of the work. The Senior Censor, Dr. Quain, moved the two following resolutions:—1st. "That the College, in answer to the application laid before it, at the Committee held on April 2, do contribute one hundred guineas towards a statue of Harvey, to be erected at Folkestone, his birthplace;" and 2nd. "That, in accordance with a suggestion of the President, the College do hold a festival banquet in honour of Harvey, at the College, on some convenient day during the present season, this being the three hundredth year since Harvey's birth." Both resolutions were unanimously agreed to.

THE LORD PRESIDENT OF THE COUNCIL, AND THE ROYAL COLLEGE OF PHYSICIANS.

On Saturday last a deputation from the Royal College of Physicians of London waited on the Lord President of the Council, the Duke of Richmond and Gordon, to formally present the Memorandum of the College on the Medical Acts Amendment Bill, 1878, and to urge upon his consideration the objections the College feels compelled to make to the Bill as at present drawn. His Grace, who evidently will not spare any amount of labour in endeavouring to make himself well acquainted with the wishes and needs of the profession in the matter of medical legislation, was very frank and courteous, and is ready, we believe, to make some of the amendments that have been suggested to him. He appears to be rather surprised, it is said, by the chorus of opposition with which his Bill has been received, the only approvals it had as yet received having come from north of the Tweed. His Grace is himself, we understand, strongly in favour of a joint examining board in each division of the kingdom, and the Bill would have been made compulsory on that point had the Government believed that such a measure could be carried. The Duke of Richmond probably hoped that the establishment of a joint board in England, which he looked upon as an accomplished fact, would have a powerful influence for good on the authorities in the other divisions; and he is, we suspect, much surprised to learn that his Bill would, if passed, almost certainly prevent the English Scheme from being carried out. The very great probability of such a result has been strongly pressed upon his attention by the Council of the College of Surgeons of England, who have also had an interview with him, as well as by the College of Physicians; and we suppose that the other English medical authorities will also urge this point, and, like the London Colleges, show their desire to strengthen his Grace's hands in making the Bill a compulsory one as to the general formation of joint boards. We understand that the Duke has no hesitation in expressing his opinion that the Bill seems to have but very little chance of being carried as it at present stands. The deputation from the College of Physicians consisted of the President, Dr. Risdon Bennett; Dr. Pitman, the Registrar; Dr. Quain, the Senior Censor; Sir William Gull, Dr. West, and Dr. Cholmeley.

QUALIFICATIONS FOR THE MEDICAL STAFF OF THE MANCHESTER ROYAL INFIRMARY.

We regret to see it reported in a Manchester paper that the Board of Management of the Manchester Royal Infirmary, in revising the rules of that institution, has decided to recommend to the trustees a most undesirable alteration in the qualifications for the post of Physician and Assistant-Physician. The existing rule requires that the candidate shall either be a Member (or Fellow) of the Royal College of Physicians in London, or a graduate of a university requiring examination for its degrees, and where the candidate has resided for at least one year. The proposed rule, instead of allowing one of these qualifications to be sufficient, renders both compulsory. Under such a rule a serious restriction would be placed on the liberty of choice of the Elective Committee; in proof of which it is only necessary to remark that many of the most able London physicians would be excluded; such men, for example, as Dr. Hughlings-Jackson and Dr. Lockhart Clarke, and, in fact, any M.D. of the University of London. If the membership of the College of Physicians is to be insisted upon in addition to a degree in medicine, then at least that clause which requires a year's residence at the university granting the degree should be omitted. But really there seems no reason for altering the old rule, which was evidently conceived in a spirit of fairness and liberality. It is indeed curious that in a city like Manchester, and in an age conspicuous for its anxiety to get rid of all manner of tests and disabilities, such a proposal should have been carried, even by so narrow a majority as the casting vote of the chairman. We sincerely hope that the trustees will be distinctly appealed to on this point, and that at their special meeting, on Friday next, they will decline to give their sanction to a course so thoroughly retrograde in principle, and so likely to prove inconvenient, if not disastrous, in its actual working.

THE ARMY MEDICAL DEPARTMENT COMMITTEE.

The Royal College of Surgeons in Ireland have replied to the communication of the Committee appointed to inquire into the present state of the Army Medical Department, and they point out the reasons which, in their opinion, produce dissatisfaction, and deter eligible candidates from joining. These reasons are as follows:—1. The short-service scheme now in existence. 2. The abolition of the regimental system. 3. The frequent changes in Warrants after they have been published under Royal authority with her Majesty's signature, and on faith of the permanency of which warrants medical officers have accepted service. This has produced an utter want of confidence in, and distrust of, the Service. 4. The differences which are made between combatant and medical officers in regard to ordinary and sick leave. 5. The almost absolute refusal to medical officers of the privilege to exchange. 6. The virtual withdrawal of forage allowance from those by rank entitled to it. 7. The quarters allotted to medical officers in barracks being almost invariably regimental, whilst they, as departmental officers, are supposed to be entitled to departmental quarters. 8. The discomfort caused to medical officers by want of a soldier-servant, whilst the sum allowed in lieu thereof is incapable of providing a civilian. 9. The length of time (twenty-five years) before the medical officers can claim a right to retire from the Service on adequate pension. 10. The roster as now kept, which has been withdrawn from public inspection, so that no officer can tell how he stands in regard to foreign service; whereas formerly this document was exposed in the waiting-room at Whitehall-yard, for each medical officer's specific information. These are the points which the Council of the College consider must be amended

before desirable students will present themselves for admission to the army; and as so many lucrative outlets in the Civil Service present themselves for the acceptance of the junior members of the profession, the Council impresses on the Secretary of State for War the necessity of improving the condition of both army and navy medical officers, if these Services are to compete on anything like favourable terms with the Civil for obtaining the best and most highly educated students. It will thus be seen that the communication of the College contains no new suggestions; every one of the points set down is an old grievance with which the authorities are already well acquainted, and if the redress of these will really popularise the Army Medical Service, it ought not to be very difficult to bring about such a desirable state of things.

INSTRUCTION IN AMBULANCE WORK.

THE Order of St. John are actively endeavouring to encourage ambulance work all over the country, and on Saturday last a meeting was held at the house of Sir E. Lechmere, M.P., which was attended by many gentlemen connected with the London hospitals. Resolutions were moved, and remarks made, by the President of the College of Physicians, Doctors Sieveking, Farquharson, Broadbent, and several others. It was recommended that ambulance committees be formed in the various hospitals to supply the Order with advice, and with instructors for its numerous classes during peace, and to select surgeons, dressers, and nurses for its service in time of accident or war. The Director-General of the Army Medical Department has already done much to assist the movement by placing the services of several highly competent army medical officers at the disposal of the Association, and although unable to be present at the meeting on Saturday last, he has promised all the assistance in his power.

NEW DIRECT ROUTE BETWEEN KENSINGTON AND SHOREDITCH.

THE Metropolitan Board of Works have undertaken the formation of a new thoroughfare, which, when completed, will make a direct route from Shoreditch to Kensington, through the heart of London. A portion of the new street was formally opened last week by the Chairman of the Board, and at a luncheon which took place afterwards Sir J. McGarel Hogg defended the action of the Board with regard to the steps taken to carry out this and several other metropolitan improvements. He said—"The gross estimated cost of this undertaking was £1,600,000, but from various remunerative alterations the net cost would be reduced to £1,100,000. The Board had done the best that was possible under the circumstances in carrying out the provisions of the Act of 1872 with regard to the clauses requiring accommodation to be found for the labouring and artisan classes displaced by the execution of improvements of this character." He also defended the vestries of the metropolis against the charges which had been made a subject of ridicule by some members of the House of Commons in a recent debate, and expressed his conviction that, whatever mistakes some of these bodies might occasionally make, they were on the whole, as evinced by the public spirit they had shown in assisting to carry out various great improvements in London, better able to judge of the wants of their own localities than any central authority would probably be.

IRREGULARITIES OF A SANITARY AUTHORITY.

IN the course of an official inquiry as to the application of the Slough Urban Sanitary Authority to borrow £18,000 for drainage purposes, Colonel Cox, the Government Inspector, ascertained that £1500, the balance of a previous loan of £7000, had been applied to meet various charges which should have been met by payments out of the current rates. He reported the matter to the Local Government Board, and in a letter to the authority the Board state that they extremely regret to hear of such grave irregularities. They consider that money raised by a sanitary authority should only be applied to the works expressly sanctioned, and that if more money is borrowed than is actually required the balance should at once be paid to the lenders, or, if the terms of the mortgages will not admit of this, it should be placed in a sinking fund, and allowed to accumulate at interest, with a view to the redemption of the loan. The Board further consider that the sum which has been misappropriated should be forthwith recouped, and they therefore propose to reduce the amount of the loan now applied for by £1500.

BETHNAL-GREEN BURIAL-GROUND.

THE Chancellor of the Diocese of London has at last given judgment in the case of St. Matthew, Bethnal-green, in which, it may be remembered, an application was made by the vicar and churchwardens on behalf of the parish for a faculty from the Bishop of London to erect a mortuary and other buildings in the disused churchyard for holding a coroner's court and for making post-mortem examinations. The Chancellor considered that the parishioners who objected to this arrangement were justified in the course they took; but he was of opinion that consecrated ground might be used for a mortuary, though not for a coroner's court, or living-rooms for the keeper of the mortuary. He had inspected the place, and, although objectionable, thought it was the best spot that could be selected for a mortuary in such a crowded parish. He would therefore grant a faculty for a mortuary and post-mortem rooms only, but these must be placed farther back from the road. It is satisfactory to find that, after three months' consideration, the parish of St. Matthew, Bethnal-green, is at least to have a mortuary and facilities for making post-mortem examinations.

THE VALUE OF GAS REFUSE.

A STRIKING example of the value of refuse products in manufactures was afforded recently at Bradford. The gas-works in that town advertised for tenders for the ammoniacal liquor produced in the manufacture of their gas, and accepted the offer of Mr. Stewart, of Manchester, who was willing to pay £10,359 per annum for seven years for the privilege of securing this article. There was a keen competition for this contract, as the discovery in the liquor of a certain chemical substance used in aniline dyes has greatly enhanced its value. The price paid under the expiring contract has been £800 per annum only, and the contract extended over a period of ten years: the holder of this profitable agreement was among the competitors for the new contract, and his offer rose from £800 to £8000 per annum.

THE METROPOLITAN WATER BILL.

THE Home Secretary last week received a deputation consisting of representatives from the Metropolitan Waterworks Companies, who stated that their object in waiting upon him was to ascertain what course the Government meant to take with reference to the Bill now before Parliament affecting their interests. In reply to their observations Mr. Cross said the question of water-supply was one which he should like to see definitely settled, but, in his opinion, there was no chance of the present Bill being read a second time.

LIVERPOOL HOSPITAL SUNDAY FUND.

THE Committee of the Liverpool Hospital Sunday Fund have apportioned this year's collection, amounting to £9000, as follows:—To the Royal Infirmary, £2976; Royal Southern

Hospital, £1488; Northern Hospital, £1296; Dispensaries £960; and the remainder to twelve of the smaller medical charities. Notwithstanding the depressed state of trade during the past year, the total amount now awarded is only £50 less than the sum distributed at the similar collection in 1877.

A CLOSE ELECTION.

At a General Court of Governors of St. Thomas's Hospital, held on Wednesday last, out of five candidates for the post of Ophthalmic Surgeon, it was decided after a show of hands that two—Mr. Nettleship and Mr. McHardy—should be balloted for. The result was that each polled fifty-one votes, Mr. Nettleship being elected to the vacant post through the casting vote of the Treasurer.

FROM ABROAD.

OBSTETRICAL ANÆSTHESIA.

In an article in the *Gaz. des Hopitaux* of April 7, it is stated that since M. Lucas-Championnière has been attached to the Maternity of the Hopital Cochin, he has employed anæsthesia as a constant and regular practice in cases of ordinary labour, the object being to annihilate suffering without inducing complete loss of consciousness. It is not, however, to be supposed that this end is always attainable by the same procedure, with the same quantity of chloroform, or in the same time; for the effect of the chloroform varies from individual predisposition and according to the period of labour at which it is administered. In some cases, when begun in good time, a few drops only are given from time to time on a handkerchief, the woman herself holding this and breathing the chloroform at the moment when she feels the contractions. Great relief is attained, the woman scarcely feeling the acuteness of the pains, and being able to continue to converse with those around her. She, so to say, anæsthetises herself, proceeding thus gradually until complete dilatation is accomplished, the accoucheur being apprised by a more urgent resort to the chloroform that the head has reached the vulva. It is for him alone to determine whether the dose should then be increased or whether the woman should be left to her suffering at the last moment. This is the most simple type of case, in which a very small quantity of chloroform is required. But there are women who are more rebellious to the action of chloroform, especially if its administration is only commenced after they have already suffered severely for one or several hours. They derive no benefit unless it be given more abundantly. They do not lose consciousness, but they have a tendency to drowsiness, during which they know all that is going on; and when this tendency has passed away, they instantly demand more chloroform. In the intervals they remain habitually silent, but care must be taken not to give the chloroform at too long intervals, as the doses would then have to be exaggerated in order to produce sufficient anæsthesia. With this precaution the labour is safely terminated, the women struggling, and showing that they feel the contractions, but without any acute pains. There are other women who are still more refractory—viz., those in whom labour commences only long after the membranes have been ruptured, when the uterus is hard and contracted, or when the labour has very far advanced. In such cases as these Simpson's plan must be followed, of giving a considerable quantity of chloroform at once, pushing on the inhalations without fear until the woman is completely insensible. Even this is not "surgical anæsthesia," it is only the sleep which precedes the stage of excitement; and if these inhalations be continued for fifteen or twenty minutes, we may then prolong the state of semi-anæsthesia until the end of the labour. The result of semi-anæsthesia, M. Lucas-Championnière observes, is the suppression of pain and of the symptoms of excitement which so often accompany it. The uterine contractions are not suppressed but regularised, occur at more regular intervals, and become efficacious. The influence, indeed, exerted on the progress of the labour is favourable. It usually proceeds rapidly, and sometimes this rapidity is truly surprising. Not only is this anæsthesia without danger, but even without any inconveniences. The labour, in spite of what has been said, is not delayed, and the child at its birth exhibits no signs of insensibility. The sequences of delivery are better, and the strength is more rapidly recovered. An important fact to be insisted upon is, that if we desire to keep within the limits of small doses, the inhalations must be commenced before the woman has suffered much. As to contraindications of his procedure, M. Lucas believes they must be excessively rare; and he does not consider as such either cardiac or pulmonary affections.

CÆSAREAN SECTION AND REMOVAL OF UTERUS.

Prof. Späth related the following case to the Vienna Medical Society (*Allg. Wien. Med. Zeit.*, January 22):—A woman, aged forty, was admitted into his clinic pregnant with her tenth child. She had borne five living children, had aborted three times, and in her last labour the child's head was perforated. For the last five years she had suffered from osteomalacia. She was pale and considerably emaciated, suffered from a considerable bronchial catarrh, and there was much albuminuria, together with œdema of the lower extremities. On examination it was found that so great a degree of contraction of the pelvis existed that the Cæsarean section was absolutely indicated. Endeavours were made, without much success, to increase her strength while she was kept in a separate room awaiting the occurrence of pains.

After mature reflection, guided by former experience, Prof. Späth resolved that he would perform the Cæsarean operation under Lister's method; and in the case of the uterus not contracting completely, and thus endangering the occurrence of subsequent hæmorrhage, he would proceed to its entire removal. Although every case of Cæsarean section performed in the Vienna Lying-in Hospital during the last century had terminated fatally either from septicæmia, peritonitis, or hæmorrhage, yet, encouraged by the success of Péan and Porro in their cases of removal of the uterus, he hoped by the aid of Lister's method, and the prompt extirpation of the uterus if necessary, to secure a better issue in this case. Accordingly, on June 2, 1876, labour pains having become active, he performed the Cæsarean operation, and removed a living child without any difficulty. An injection of ergotin had been previously made in order to secure energetic uterine contraction; but, as this did not take place, and as considerable hæmorrhage occurred, which iced water failed to arrest, the extirpation of the uterus was resolved on. The uterus having been secured in the neighbourhood of its neck by the chain of the écraseur, and raised up from the wound, Prof. Späth separated its body from the neck by some strokes with the scalpel. The cavity of the abdomen was carefully cleansed, and the wound was united, securing the pedicle at its lower angle. The whole operation scarcely occupied an hour. The patient soon came to, and complained but little of pain. The subsequent course of the case was most favourable, the highest temperature being 38·6° C. The albuminuria and œdema disappeared. The patient's strength was kept up by champagne, and the catarrh, which had been very troublesome, diminished. On the tenth day the end of the pedicle fell off: and on the thirty-eighth day after the operation the patient was able to stand, and eleven days afterwards to walk in the garden. On September 18 she was discharged cured. In October the small fistula which remained after the union of the rest of the wound had completely healed, and the patient was rid of all her suffering.

Prof. Späth exhibited the patient to the Society, then some eighteen months after the operation, in the enjoyment of complete health, the pains caused heretofore by the osteomalacia having disappeared. On examination, the freely movable cervix could be felt high up, but no exudation was perceptible beyond. Prof. Späth believes that this procedure will be found to deserve adoption in preference to simple Cæsarean section. The wound in the uterus is definitively smaller, and can be submitted to external treatment, and uterine hæmorrhage and endouetritis become impossible (nor can the woman, we may add, become again pregnant, as sometimes happens notwithstanding the danger that has been run in Cæsarean section).

GENERAL CORRESPONDENCE.

THE ARMY MEDICAL SERVICE.

LETTER FROM MR. R. C. LUCAS.

[To the Editor of the Medical Times and Gazette.]

SIR,—After issuing many abortive Warrants, with the avowed object of making the Army Medical Service more popular, Mr. Secretary Hardy has addressed himself to the various medical schools of the metropolis, to learn the cause of the unwillingness of students to compete for commissions in the army. Now would seem, therefore, to be a very favourable opportunity for the teachers at the various schools to come forward and assist in framing any scheme which might raise the position of the medical officers in the army. At Guy's Hospital a committee has been appointed to inquire into the subject, and it is to be hoped that some concerted action may be taken by the teachers at all the metropolitan schools.

That the medical officers in the army have a number of grievances which make them discontented, when they compare themselves with combatant officers, there can be no doubt. These grievances ought to be removed, and the privileges of the surgeon made as nearly identical with those of the combatant officers as, consistently with their different duties, they can be. But most of these grievances only become known to the medical officers after they have passed into the army; whereas every junior student is able to appreciate the awkward position in which he would be placed if compelled to retire from the army after ten years' service, with a trifling bonus of £1000. I think everyone is agreed that this scheme of retirement ought at once to be annulled.

Before referring to the disadvantages of the Service, it would be as well to consider what are the inducements offered to medical men to enter the army. These appear to be two—an easy social life, and a regular certain income. The pay is little compared with what a medical man may soon earn in civil practice, and it must therefore, I think, be conceded that it is the social life which is the chief attraction. Formerly, the inducements were not sufficient to attract more than an occasional student from a London school; but under the unification system even these hold back. From what I can gather, it seems that the senior medical officers in the Service, who have passed through the regimental system, are in favour of the unification scheme; whilst the juniors and students are all in favour of the regimental system. Might not, then, a scheme be drawn up, by which for the first five years the surgeon should be compelled to serve with a regiment, and afterwards pass out into the hospital or depôt corps as under the unification scheme?

I am, &c., R. CLEMENT LUCAS, B.S.

COLOUR-BLINDNESS.—Dr. Lederer, a naval surgeon, in an elaborate paper in the *Wien. Med. Wochenschrift* (1878, Nos. 2 and 4) states that the observations which he has made upon 1300 individuals lead him to the following conclusions:—1. That colour-blindness properly so called, in its strictly scientific sense, is a very rare occurrence. 2. People who are not always conversant with colours are pretty numerous; and this should be borne in mind in selecting those who have to be engaged on important services with coloured signals. It would be incorrect, however, to regard all such persons as subjects of colour-blindness.

THE MECCA PILGRIMAGE OF 1877.—The following statistics of the number of pilgrims is of interest in reference to the transport of contagious diseases from Asia, and especially from India, the home of cholera, to Africa and Europe. Between August 12 and December 15, 1877, the following pilgrims arrived at the port of Djedda, on their way to Mecca, viz.:—17,024 by the Indian Ocean, 2566 by the Persian Gulf, 3307 by the Red Sea, and 19,861 by the Suez Canal. Of the total number 42,718 pilgrims, 37,188 arrived in 95 steamers, 514 in 2 sailing-vessels, and 5016 in 154 *sambouks*. Of the 95 steamers 54 were English, 20 Egyptian, 15 Austrian, 2 French, 2 Italian, 2 Dutch, and 2 Norwegian. The number of pilgrims that arrived at Djedda was 35,279 in 1875, and 38,759 in 1876.—*Veröff. des Deutschen Gesundh.*, April 1 [the same number contains an interesting report upon the epidemic of cholera at Mecca and Medina].

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen having conformed to the by-laws and regulations, and passed the required examinations, were granted Licences to practise Physic, at the meeting of the College on the 15th inst.:—

Bartlett, Felix Paul, 5, Albert-street, N.W.
Birt, Ernest, County Asylum, Shrewsbury.
Davis, George, 11, Avenue, Blackheath, S.E.
Dumbleton, Edgar Hunt, 81, Commercial-street, E.
Ellis, William Ashton, 59, Sloane-street, S.W.
Gamble, Ernest Langwith Gompertz, 8, Chase, Clapham-common, S.W.
Gaze, William Henry, Woodlands, Thames Ditton.
Greenwood, Arthur, 140, Minories, E.
Greenwood, Major, London Hospital, E.
Henry, Louis, 34, Ampthill-square, N.W.
Jover, Anthony, 20, Paris-street, S.E.
May, Albert Edward, 5, Clifton-gardens, W.
Moritz, Siegmund, Cheetham, Manchester.
Nicoll, Thomas Vere, 81, Charterhouse-street, E.C.
Norton, Ritchie Robinson, University Hospital, W.C.
Oram, Richard Rundell William, 28, Great Coram-street, W.C.
Packer, William Herbert, County Asylum, Glo'ster.
Reddy, Herbert Lionel, St. Thomas's Hospital, S.E.
Shaw, Charles Thomas Knox, 8, Guilford-place, W.C.
Stokes, Richard Lingard, 30, Albert-street, N.W.
Vasey, Samuel William, 5, Cavendish-place, W.

THE ROYAL COLLEGE OF SURGEONS.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 16th inst., viz.:

Ball, William Montague, L.S.A., Camden-road, student of St. Bartholomew's Hospital.
Bennett, William Charles Storer, L.R.C.P. Lond., George-street, W., of the Middlesex Hospital.
Burt, Alfred, L.S.A., Ventnor, of Guy's Hospital.
Buxton, Alfred St. Clair, L.R.C.P. Edin., Shepherd's-bush, of Guy's Hospital.
Clabburn, Tom George, Norwich, of King's College Hospital.
Clark, Charles Alfred Dagnall, Twickenham, of St. Bartholomew's Hospital.
Clarke, Richard, L.S.A., Henton, Oxon, of the Aberdeen School.
Clarke, Thomas Furze, L.S.A., Richmond, Surrey, of King's College Hospital.
Flood, Francis Pultney, Leeds, of the Leeds School.
Gabb, Claude Baker, L.R.C.P. Edin., Hastings, of St. Bartholomew's Hospital.
Gilbert, Philip Francis, L.R.C.P. Edin., The Vicarage, Cripplegate, of Guy's Hospital.
Griffith, Walter Spencer Anderson, Sandridge, near St. Albans, of St. Bartholomew's Hospital.
Henderson, Cecil, Clifton, Bristol, of the Bristol School.
Hetherington, George Haynes, L.S.A., Uxbridge, of St. Mary's Hospital.
Lowson, David, M.D. Aber., Huddersfield, of the Aberdeen School.
Pearse, Thomas Frederick, L.R.C.P. Lond., Finborough-road, S.W., of the Middlesex Hospital.
Pinching, William Wyatt, L.R.C.P. Edin., Gravesend, of Guy's Hospital.
Powell, Arthur Ernest, L.R.C.P. Edin., Norwich, of St. Thomas's Hospital.
Prichard, James Edward, Clifton, Bristol, of University College Hospital.
Rendall, Stanley Morton, Torquay, Devon, of the Edinburgh School.
Sayer, Thomas, Swaffham, Norfolk, of University College Hospital.
Skelding, Henry John, L.S.A., Bayswater, of University College Hospital.
Takaki, Kanehiro, Tokio, Japan, of St. Thomas's Hospital.(a)
Wride, Francis George, L.K.& Q.C.P. Ire., Oxton, Cheshire, of St. Thomas's Hospital.

Five gentlemen were approved in Surgery, and when qualified in Medicine will be admitted Members of the College; and six candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 11:—

Benington, Robert Crewdson, Vivian-road, Peckham-rye.
Bisdee, Alfred James, Hutton, Weston-super-Mare.
Brock, Charles Delisle, St. John's Vicarage, Guernsey.
Bryden, Richard Joseph, Uffculme, Devon.
Burt, Alfred, Ventnor, Isle of Wight.
Cumming, Robert Frederick, St. David's Hill, Exeter.
Drewitt, Frederick George Dawtry, Cumberland-street, Eccleston-square.
Wiles, Frederick William, Wotton-under-Edge, Gloucester.

APPOINTMENT.

GELDARD, R. HENRY, L.D.S.R.C.S. Eng., of Plymouth.—Dental Surgeon to the Royal Albert Hospital.

(a) This gentleman, who has already passed the primary examination for the Fellowship, is the first Japanese student who has been admitted a Member of the College.

NAVAL, MILITARY, &c., APPOINTMENTS.

Royal Naval Artillery Volunteers, Liverpool Brigade.—Surgeon Reginald Harrison, F.R.C.S., to be Honorary Staff-Surgeon; Henry Ashby, M.B., M.R.C.S., to be Surgeon.

Whitehall.—The Lord Chancellor has appointed Dr. W. Rhys Williams to be a Commissioner in Lunacy, on the resignation of James Wilkes, Esq.; and James Wilkes, Esq., to be an Honorary Commissioner in Lunacy, without salary.

Bombay Medical Establishment—Surgeon John Thomson Welsh, M.D., to be Surgeon-Major.

BIRTHS.

Lloyd.—On April 14, at Pleasant-place, Brooke-street, Kennington, the wife of Robert H. Lloyd, M.D., of a son.

Palmer.—On April 16, at Ormonde House, Old Kent-road, the wife of F. W. Palmer, L.R.C.P. Edin., of a son.

Roberts.—On April 13, at Hopeton Villa, Upper Lewisham-road, the wife of H. W. Roberts, M.R.C.S. Eng., of a daughter.

Stirling.—On April 15, at 60, Great Cumberland-place, Hyde-park, the wife of Edward C. Stirling, M.B., F.R.C.S., of a daughter.

MARRIAGE.

Greenwood—Cumberbatch.—On April 11, at Trinity Church, Upper Chelsea, Granville George, younger son of the late John Greenwood, Esq., Q.C., to Laurentia Trent, eldest daughter of L. T. Cumberbatch, M.D., of 25, Cadogan-place.

DEATHS.

Cass, William, M.D., late of Cowes, Isle of Wight, at 20, St. George's-road, S.W., on April 12, aged 67.

Drew, Walter Henry, M.R.C.P. Edin., M.R.C.S. Eng., of Ospringe-road, Tufnell-park, at Salisbury, on April 9, aged 33.

Eeden, Laura Henrietta, wife of Henry A. Ebden, M.D., late of H.E.I.C.S., at Rondesbosch, near Cape Town, on March 13.

Griffith, John Clewin, M.A., M.B., etc., at Ventnor, on April 12, aged 45.

Leake, Jonas R., L.R.C.P. Edin., eldest surviving son of Jonas Leake, M.D., West Kensington-gardens, London, W., at Rathkeale House, Brook-green, W., on April 14, aged 34.

Murdoch, William Burn, M.D., at 4, Bruntsfield-terrace, Edinburgh, on April 12.

Shea, Henry D., R.N., M.R.C.S. Eng., L.S.A., Deputy Inspector-General of Hospitals at Diep River, Cape of Good Hope, on March 16, aged 66.

Taylor, Mary Mildred, wife of Henry Taylor, M.D., H.M.'s Indian Army (retired), at 13, Seafield-villas, Brighton, on April 3, in the 51st year of her age.

Van der Kemp, Anna, wife of J. J. Van der Kemp, M.D., at 51, Boulevard Eugène, Neuilly (Seine), on April 9.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

Bristol Royal Infirmary.—House-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons of London, Edinburgh, or Dublin, or Masters in Surgery of one of the universities of the United Kingdom, and also possess a registered medical qualification. Applications, with testimonials, to the Secretary, on or before May 1.

Great Northern Hospital, Caledonian-road, N.—Ophthalmic Surgeon. Candidates must be Fellows of the Royal College of Surgeons of England. Applications, with testimonials, to the Secretary, on or before May 6.

Kent and Canterbury Hospital.—Assistant House-Surgeon and Dispenser (one office). Candidates, who must produce proof of being registered under the Medical Act as legally qualified to practise, and of being accustomed to dispense medicines, must be unmarried and not more than fifty years of age. Qualifications and testimonials to the Secretary, on or before April 25.

The Lord Chancellor has appointed Dr. W. Rhys Williams to be a Commissioner in Lunacy, on the resignation of James Wilkes, Esq.; and James Wilkes, Esq., to be an Honorary Commissioner in Lunacy, without salary.

West Kent Medico-Chirurgical Society.—The eighth and last meeting of the session will be held on Friday, May 3, at the Royal Kent Dispensary, Greenwich-road, at 8 p.m. precisely. Clinical cases by the members.

The Government has had under its consideration the necessity for increased hospital accommodation in the island of Malta for both branches of the Service, and it is stated that immediate steps are to be taken with respect to the naval hospital there, so as to render it capable of meeting the requirements of so large a fleet as that now assembled in the Mediterranean.

The Hunterian Society.—At the meeting of the Hunterian Society, which will be held in the London Institution, Finsbury-circus, on Wednesday, April 24, Dr. B. W. Richardson, F.R.S., will read a paper "On the Practice of Total Abstinence from Alcohol in Health and Disease." The President and Council desire that any members of the profession interested in the subject may be present to hear the paper and join in the discussion.

The degree of Doctor of Medicine has recently been conferred in Holland upon a woman, a Miss Aletta Jacobs, who has announced her intention of publicly practising medicine at Amsterdam. This is the first instance in Holland in which a medical degree has been conferred upon a woman.

Salicylic Acid as a Dressing of Wounds.—Dr Sacré, in a paper addressed to the Belgian Academy of Medicine, states that he has found, at the St. Jean Hospital, Brussels, the treatment of wounds by drainage and the application of compresses wetted with a solution of salicylic acid extremely efficacious. In very complicated wounds it constitutes an antiseptic at once simple and effectual.—*Gaz. Hebd.*, April 12.

The Hunterian Museum.—Among the most recent additions to the collection are three skeletons of the diminutive natives of the Andaman Islands—one male and two females—presented by Dr. J. Dougall, Surgeon-Major H.M. Madras Army, Senior Medical Officer at Port Blair. These people rarely exceed five feet in height, have black complexions and woolly hair, and exhibit several osteological peculiarities, which were pointed out by Professor Flower, F.R.S., in his recent lectures at the College.

Number of the Pulsations of the Heart during Life.—Dr. Guyot, after consulting the best authorities on the subject, and making the necessary calculations, has determined that the number of pulsations during the different ages of life are as follow:—During the first year, 63 millions (we only transcribe the round numbers); during the first two years, 120 millions; during the first eight years, 435 millions; during the first twelve years, 614 millions; during the first fourteen years, 698 millions; during the thirty-six years, from fifteen to thirty-six inclusively, 1,229,904,900; during a life of fifty years, 1,928,160,000; during a life of sixty years, 2,269,800,000; and during a life of eighty years, 3,007,040,000. To these figures, applicable to an individual in constant good health, have to be added the pulsations of fœtal life, calculated at 27,216,000. The total number of contractions in a centenarian would amount to 3 milliards 792 millions and 550,000, or nearly 4 milliards. —*Rev. Méd.*, April 8.

The Sussex County Lunatic Asylum.—In the nineteenth annual report on the Sussex County Lunatic Asylum at Hayward's-heath, for the year 1877, Dr. Williams, the Medical Superintendent, calls attention to the fact that, notwithstanding the strongest efforts to the contrary, the Asylum is slowly but gradually filling up; and if the system of late adopted, of sending all the chronic cases from the workhouses into this establishment, be continued, it will within two or three years be quite full, and the question of how best to provide increased accommodation will have to be seriously considered. He also raises the question whether it is wise thus to fill up lunatic asylums, since there can be no doubt that chronic lunatics, idiots, and imbeciles do not require the same expensive arrangements as the actually insane; and if they were kept in the workhouses, or in simple detached buildings, connected with and under the same management as the workhouses, the expense to the ratepayers would be much less than what would have to be incurred in enlarging the present Asylum or building a new one. During the year under notice the statistical results were, in most instances, about the average. The discharges (including the cases relieved) were 48·2 per cent. on the admissions of the year. Excluding those cases relieved, the percentage of recoveries on the admissions stands at—male, 24·7; female, 20·5; average, 27·0 per cent. On the mean number resident it was—male, 12·7; female, 11·7; average, 12·2 per cent. The mean annual mortality on the total number under treatment was—male 9·6; female, 9·2. This percentage is somewhat above that of last year, but below that of the year before. The average weekly cost of maintenance has been at the rate of about 10s. per head.

Non-payment of Expert Evidence.—The *Philadelphia Medical Times* (February 16) adverts to the question of experts in relation to a case of rape recently tried in Indiana. Two physicians were subpœnaed to give opinions on a supposititious case, without prospect of payment as experts. They refused, and were committed to prison for contempt. Appealing to the Supreme Court of the State, they were brought up by *habeas corpus*, their counsel maintaining that their opinions concerning a supposititious case were their

private property, acquired at a great expenditure of time, money, and labour, and could not be taken from them for the public weal without compensation, and that the rendering of such opinion was a particular service, and that the Constitution of Indiana expressly provides "that no man's particular service shall be demanded without just compensation." The presiding judge decided against the doctors, and remanded them to prison, when they purged themselves of the contempt and gave the evidence demanded. The judge stated that when a physician is ordered by the legal authorities to perform a post-mortem he has a right to demand compensation, but when asked for an opinion he is not entitled to receive more than the dollar and a-half a day of the ordinary witness. The Editor of the *Medical Times* recommends the profession to unite and get the law altered, or men in general practice may deny that they are experts, and escape the inconvenience of being called upon. Most of those who are called in court are not experts in the proper sense of the term, and may incur disgrace by expressing opinions on delicate medico-legal questions that they have never studied or had experience concerning.

TYPHUS IN THE CAUCASUS.—The *St. Petersburg Med. Zeit.* (March 23) states that it learns from private letters that petechial typhus rages in Alexandropol, Kars, and Erzeroum, the mortality being enormous. To the present time there have died twenty-eight of the medical officers of the Caucasian army—twenty of these of typhus. There is hardly a medical officer in any of these three garrisons who has not been ill; and some of them more than once. The mortality among the surgeons (*Feldscheerern*) and sanitary attendants has been very great, so that there is a great want of them. The immense number of wounded that have been brought in during the last three months has dwindled down to a small heap. All that can be transported are removed. In Alexandropol there are now very few, and in Kars none at all. The distress in these places has been aggravated by the impassability of the roads, so that the communications between Alexandropol and Kars, and Kars and Erzeroum, have been suspended for weeks, at least for vehicles. The transports have therefore been stopped, and the hospitals have been without their necessary supplies of linen, articles of food, etc. While typhus prevails so in the main army, erysipelas, scorbutus, and hospital gangrene are common in the detachments. So severe a winter has not occurred for twenty years, so that there were several feet of snow met with every day during February. This melts under the sun's rays during the day, and the unfortunate troops are exposed to violent changes of temperature, and are sinking almost up to the knees in the wet soil. Disease is thus becoming more and more prevalent, scorbutus occupying the foreground. Erysipelas and hospital gangrene have also attacked many of the wounded.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Reed, Pentridge.—Received with thanks.

Mr. F. W. Armitage, Tauranga.—Received with thanks.

J. N.—Most hospital surgeons now make use of the method in question. Ask your ordinary attendant.

Infantile Mortality in Macclesfield.—Statements respecting the infant mortality of the borough of Macclesfield having a short time since obtained a rather wide circulation, the Medical Officer of Health was instructed by the Local Board of Health to investigate the subject. The Medical Officer's report has been laid before the Local Board, and it shows the lowest death-rate that has ever been recorded for Macclesfield; for the past year the rate of mortality had been 20·2 per 1000, which was actually less than the average death-rate for the whole of England. This rate was lower by 2·04 per 1000 than the death-rate of twenty of the largest cities and towns in the kingdom, and lower by 1·02 per 1000 than fifty of the next largest cities and towns usually quoted in the Registrar-General's Returns. The report also states that throughout 1877 a very marked decrease in infantile mortality had been experienced, especially during the first three quarters of the year. In this respect Macclesfield registered a lower death-rate than the average of the whole of England, the average for the United Kingdom being 13 per cent., whereas the infantile mortality of Macclesfield was only 11 per cent. These statistics afford a fresh proof of the fallacy of taking the mortality of any one year, especially a year of epidemics, as 1876 was, and deducing from it general inferences and general conclusions.

A Lady Doctor, U.S.—The admission of women to the Medical School of the University of Paris was first announced publicly in England by a letter from Miss Jex-Blake in the *Spectator* of September 22, 1868.

Infected Cab Fares.—At Margate a lady has been fined £2 and costs under rather rare circumstances. In February she took apartments at Broadstairs, representing that she had brought three of her children with her, because one of her sons had been sent home from school with small-pox. A few days afterwards one of the three showed symptoms of the same disease, and was removed in a cab. This was the offence. We wish that local authorities generally were equally vigilant.

Co-operation.—Dr. Thomas Dean, Medical Officer of Health, has communicated the fact to the Burnley School Board, that more than a fourth of the deaths in that town, in the past month, have been caused by diseases such as measles and scarlatina, and appeals to the Board for their co-operation in the endeavour to stay the spread of infectious diseases.

Anti-Vaccination, Brighton.—Active and energetic steps are being taken by the opponents of vaccination at Brighton, with the view of securing the return of several members of the Anti-Vaccination League on the Board of Guardians at the ensuing Easter elections. Several of their members have already been nominated as candidates.

A Worthy Example.—The Consett Iron Company have just built a new infirmary in Parliament-street, Consett. Nearly an acre of land has been set apart by the Company for the purpose. The new building will contain a ward which will be supplied with eight beds, nurse's accommodation, a convalescent ward, operating-room, and a ward for two beds for severe cases and isolated from the principal ward. Lavatories and bath-rooms have also been provided, and the whole cost of the building, exclusive of the fittings, will be about £2800.

Longevity.—The *Times'* obituary of a recent date recorded the deaths of four ladies and one gentleman, whose united ages amounted to 463 years, averaging rather more than ninety-two years and seven months each; the youngest was eighty-two, and the oldest had reached the great age of one hundred years and six months. There were also six septuagenarians, whose united ages amounted to 448 years, giving an average of seventy-four years and eight months.

Infection Wards in Workhouses.—The question of the erection of a ward for infectious cases came before the Stockton Board of Guardians a few days since, when Mr. Cully, the Local Government Board District Inspector, and Dr. Mouat, from the medical staff, attended to give explanations with reference to plans which had been submitted to the Local Government Board, and returned disapproved. Mr. Cully pointed out the defects of the plans. Dr. Mouat then described a plan of accommodation that would be more advantageous, as well as cheaper, which is instructive and deserves attention. He said it appeared that there was insufficient hospital accommodation in the workhouse, which the Board of Guardians wished to increase. He was satisfied that a workhouse was not a suitable place for introducing contagious fevers in any form that could possibly be avoided. It had been found in a number of workhouses that the workhouse enclosure was about the worst place such cases could be entrusted to. Isolation could not be obtained owing to administrative and other reasons. That was the first reason that had rendered the Local Government Board undesirous of entrusting such cases to the workhouse. From the statistics which had been obtained it was clear that the number of cases of infection that originated in workhouses was not very great. It was necessary that the authorities should provide for the immediate isolation of those cases, but very little room would be required for them. The least expensive and temporary buildings, that were capable of being warmed and lighted and sufficiently isolated, were the very best, and he would recommend wooden huts of the most simple construction. They would last ten to fifteen years if properly built, and the cost would be very small. As an instance of the efficiency of this kind of hut, together with isolation, he referred to the way camp-fever was stamped out of the Duke of Wellington's Peninsular army. He next recommended the Board of Guardians to enter into arrangements with the sanitary authorities to make provisions for all classes of fevers, and concluded his remarks by advising that a deputation of the Board should go to Manchester and Bolton, where the hut system was in operation. The Board decided that, before proceeding further with the plans, a deputation be appointed to go to Manchester and Bolton to inspect the huts mentioned, and report to the Board.

The Old Story.—In consequence of scarlet fever being prevalent in the neighbourhood of Lee, Mr. Wigner, public analyst, has presented a report to the Plumstead District Board of Works, in which he states that he had obtained various samples of milk, in which he found water added to the extent of from 6 to 45 per cent. Four samples were in a state quite unfit for food, as they contained the germs of disease, traceable, no doubt, to the contaminated water in the cowkeepers' yards. The wells from which the water was drawn were often mere receptacles of diluted sewage; and he had just examined a sample, taken from one of these wells, which was fourteen times as foul as the London drainage that was daily discharged into the river at Crossness. He urged that the contents of the wells in the farmyards and dairies should be frequently tested. The Board has given instructions to prosecute the vendors of the milk.

The Need of Statutory Obligation.—Dr. Sedgwick Saunders, Medical Officer of Health of the City of London, calls attention in his last report to the utter impossibility of adopting early preventive measures for checking the spread of contagious diseases. This arises from the objection of parents and others to give information of the existence of disease. He feared no improvement would take place in this matter without further legislative interference.

Health in Chelmsford.—Mr. E. H. Carter, the Medical Officer of Health, in his recent report, shows that there has been a somewhat larger number of deaths during the past month than usual, but the death-list presented some remarkable features—twenty-seven deaths had been registered, and one only was from any zymotic disease. Of the total number, seven were children under two years of age, and thirteen ranged from sixty-eight to ninety-one, the united ages of the latter being 1014 years, or an average of seventy-eight. The epidemic of measles has abated, but whooping-cough and mumps were very prevalent. The Sanitary Committee had instructed the inspector to endeavour to ascertain and report to them all cases of overcrowding of houses by the militia. It was stated that in one small cottage eight or ten militiamen were lodged.

COMMUNICATIONS have been received from—

Mr. B. R. Wheatley, Loudon; Dr. N. P. B. Taaffe, Brighton; Dr. Thomas Barlow, London; Mr. T. M. Stone, London; The Secretary of the Council of the Royal College of Surgeons in Ireland; Mr. Shirley Murphy, London; Mr. T. B. Curling, London; Messrs. Mackey, Sellbas, and Co., London; The Hon. Secretary of the Harveian Society; The Registrar of the Apothecaries' Hall, London; The Medical Superintendent, Yaws Hospital; Dr. Block, Hanover; Dr. H. K. Hitchcock, Lewisham; Dr. Jencken, Kingstown; The Hon. Secretary of the Quekett Microscopical Club; Mr. F. W. Lowndes, Liverpool; The Secretary of the Hunterian Society, London; Mr. John Chatto, London; Mr. S. R. Dyer, Chiswick; Mr. W. Baxter, Kennington; Dr. Savage, London; Mr. G. Brown, Islington; Dr. Duckworth, Edinburgh.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Medicale—Gazette Hebdomadaire—Le Progrès Médical—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Journal of Psychological Medicine and Mental Pathology—Guy's Hospital Gazette—Boston Journal of Chemistry—Students' Journal and Medical Gazette—Australian Practitioner—North Carolina Medical Journal—Dublin Journal of Medical Science—American Bookseller—Revue des Sciences Médicales.

APPOINTMENTS FOR THE WEEK.

April 20. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

22. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

23. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Medical and Chirurgical Society, 8½ p.m. Mr. Nettleship, "On a Rare Form of Primary Opacity of the Cornea." Mr. Harrison Cripps, "On the Treatment of Hæmorrhage from Punctured Wounds of the Throat and Neck." Dr. Topham, "On an Abscess within Thorax, accompanied by Pulsation."

24. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Hunterian Society (London Institution), 8 p.m. Dr. B. W. Richardson, "On the Practice of Total Abstinence from Alcohol in Health and Disease."

25. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Harveian Society, 8 p.m. Special Meeting. Mr. Augustus J. Pepper, "On Abnormalities of Fœtal Development."

26. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Quekett Microscopical Club, 8 p.m. Mr. J. G. Waller, "On Variation in *Spongilla fluviatilis*."

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 13, 1878.

BIRTHS.

Births of Boys, 1319; Girls, 1262; Total, 2581.
Average of 10 corresponding years 1868-77, 2350·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	1000	895	1895
Average of the ten years 1868-77	775·2	736·7	1511·9
Average corrected to increased population ...	...	...	1618
Deaths of people aged 80 and upwards ...	...	...	71

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	8	3	4	2	19	...	1	...	2
North ...	751729	30	8	10	3	29	1	5	1	6
Central ...	334369	1	3	4	...	9	...	2	...	3
East	639111	11	8	9	...	38	...	3	2	2
South	967692	8	18	9	4	62	3	12	2	1
Total	3254260	58	40	36	9	157	4	23	5	14

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·857 in.
Mean temperature	46·0°
Highest point of thermometer	64·6°
Lowest point of thermometer	32·1°
Mean dew-point temperature	38·3°
General direction of wind	E.
Whole amount of rain in the week	2·85 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 13, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending April 13.	Deaths Registered during the week ending April 13.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2581	1895	62·6	32·1	46·0	7·78	2·85	7·24
Brighton	103323	44·1	55	59	59·3	36·0	46·1	7·81	0·81	2·06
Portsmouth ...	129461	28·9	73	47	..	...	..	...	...	...
Norwich	84620	11·3	64	36	62·5	33·2	45·8	7·67	0·01	0·03
Plymouth	73599	52·8	48	56	58·5	39·5	47·3	8·50	0·71	1·80
Bristol	206419	46·4	136	92	64·2	33·3	46·3	8·06	1·21	3·07
Wolverhampton ...	74240	21·9	48	34	61·0	29·5	44·6	7·01	0·20	0·51
Birmingham ...	383117	45·6	350	168	...	...	...	...	...	...
Leicester	121473	38·0	97	53	..	...	...	...	...	...
Nottingham ...	165267	16·6	115	68	65·4	29·0	45·8	7·67	0·91	0·03
Liverpool	532681	102·2	384	293	62·0	38·8	48·0	8·89	0·20	0·51
Manchester ...	360514	84·0	272	216	...	...	...	...	...	...
Salford	170251	32·9	162	80	64·8	33·1	46·6	8·12	0·15	0·38
Oldham	107366	23·0	78	43	...	...	...	...	...	...
Bradford	185088	25·6	121	68	59·7	32·0	44·5	6·95	0·05	0·13
Leeds	304948	14·1	247	135	62·0	30·0	45·0	7·22	0·04	0·10
Sheffield	289537	14·7	232	140	61·0	29·0	45·9	7·72	0·15	0·38
Hull	143139	39·4	132	56	60·0	32·0	43·7	6·50	0·11	0·28
Sunderland ...	112459	34·0	97	51	58·0	37·0	44·6	7·01	0·02	0·05
Newcastle-on-Tyne	144570	26·9	110	53	...	...	...	...	...	...
Edinburgh	222371	53·1	160	128	57·8	33·0	44·9	7·17	0·20	0·51
Glasgow	566940	94·0	438	278	59·5	33·5	45·0	7·22	0·72	1·83
Dublin	314686	31·2	185	201	64·4	40·7	49·9	9·94	0·18	0·46
Total of 23 Towns in United Kingdom	8373953	37·8	6209	4241	65·4	29·0	45·9	7·72	0·45	1·14

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·86 in. The highest reading was 30·03 in. at the beginning of the week, and the lowest 29·72 in. on Wednesday afternoon.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

MEETING OF THE GENERAL MEDICAL COUNCIL.

HELD AT THEIR HOUSE, OXFORD-STREET, W.

FIFTH DAY—MONDAY, APRIL 15.

On the proceedings being resumed this day,

The PRESIDENT presented the following statement with regard to the interview between the deputation from the General Medical Council and the Duke of Richmond and Gordon, Lord President of the Privy Council:—

The Medical Council deputed the President, Dr. Humphry, and Dr. Andrew Wood to present to your Grace certain resolutions which they have arrived at.

The Council met on April 10 to consider the letter which your Grace forwarded with copies of the Medical Act (1858) Amendment Bill read in the House of Lords on March 19.

All the subjects on which the Council last year addressed your Grace are dealt with in this Bill, viz.:—

1. The recognition of foreign and colonial qualifications in England;
2. The privileges of women in regard to medical qualifications;
3. The appropriation of penalties under the Medical Act;
4. To some extent the education of midwives;
5. And, indirectly, the emendation of the law affecting certificates of lunacy.

After the second reading of the Bill the Council may have to suggest to your Grace's consideration certain amendments in various clauses relating to these subjects, and to some minor points in the Bill, prior to the consideration in committee.

The Council are aware that your Grace was unwilling to bring in any Government Bill which did not deal with all the chief subjects that were known to need attention in regard to medical legislation.

They find, accordingly, in the Bill, clauses having reference to subjects that are admitted to be of importance and to need settlements other than those named last year by the Council.

They find clauses relating to the mode of conducting examinations in the United Kingdom, and to framing examination-rules.

They perceive that the permissive principles of combination of any of the licensing bodies is continued with modifications.

On this subject a resolution has been passed by the Council, which forms Clause 3 of the Minutes for April 12, 1878 (pages 37 and 38).

If the Bill pass in its present form it would, in the opinion of the majority of the Council, be necessary to make such modifications in the rules as are set forth in the resolutions in Clauses 5, 6, and 9 of the Council's Minutes for April 12, 1878 (pages 38-40).

On the subject of the registration of colonial practitioners and other subjects therein, the Council is engaged now.

On the subject of dentists, they have passed resolutions which form Clauses 6, 7, 9, 10, 11 of the Council's Minutes for April 13, 1878 (pp. 48-50).

As regards the registration of midwives, they have not yet had time before the second reading to pass any resolution. But they have already notified to your Grace (see Minutes, vol. xiv., page 198, Clause 14):—

"That the Council, without assenting in all details to the scheme of the Obstetrical Society, is of opinion, with the Society, that it would be desirable to provide by legislation for the following two objects:—First, that means under legal sanction should be provided for giving credentials of qualification to competent midwives; and, secondly, that the lives of women in labour should, so far as practicable, be protected from the incompetent." And to-morrow they will receive a deputation from the Obstetrical Society as to the details of their proposal.

The Council are still engaged in considering the remainder of the clauses in the Bill, and will further communicate with your Grace thereon after the Easter recess.

Upon that, his Grace said that he would give the fullest attention and consideration to all those particulars upon which the Council had already resolved, and to any further resolutions which the Council might pass at such times as the Council thinks fit; that is, either during the present session, or at any subsequent session that may take place at the will of the Council, if it takes place before the House of Lords goes into committee on this Bill. He then said that he was going to bring forward the second reading this afternoon, and that in consequence of that, and some important business in which he is engaged, he was unable to receive the deputation of the Obstetrical Society which he had wished to do this afternoon. He was so occupied that it was impossible for him to do so; but, as the Easter recess begins to-morrow, and he would not be able to see them at all now until after the Easter recess, having understood that they were to meet this Council to-morrow, he would be happy to receive through this Council any further communication on the subject, if there be any to be forwarded after the interview with the Obstetrical Society.

Then he added that he had every reason for hoping that this evening the second reading of the Bill would be passed, and then that in that case he would introduce the Bill in committee for the consideration of all the amendments which had been presented to him, and for their full discussion, at the earliest possible period at which it could be done. Considering the other arrangements of the Government, and the work before the House, the earliest day at which he could undertake to do this would be on May 20 next, and, in his Grace's judgment, if the discussion could not successfully take place on May 20 or thereabouts, there would be no chance of the Bill passing this year; that he would give his best attention to all amendments which should come before him before May 20, and on that day he would proceed with the consideration of the Bill in committee.

I thought it my duty to say, and I trust the Council, as well as my colleagues, will not think I went too far in this statement, that we had not yet considered fully the whole of the Bill, but I was quite sure I expressed the individual feelings of the members of the Council, that whatever opinions there might be as to the value of the Bill, we were all very sensible of the great trouble he had taken."

It was resolved that the foregoing statement be inserted on the Minutes.

Mr. TEALE called attention to the following further communication from Dr. Waters, and reminded the Council that it required an early answer:—

14, Nicholas-street, Chester, April 12, 1878.

Sir,—I beg to acknowledge the receipt of your letter of the 11th instant.

I am very happy to hear that the views of the Association will be submitted to the General Medical Council during its present session. I hope the Council will not negative the proposals without giving an opportunity to the Medical Reform Committee of defending them.

The Committee will have a meeting in London on Wednesday next, and some of its members might possibly attend before twelve o'clock on that day.

W. J. C. Miller, Esq. (Signed) EDWARD WATERS.

He (Mr. Teale) then moved—"That, in reply to Dr. Waters' letter of April 12, the President be authorised to receive Dr. Waters and the members of the Medical Reform Committee on Wednesday, at eleven o'clock, in order to hear their views of the proposals referred to in Dr. Waters' letter, and that such members of the General Medical Council as desire it shall be present at the interview."

Sir WILLIAM GULL seconded the motion.

In the course of some discussion,

Dr. ROLLESTON observed that, whether rightly or wrongly, there was a feeling in the profession that the constitution of the Council should be varied.

Dr. QUAIN said that it was absolutely necessary to receive Dr. Waters. There was no shirking the fact that he represented a vast number of people. The only question was, whether he should be received by the President and members, or whether he should attend at the sitting of the Council on Wednesday. His (Dr. Quain's) own opinion was that Dr. Waters ought to be received by the Council.

Sir DOMINIC CORRIGAN opposed the resolution. He said that if it were acted upon the reception of Dr. Waters would amount to nothing more than a reception by private individuals.

The PRESIDENT agreed with Sir Dominic's view as to the nature of the reception which it was proposed to give to Dr. Waters. He said that his own opinion was that that was the proper way to deal with the matter. It would be a dangerous precedent if all the members of the Council were required to be present upon such an occasion.

Mr. MACNAMARA did not think that the form of proceeding proposed by the resolution would be sufficiently respectful to the body of persons whom Dr. Waters represented.

The motion was ultimately carried *nem. con.*

The Council then went into committee to proceed with the further discussion of the new Medical Bill. On Clause 5,

Dr. ANDREW WOOD said that since Saturday he had looked very carefully into the matter of the registration of colonial practitioners, and he did not now feel inclined to adhere to the terms of the motion of which he had given notice. He said that they all knew that some pressure had been brought upon the Government to allow the registration of foreign and colonial degrees. The object of this pressure was to secure that justice should be done to the colonies and to the holders of foreign and colonial degrees. At the present time such persons were liable to be called upon to undergo an examination before they could practise in the United Kingdom. With regard to Clause 5, he believed that it was a complete mistake to require that a colonial practitioner should be obliged to practise medicine and surgery for more than ten years before he could be registered in the United Kingdom. The proposal was a most illiberal one. If colonial practitioners were to be admitted to registration in the separate register provided for them, they should be admitted upon liberal principles. He was now convinced that it would be a wrong thing for the Council to give the option of an examination. He did not think that the question of examination should be brought into the matter. The only question that seemed to him to be worthy of consideration was whether there would be any evil in admitting colonial practitioners without any provision for their having practised for any length of time. He believed that the Council were all against requiring ten years. If they made the term two years that would be quite sufficient, and it would prevent the evil which some had talked of—namely, that a man might go to one of the colonies for the purpose of getting degrees and diplomas more easily than he could secure them in the United Kingdom. He was, therefore, inclined to move—"That in Clause 5 the word two years should be substituted for ten years."

Dr. ROLLESTON said that if that motion was made by Dr. Wood he (Dr. Rolleston) would, to save time, treat as an amendment his own motion which had been seconded by

Mr. Simon, and which was—"That Section 5 of the Bill run thus:—'Where a person who has not been domiciled in the United Kingdom for a period of three years shows,' omitting the other words in the first three lines of that section." He (Dr. Rolleston) did not in the least wish to cause the Bill to be thrown out, for it was not only a child of the Government, but, to a great extent, the child of the Council also. There were, however, certain necessary amendments which ought to be made. What they wanted to do in respect to the point to which Clause 5 referred was to prevent persons who had been educated in the United Kingdom, and had been rejected by the Examining boards, running over the "herring-pond" and getting a colonial diploma, and then coming back and flaunting it in the faces of the Council. Another minor object was to prevent Canadian practitioners, who had simply a Canadian licence to practise, from being disfranchised upon arriving in this country, and being unable to take the charge of a cargo of emigrants back to Canada. As the clause stood, instead of simply preventing men from England, Scotland, and Ireland from running over and getting a colonial diploma, it would actually prevent a Canadian from being on the Register of the United Kingdom unless he had practised ten years in Canada. The requirements that a man should have practised ten years in the colonies before practising here was a mere *brutum fulmen*, which meant nothing. All that they wanted to guard against was registration upon an illusory diploma. The resolution which he had moved would secure this object.

On the suggestion of Mr. Simon, Dr. Rolleston agreed to alter two years for three years in his resolution, and he subsequently altered his resolution to the following form:—"That Section 5 of the Bill run thus—'Where a person who has not been domiciled in the United Kingdom within the last two years immediately preceding the obtaining of his diploma,' and so on."

Mr. Simon said that he believed that this resolution was infinitely nearer the mark than that of Dr. Wood. Upon an appeal made to the Marquis of Ripon eight years ago, a Medical Bill was introduced into Parliament, and there was contained therein a provision for the necessity of ten years' practice in a colony before the holder of a colonial diploma could be registered in the United Kingdom; but this Council had made immense progress in the seven years from 1870 to 1877. In that time it had changed from taking an extreme and almost fanatic view in favour of the exclusion of foreign and colonial practitioners, to the taking of a thoroughly liberal and just view of the case; and that thoroughly liberal and just view of the case was, in his judgment, embodied in what was represented to the Government last year. If he might say so, it was "because of the hardness of their hearts" that the requirement of ten years was inserted in the Bill of 1870. The Council was itself obdurate against foreign and colonial practitioners, and the utmost that could be proposed in the way of compromise was that these practitioners should be required to undergo a ten years' test. Last year this Council quite agreed to dispense with that requirement; but, somehow or other, the ten years had slipped into this present Bill. Of course allowance must be made for Parliamentary clerks; and the draughtsman of the present Bill would have had Lord Ripon's clause before him, and, therefore, he (Mr. Simon) could not help thinking that the term of ten years had slipped into the Bill through an inadvertence. What was required was not a long period of sojourn in the colony where the diploma was obtained, but that a man should not have gone over to the colony for the purpose of getting his diploma. It was, no doubt, a definite purpose of the Council to provide against any attempt which it would regard as an improper attempt to get a qualification outside the United Kingdom. But, first, was it likely that a medical student having failed to obtain his qualification in England would go out to a colony? It would be a question of money; and the event was improbable. But let them assume that even in the majority of cases such a step was probable. What would the danger then amount to? This was the real *crux* of the position. Were they justified in assuming that a colonial qualification would be an inferior one? The point upon which he would fix the attention of the Council was that a colonial qualification was one given under the sanction of Imperial law. If they would refer to the provisions of Clause 7 they would see that the man who had the privilege of being put on the Colonial Register, after having gone out in the imaginary case to get the colonial diploma, would have gone through an examination which was under the same sanctions as the examination of the United Kingdom, although a colonial examination not visited by the Medical Council. The colonial diploma would be granted under a proper authority, and one which this Council recognised to be a proper authority. That being the case, did not the clause deal with an evil which was quite microscopical, and were not the Council endeavouring to guard against a microscopical danger by introducing a factious impediment in the way of colonial authorities?

Dr. Andrew Wood said that he would withdraw his motion.

Dr. Storrar said that he could not help thinking that the proposal to restrict the registration of colonial degrees in the United Kingdom was most unfortunate. They must bear in mind that, after all, holders of colonial qualifications could practise not only in their own colonies, but in all other colonies belonging to the British Empire. That being so, could there be anything more invidious than to debar them from practising in the United Kingdom? He was prepared to say that the chances were that some of the colonial qualifications would be qualifications of a higher kind than many of those which were got in the United Kingdom. It would be invidious, and he might almost go further, and say unjustly offensive, to many of the universities in the colonies if they were treated with the suspicion which the clause implied. He admitted that in some English-speaking countries—he might say plainly, the United States—there were facilities for getting qualifications which ought to be fully guarded against, but he did not think that in Canada there existed the abuses which existed in the United States. With regard to Australia, he was sure, from conversations which he had had with gentlemen connected with Australian universities, that their ambition was to make their qualifications of an eminent character. He could not conceive anything more calculated to inspire Canada and Australia with a sense of soreness than the adoption of a clause of this kind by the Medical Council. They must recollect too that, as he had stated, the restriction would not apply to the whole empire outside of the colony where the degree was granted. It would apply only to Great Britain and Ireland. For instance, a degree granted in the University of Toronto would enable its possessor to practise in Jamaica or in the Barbadoes or in Australia, although not in England. He would ask those gentlemen who had moved in this matter to reconsider it a little further. He did not blame them for going wrong, for he himself went wrong for a quarter of an hour on Saturday. They might get rid of all that they did on Saturday when the Council resumed and the report of the Committee was brought up.

Dr. Pitman moved as an amendment—"That the Council adhere to the resolution of last year in reference to the registration of colonial diplomas." He said that he was exceedingly glad when Dr. Wood expressed his willingness to take a more liberal view of the matter. The Council would recollect that last year the question was discussed at considerable length, and the discussion arose upon a report of a Committee appointed by the Council to consider this particular question. The words of the Committee were these:—"The grievance (stated in general terms) is that medical degrees or licences which have been conferred under due authority in British possessions outside the United Kingdom, and which respectively entitle to practise in the particular Imperial province in which they are granted, give at present no professional status in other parts of the British Empire; and the question of principle which the Council has to determine is that of admitting such degrees or licences to be registered as qualifications under the Medical Act. The Committee regards this question as one which urgently needs to be decided by the Council." The Council considered the subject very fully upon that report, and came to a decision upon the question which they were advised by this Committee to do. That decision appeared on page 119 of volume xiv. of the Minutes—"That medical qualifications granted under legal authority in any part of her Majesty's dominions outside the United Kingdom, and entitling to practise in such part, should be registrable within the United Kingdom on the same terms as qualifications which are granted within the United King-

dom, but in a separate, alphabetically arranged section of the Register." To his (Dr. Pitman's) mind that decision seemed to be infinitely preferable to the clause in the Bill now submitted to them, and preferable also even to the motion which had been now moved by Professor Rolleston. Professor Rolleston's motion was certainly more liberal than the original proposition, which was moved by Dr. Wood, but was not so liberal as the motion which was recommended by the committee of last year, and which the Council decided to adopt. He need not refer to the inconvenience of departing from the decision of last year, but really, if he might use such a word, there was something like discredit on the part of the Council in entirely changing, without any strong reasons, the conclusion which they had arrived at last year after grave deliberation. He sincerely submitted to the Council that the resolution of last year was far more reasonable and liberal than anything which was now proposed, and he had not heard any good reason why the Council should depart from it.

Dr. Quain seconded the motion.

Dr. Rolleston said that, with the permission of the Council, he would withdraw his motion in favour of Dr. Pitman's. What he wanted was wide, liberal legislation, instead of illusory restrictions.

The President remarked that the motion of last year, which Dr. Pitman's motion stated to re-affirm, was the one which had been forwarded to the Lord President, and was, no doubt, in the hands of the draughtsman of the present Bill, and he (the President) could not but believe that the draughtsman by simple accident had referred to Lord Ripon's Bill in drawing Clause 5 of the present Bill, instead of referring to the proposal of the Medical Council of last year. From repeated conversations which he had had in Canada and with Sir Joseph Fayrer and others, he believed that it would be a most desirable thing to encourage in every way they possibly could the carrying on of the medical education which was afforded in Canada. The greatest endeavours were being made to put medical education in that colony on a level with that in England. As to the United States, he would not say that the improvement of medical education there was hopeless, but very little improvement had been made in it.

Sir James Paget recommended the Council to go as far as possible in the direction of liberality towards the colonies, but he asked why they should be many times more liberal to the colonies than to themselves. The Council were now saying that they were quite content with all those who had passed examinations in the colonies, and that they might come to the United Kingdom and practise with all the rights of British practitioners, except that they would be in a list which, perhaps, not one person in a hundred would ever look at. Within the last few years the Council had been expressing great dissatisfaction with all the systems of examination in England, but the motion would have the effect of saying that they did not suspect any defect whatever in the oral examinations of the colonies. At least they ought to have as many precautions with regard to the colonies as they had with regard to the United Kingdom. He could not but think that Dr. Rolleston's motion (which had been withdrawn) was the better of the two.

Mr. Simon said that the Medical Council could apply with regard to the colonial examinations the same sort of tests, short of inspection, which they could apply to English examinations. Inspection they were unable to carry out, and therefore they proposed to put the owners of colonial diplomas in a separate list. It was only a sub-question whether certain conditions should be imposed before registration could take place. Surely, if these conditions were to be illusory conditions, it was unworthy of the Council to impose them.

Dr. Storrar said that the question seemed to be narrowed to a willingness to admit colonial diplomas into the colonial list in the Register, provided that the Council had a guarantee that men from this country did not go to the colonies simply to get colonial diplomas. It was admitted that the number of cases in which such a step was taken would be exceedingly small; and he confessed that he thought too highly of the men whom he had seen connected with the colonial universities to think that they would admit candidates for examination for colonial diplomas without asking where they came from, what had been their course of study, and, finally, the reason why they did not get their qualification in their own country. The suspicion which would attach to a candidate going from England to a colony simply to obtain a diploma, would shut the door of the colonial licensing bodies against him. The whole danger was reduced to such a small point that it was not worthy of the Council to attempt to take the precautions which had been proposed.

Sir William Gull moved as an amendment—"That Clause 5 be as follows:—Where a person who has been *bonâ fide* domiciled in any British possession can show evidence of holding some recognised medical diploma or diplomas (as hereinafter defined), granted in such British possession, and which may be satisfactory to the Council, and that he is of good character, such person shall, upon payment of the registration fee, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the Medical Register."

Dr. Hudson seconded the amendment.

Dr. Andrew Wood said that the Council must recollect that there were certain conditions in Clause 5 which would be left out altogether if they carried the motion that had been made by Dr. Pitman. For instance, the motion in question contained no requirement that the colonial practitioner should be of good character. He (Dr. Wood) was very sorry that Dr. Rollestou did not stick to his motion. He thought that the requirement of two years and the good character would be as liberal a measure as could possibly be required. He could not agree with Sir William Gull's motion.

Dr. Humphry said that he rather regretted the withdrawal of Dr. Wood's motion. Notwithstanding all that had been said about liberality, it appeared to him that that was the most liberal motion that had yet been placed before the Council. The resolution of Dr. Wood would have enabled a colonial practitioner to present himself for one of the final examinations which qualified for registration in the general list of practitioners in the United Kingdom, and so be placed on a par with them in the Register, and thus be open to any of the various appointments which were obtainable in the kingdom. He thought that that was a very important point. His feeling was that that resolution would have been a greater security to the public, and, at the same time, give greater privileges to the colonist.

Sir William Gull said that the proposal to allow a colonial practitioner to undergo a final examination might come as a rider to the motion.

Mr. Simon said that he did not see the least objection to the words suggested by Sir William Gull, which required that a person should have been a *bonâ fide* resident in the colony. Those words would shut out the imaginary case of the man who, having been plucked by one of the universities in the United Kingdom, rushed over to one of the colonies to get his diploma.

The amendment proposed by Sir William Gull was then submitted. There were in favour of it ten, and against it eleven. The amendment was consequently lost.

Dr. Rolleston then proposed, as a further amendment, "That Clause 5 should be as follows:—'That any practitioner who holds a colonial diploma shall, on demand, be admitted to any final examination in the United Kingdom, which entitles to be placed on the Register of the United Kingdom.'" This measure would protect the public and encourage the colonies.

Dr. Storrar, on behalf of the University of London, asked whether, if Dr. Rolleston's proposal was carried, that University would have put upon it the duty of examining any colonial graduate who presented himself for examination. The University of London did at the present time admit the graduates of the colonial universities to a modified examination.

Dr. Rolleston said that he was never in favour of putting compulsion upon any people unless it was absolutely necessary. He would alter his amendment to the following:—"That any medical practitioner who holds a colonial diploma shall, if admitted to the examinations of a licensing body in the United Kingdom, entitling him to be placed upon the Register, not be required to produce any other certificate than that of the colonial licensing body which has conferred upon him his licence."

The amendment was seconded by Dr. Pyle.

Dr. Pitman said that the point of the clause of the Bill seemed to have been overlooked by Dr. Rolleston. The clause was inserted to secure the admission of practitioners from the colonies to the Register without examination. That was

what was decided upon last year. Dr. Rolleston was one of those who adopted that resolution. He must oppose Professor Rolleston's amendment. He thought the original motion was far to be preferred, as it was consistent with their former decision. ("Vote, vote.")

Dr. Rolleston withdrew his amendment.

Dr. Andrew Wood said that he would move the following amendment, because the motion left out some important points:—"That in clause 5, lines 1 to 4, of the Bill, for the words, 'Where a person who either is not domiciled in the United Kingdom, or has practised medicine or surgery, or a branch of medicine or surgery, for more than ten years elsewhere than in the United Kingdom,' there should be substituted the following words: 'Where a person has been domiciled in a British possession for two years immediately preceding the granting of his diploma.'"

The amendment was seconded by Mr. Teale.

Dr. Storrar said that he preferred Dr. Pitman's motion. It was suggested in the amendment that a man must be domiciled for two years in a colony before he could practise in the United Kingdom. He knew of universities in the United Kingdom which required only one year's residence. An Australian colonist, who might have passed two years of study in Australia, and then found it necessary to go to Canada to pass his final year, would be disentitled to be registered in the United Kingdom by the clause as it stood in the amendment.

Sir Dominic Corrigan said that the University of London, which turned out some of the best medical graduates, did not require that a person should be resident or domiciled anywhere; but it permitted him to come up and pass his examination, and get his certificate. The amendment would have the effect of overruling the rules of the University of London. ("Vote, vote.")

Upon a show of hands being taken, there were thirteen in favour of the amendment, and nine against it. The amendment having thus become a substantive motion,

Mr. Simon moved, as an amendment—"That the words 'two years' and all the words referring to the time of domiciliation be omitted."

Dr. Storrar seconded this alteration.

Sir James Paget asked what was the use of referring to the domicile at all if the time was omitted.

Sir Dominic Corrigan suggested that the word "domiciled" should be dispensed with. Some time ago there was a very interesting discussion in Dublin with regard to the word "domiciled." A question arose whether a certain man was domiciled at his office or domiciled at his home. The women said that he was not domiciled at home, for he spent so little of his time there. (Laughter.)

The President asked whether there was really any difference between the amendment and Dr. Pitman's motion, except that the amendment was more difficult to understand. (Hear, hear.)

Dr. Quain: Upon my word, I confess that I cannot understand it. (Laughter.)

After some further consideration, it was agreed to substitute the word "resident" for the word "domiciled," and the amendment was then carried in the following modified form:—"That where a person who has been *bonâ fide* resident in a British possession outside the United Kingdom shows that he is of good character, and holds a recognised diploma or diplomas (as hereinafter defined) granted in a British possession, such person shall, upon payment of the registration fee, be entitled, without examination in the United Kingdom, to be registered as a colonial practitioner in the Medical Register."

This amendment was then put as a substantive resolution, and carried.

The Council then resumed, and proceeded to a ballot for the election of the Executive Committee, the result of which was the appointment of the following:—Sir James Paget, Dr. Humphry, Dr. Andrew Wood, Dr. Aquilla Smith, Dr. Quain, and Mr. Simon.

After a short adjournment, the consideration of the clauses of the new Medical Bill was continued, and the Council again resolved itself into committee for that purpose.

On the motion of Mr. Simon, seconded by Sir James Paget, it was unanimously resolved that Clause 6 be in substance approved.

Dr. Andrew Wood: We have dealt with Clause 7.

Mr. Simon moved that Clause 8 be in substance approved. The clause was as follows:—"Where the General Medical Council are satisfied of the eminent professional acquirements and character of any person, who for more than ten years has been practising medicine or surgery, or any branch of medicine or surgery, in any foreign country or elsewhere out of the United Kingdom, they may, if they think fit, by a special order direct such person to be registered in the Medical Register as a foreign or colonial practitioner, as the case may require; and such person, upon payment of the registration fee, shall, without examination in the United Kingdom, be registered accordingly as a foreign or colonial practitioner in the Medical Register."

Dr. Haldane said that he could not agree with the motion, because the clause involved a principle. As he read it, it would appear that anyone who had practised any branch of medicine or surgery out of the United Kingdom might, by a special order of the Medical Council, be registered in the Medical Register as a foreign or colonial practitioner. This clause would admit persons who had no diplomas in their own country, and he was not prepared to accept it. He therefore begged to move—"That, in the opinion of this Council, a colonial or foreign practitioner should be registered as such unless he has obtained a recognised medical diploma or diplomas in a British possession or a foreign country."

Mr. Simon said that he might remind the Council of the view which this clause was intended to represent. Whether it represented that view successfully or not was another matter. The former clause provided for the cases of what were called recognised diplomas. But every now and then there would be a man who had not got a recognised diploma, but of whom the Council knew personally that he had been for a great many years in practice in a place which did not diplomatise, and that he held no diploma; and, further, he might have contributed for many years valuable papers on medical science, and, after spending a long period in this way abroad, he might come to England. The proposal was that the Council should have power to consider the merits of such a man personally, irrespectively of the question of diploma, and should be enabled to place him on the Register. The clause would not affect a large class of cases, and the selection of those cases would rest with the Council. They would not be likely to go very far wrong in the matter.

Sir William Gull said that he should be happy to second Mr. Simon's motion.

The amendment which had been proposed by Dr. Haldane failed of a seconder, and the original motion was carried.

On Clause 9—

Mr. Simon remarked that words were wanted to make it clear that the registration referred to in sub-section 7 was an additional registration of diplomas belonging to a man who was already on the Register. The clause required verbal amendment. He believed that such additional registration was the essential point of the sub-section.

Dr. Aquilla Smith said that it would be in the recollection of the Council that last year there was an application from the University of Dublin that an obstetrical degree should be registered. This was refused by the Council, although that degree was conferred by the University of Dublin only after a very stringent examination. He took it that the sub-section was intended to meet such a case as that.

Sir James Paget thought that the intention of the clause was to provide for the registration of honorary degrees. That was a very excellent intention.

Dr. Humphry said that the intention of the provision was to give the Council power to register diplomas granted after examination. It was clear that it meant diplomas after examination. He considered that the sub-section should be approved.

Mr. Simon said that the paragraph was open to the objection of obscurity. It ought to be made clear that the registration was to be an addition to a name previously registered.

Dr. Humphry thought that the clause might possibly mean to provide for the registration of one of the higher qualifications, even though a person had no previous registration. ("No, no.")

Mr. Simon: Then I should move that it be struck out.

The President said that it would be desirable that Mr. Ouvry, the Solicitor to the Medical Council, should be present to take note of points of this kind.

Dr. ANDREW WOOD said that his own idea was that they ought not to decide upon this clause at all, but ought to remit it back as an obscure clause, and ask for an explanation instead of discussing it at present.

Mr. SIMON: I think we can answer for the real intention of it.

Dr. ANDREW WOOD said that the sub-section was very badly worded, but he thought that they might pass Clause 9 in substance, and call attention to this particular portion of it.

It was understood that Clause 9 should be in substance approved.

Clause 10 was also in substance approved.

On Clause 11, which provides for erasing from the Medical Register the names of practitioners convicted of crime, or guilty of disgraceful conduct,

Dr. ANDREW WOOD said that the third paragraph seemed to be important. It provided "that the Council *may*, and upon the application of any of the medical authorities *shall*, cause an inquiry to be made."

Dr. HUMPHRY said that this would constitute the Council a prosecuting body. The Council had hitherto not considered itself a prosecuting body. If the clause was passed there would thenceforth be no option.

Dr. ANDREW WOOD said that medical authorities had applied to the Council to make inquiry, and they had done it constantly.

Mr. TEALE said that the last section of the clause contained the words, "provided that the name of a person shall not be erased under this section on account of conviction for a political offence out of her Majesty's dominions." According to this, a person might commit a political offence outside her Majesty's dominions without being taken off the Register, but if he committed it within her Majesty's dominions his name must be erased. There was always a difference between political and other offences.

Dr. STORRAR said that it would be a very dangerous thing for the Council to have to consider the particular kind of political offence which should cause a man to be removed. It would be better to leave the clause as it stood.

Mr. TEALE said that the clause went on to say that, in the case of a trivial offence, the offender's name need not be removed from the Register. The clause did not say whether the Council were to be the judges of the trivialness of the offence.

The PRESIDENT said that he had made a note of the points which had been referred to.

The Council then passed to Clause 12.

The PRESIDENT said that Mr. Ouvry had told him that he was not quite certain what this clause meant. If the Council had no objection, he (the President) would consult Mr. Ouvry further on the subject.

On Clause 13, the object of which was, among other things, to provide that a committee of the Council should be appointed for the purpose of deciding upon the erasure of names from, and the restoration of names to, the Register,

Dr. APJOHN moved—"That questions relating to the erasure of names from the Medical Register for infamous or disgraceful conduct in a professional respect ought, in the opinion of the Council, to be reserved for decision by the general body of the Council, and that it be recommended to the Lord President to amend Clause 13 of his Bill accordingly." He said that the clause as it stood would take out of the hands of the General Council a duty which it had been in the habit of discharging. The Council ought not to give up the power in question to a small committee. He felt sure that they would agree to his proposal.

Mr. SIMON seconded the motion.

Dr. ANDREW WOOD said that the power given to the Council with regard to the erasure of the name of a man from the Register was one by which they might blast the prospects of a man for life; and he must say that he could not make up his mind to approve of any provision which put the prospects of a man for life in the power of any small committee of the Council. (Hear, hear.) Looking back, as he could, for twenty years to the transactions of the Council with regard to such cases, he did not recollect a single case in which care was not taken in every way to inquire into every particular, and to administer justice—he might say, with a tendency towards mercy. Many of the gentlemen present might recollect a case in which, if it had been judged in a strictly technical way by a small committee, the results would not have been consistent with what the whole Council were able to do in the way of mercy. He thought that they ought to administer justice and to maintain the purity of the Register, but, at the same time, avoid exercising any despotic power. And more especially was it necessary that this should be the case, because, as a learned judge on the bench had said, the power given to the Medical Council in the way of depriving men of their rights was one possessed by no other body. He believed that medical men would have much more confidence in the decision of a whole Council like that, of twenty-four members, than in the decision of a small committee.

Mr. SIMON said that he objected to the clause on the ground which Dr. Apjohn had stated, and also because it would complicate the machinery of the Council. He was as little disposed as was Dr. Wood to delegate such a great power as was involved in the clause to such a small committee; but he thought, nevertheless, that the whole case would be met if there was a power given to the committee to remove from the Register the names of persons who had been convicted, upon the committee obtaining a certificate of the conviction. That would be merely an executive power, and it would prevent names being retained upon the Register for several months, or even inserted in a new Register, after men had been convicted.

Dr. STORRAR objected to even such a modified power being given to an executive committee. The retention of an unworthy name upon the Register for a year was a very small consideration compared with the risk which might be involved in the other direction.

Dr. ROLLESTON was sorry to disagree with others who had spoken, but he was in favour of the clause providing for the work being done by a committee. In the House of Lords the Duke of Richmond laid great weight upon the opinion that a large body like the Council was unfit to exercise the judicial functions of erasing and restoring names. He (Dr. Rolleston) would propose, as a modification, that there should be a committee of five, and that they should exercise their functions subject to a power of veto by the General Council.

The PRESIDENT pointed out that in most cases in which names had been erased, the erasure had been made either by the Executive Committee or by the Branch Council.

Dr. HUMPHRY said that the power of erasure would apply to persons who had been convicted in a court of law, and also to persons who had not been so convicted, but who, in the judgment of the Council, ought to be removed from the Register for improper conduct. He thought that there could be no doubt that the Council might depute to the Executive Committee the erasure of the names of those who had been convicted in a court of law; but whether such a committee should exercise a judicial function in deciding upon other cases he was not at all clear. He certainly believed that if that function was exercised by a large number the sense of individual responsibility would be reduced. He thought, with Professor Rolleston, that it would be probably better and safer to depute the function to a committee of five persons selected on account of their special fitness.

The motion of Dr. Apjohn was eventually agreed to.

Upon the motion of Dr. HUMPHRY, seconded by Dr. AQUILLA SMITH, it was also resolved—"That it is desirable the power of erasing from the Medical Register the name of any person who has been convicted in a court of law of a felony or misdemeanour, be deputed to a committee of the Council."

It was then resolved, upon the motion of Dr. ANDREW WOOD, seconded by Mr. TURNER—"To restore to the Register the name of the under-mentioned person, which had been erased therefrom in conformity with Section XIV. of the Medical Act:—Laurence Patrick Joseph Finigan, Licentiate of the Royal College of Surgeons, Ireland, 1876." This name had been omitted from the Register in consequence of Mr. Finigan not having communicated his change of address to the Registrar.

It was moved by Mr. BRADFORD, seconded by Dr. ANDREW WOOD, and agreed to—"That the following communication from the Apothecaries' Society of London be received and entered in the Minutes":—

April 13, 1878.

Sir,—On the other side is the copy of a letter which I have this day addressed on behalf of the Society to the Lord President of the Council on the subject of the Bill introduced by his Grace into the House of Lords to amend the Medical Bill of 1858. (Signed) W. CLARK.

To the President of the Medical Council.

Apothecaries' Hall, Blackfriars, London, April 13, 1878.

My Lord,—I am desired, on behalf of the Society of Apothecaries, briefly to bring before your Grace the views which they entertain in reference to the Bill which you have introduced to amend the Medical Act of 1858.

The Society consider that if the 14th section of that Bill should become law it will operate very much to their prejudice.

In the first place, the privilege which the Society enjoy at the present time of framing their own examination-rules would be taken away from them and placed in the hands of the General Medical Council. Such a result, in the opinion of the Society, would be a serious blow, not only to their own independence, but to that of all the existing medical authorities. But, in the second place, the Society occupy a peculiar position as regards this section, from having granted some time since their licence to a woman.

The present Bill, by not repealing the 5th clause of the Society's Act of 1874, while it repeals an exactly similar clause in the College of Surgeons Act of 1875, evidently has not lost sight of this fact.

Assuming, then, an obligation to exist on the part of the Society to examine women, the 14th section of the Bill would, on the one hand, compel the Society to examine women on terms and conditions differing from those to which men would be subjected, and, on the other hand, would prevent them from framing the rules for their examination.

The anomalous position in which the Society would be placed by such legislation is obvious. The Society, therefore, cannot but think that your Grace will recognise the justice of their objection to the principle of a medical authority under an obligation to admit women to examination being deprived of the right of framing the rules under which such examination should be conducted.

There is a further matter of less importance to which I am desired to draw your Grace's attention. It is not altogether clear from the 21st section of the Bill whether the Society (if they do not form part of a conjoint board) could alter by statute or by law the constitution, functions, and duties of their present examining body, or whether the Society would remain in the same position as they are under their Amendment Act of 1874, which enables them only to alter such constitution, functions, and duties in the event of their forming part of a conjoint board.

Upon the general features of the Bill the Society desire me to state that their views are in accordance with those which have already been expressed to your Grace by the Royal College[s] of Physicians and Surgeons.

(Signed) W. Clark,
Master of the Society of Apothecaries.

The following communication from the Royal College of Surgeons in Ireland was received, and ordered for entry upon the Minutes:—

Dublin, April 11, 1878.

Sir,—I am directed by the President and Council of the Royal College of Surgeons in Ireland, in reply to your letter of the 21st ultimo (7509/823), requesting that they would "favour the Right Hon. the Secretary of State for War unreservedly with their opinion as to the specific causes which produce the existing difficulty in obtaining candidates for the Army Medical Department," to state, that the President and Council have had the subjects therein referred to under their anxious consideration for a lengthened period, as shown in their Memorial presented by deputation to the Right Hon. the Secretary of State for War upon June 3, 1875.

Since the receipt of your communication the President and Council have taken further steps for the purpose of ascertaining accurately the causes which render the Army Medical Service now so unpopular—which produce the dissatisfaction that exists amongst those serving in it, and which deter eligible candidates from joining. These are—

Firstly, the short service scheme now in existence.

Secondly, the abolition of the regimental system.

Thirdly, the frequent changes in Warrants, after they have been published under royal authority with her Majesty's signature, and on faith of the permanency of which Warrants, medical officers have accepted service. This has produced an utter want of confidence in, and distrust of, the Service.

Fourthly, the differences which are made between combatant and medical officers in regard to ordinary and sick leave.

Fifthly, the almost absolute refusal to medical officers of the privilege to exchange.

Sixthly, the virtual withdrawal of forage allowance from those by rank entitled to it.

Seventhly, the quarters allotted to medical officers in barracks being almost invariably regimental, whilst they, as departmental officers, are supposed to be entitled to departmental quarters.

Eighthly, the discomfort caused to medical officers by want of a soldier-servant, whilst the sum allowed in lieu thereof is incapable of providing a civilian.

Ninthly, the length of time (five-and-twenty years) before the medical officers can claim a right to retire from the Service on adequate pension.

Lastly, the roster, as now kept, which has been withdrawn from public inspection, so that no officer can tell how he stands in regard to foreign service; whereas formerly this document was exposed in the waiting-room at Whitehall-yard for each medical officer's specific information.

These are the points which deter candidates from coming forward, and the President and Council feel assured that, until ameliorated, entrance into the Army Medical Service will be avoided by the desirable class of students.

The President and Council, in conclusion, deem it right to impress upon the consideration of the Right Hon. the Secretary of State for War the fact that at the present time so many varied and lucrative outlets in the Civil Service present themselves for the acceptance of the junior members of the profession, that it becomes the more imperative to improve the condition of Army and Navy Medical Officers, so as to enable the Naval and Military Services to compete on favourable terms with the Civil for the obtaining of the best and most highly educated students.

(Signed) J. Stannus Hughes, Secretary to Council.

To Ralph Thompson, Esq., C.B., Assistant Under-Secretary of State, War Office, London.

The Council then adjourned.

Sixth Day—Tuesday, April 16.

Upon the resumption of business this morning, a deputation from the Obstetrical Society attended, and had an interview with the Council. The deputation consisted of the following gentlemen:—Dr. West, President of the Obstetrical Society; Dr. Barnes, Dr. Aveling, Dr. Priestley, Dr. Murray, and Dr. J. Williams.

Dr. West, who acted as the spokesman, said: Mr. President, in the letter which I had the honour to address to you I dwelt upon the main points involved in the scheme for the examination and registration of midwives, the object of which is, wholly independently of the other very grave question of the admission of women generally to the practice of medicine and surgery, to provide, if possible, for the education and examination and the subsequent registration of women who, having passed the training which would make them competent nurses, should superadd to that nursing knowledge the knowledge of how to attend women in ordinary labour. It appeared to the Society which I have the honour to represent, that, in order for this object to be effectually carried out, it was important, first of all, that there should be no charge or no fee imposed upon those persons larger than their means were likely to enable them to meet, and therefore it was that the Society fixed the fees, as you will observe, very low throughout. The scheme first provides for the registration of those at present practising, upon the payment of a very small fee, and they have superadded, as a condition of registration, one which does not appear in the Medical Bill introduced by the Lord President, namely, a certificate of moral character, and a certificate also of reasonable competency from some registered medical practitioner. The certificate of moral character is, in the cases of women practising as midwives in large cities, a matter of considerable importance; for there are some who exercise the occupation of midwives, and who are not persons of good moral character, and who lend themselves, indeed, to a system which I might almost call, or may really call, one of infanticide. We have known instances in which they have received pregnant unmarried women into their houses upon the recommendation, as it would seem to these poor women, of the certainty that the children should not survive; and, therefore, it seems desirable that the moral character of the people shall be certified. Next, if one goes down the list, we come to the third provision, which requires that the certificate of registration should have a number affixed to it, and that this number should correspond with the number borne upon the register, the great object of that being to prevent, as far as may be, the possibility of traffic being carried on, which, without some such means of check, would be very possible, and, indeed, would be extremely likely to take place. If we come to the fourth provision, which describes the nature of the register of women and by whom it is to be kept, you will see that there is a provision made for such register being kept in the county town of each county, or in the assize town of each country, certain exceptions being made in a case in which there are two assize towns in each county. The object of having a register in each county town, as well as an examination in each county town, was to save the poor women from the expense which would render any other provision absolutely nugatory—the expense which would attend upon their being compelled to come to London, or to one of even three or four central places, for examination and registration. And it was thought that we should be most likely to carry out our object—which was an important one—by providing for the examination and registration of these people at the smallest possible inconvenience and expense to themselves. For one moment I beg leave to go back to the compulsory clause and the penalties affixed to a person calling herself a registered midwife. And, at the same time, I am myself responsible for an error which occurred in the plan submitted to you last year, according to which the mere practice would be made punishable. That was done in error. I fancied, stupidly enough, that the mere practice of medicine and surgery was penal. This was inserted instead of the mere provision that the penalty should ensue on account of the person practising giving herself out as being a legally registered practitioner. That, as well as other legal technical errors, has been altered under the advice of Mr. Roscoe, the solicitor to the College of Physicians. It was proposed, as you will observe, that there should be a return made to the Medical Council once a year. We were anxious that the Medical Council should have the supervision of this, which, though concerning a very small part of the practice of medicine, is yet a very important part. We know of no body

so fit to undertake the supervision, and which would carry with it as much weight, as the Medical Council. It is proposed, as you will see, that a return should be made once a year to the Medical Council, of the women who have been entered each year upon the list. And further than that—and the object of this provision is, again, to prevent a traffic in certificates—it is proposed that a midwife shall be licensed to practise in the district in which she ordinarily resides; that is to say that a person holding a certificate in Yorkshire shall be understood not to practise out of Yorkshire as a usual thing; but, at the same time, there will be a provision, of course, that the penalties shall not apply to the case of any woman who, living in Yorkshire, may perchance occasionally go to attend a case in Durham, and so on. The object is not to inflict penalties, or to place difficulties in the way of these people, but to provide, as far as may be, for the safe exercise of their business, and to provide also that they may be put to the smallest possible inconvenience. Then it is further, with the same view, proposed that the registration towns should also be the towns for examination; and the reason which I mentioned before for the registration being distributed over the different towns throughout England applies also to the examinations. There come then certain conditions. The first is that the certificate to practise as a midwife does not trench in any way on the general question of the practice of medicine, but that a woman practising as a registered midwife is understoood to be that and nothing else. Then there come certain provisions which, I imagine, would, if this scheme is adopted, be best considered in some sub-committee of your Council—perhaps with the assistance of the Obstetrical Society and other people—such conditions being the limits of age, a certificate of character, and a certificate of their being possessed of a minimum of general knowledge, and also of their having had certain training as sick nurses; for I found, many years ago, when I had to do with midwives, that they very often were wholly ignorant of the commonest duties of a sick-nurse, and did not know how to make a poultice, or how to make beef-tea, or how to prepare arrowroot, and were ignorant of the simplest and essential duties of a nurse. Therefore, it is provided that they must bring proof of having acted as a nurse in some infirmary, or of having been in attendance upon the sick in the homes of such sick persons, under some duly qualified practitioner. In Liverpool and other large towns there is, I believe, a general system of nursing carried out among the sick poor at their own homes under medical supervision, and the object was to meet that case. And, further, there is a minimum of attendance of midwives required, and with the least possible hardship, as far as it appears to us, inflicted on the people. Then there comes the question as to how the examination board should be constituted; and the suggestion—which, no doubt, may admit of many improvements—made by the Society was the following: that this board should be constituted in a way to impose the smallest possible amount of trouble, and consequently the smallest amount of expense, upon those who undertook the duties; and it was assumed that in each of these districts connected with the county or assize town there would be a medical officer of health, and that he might *ex officio* act, not as a president, but as a sort of secretary, and have the general management of the matter, and that he, *ex officio*, and four other medical practitioners whose qualifications are defined, should form the board for the examination of those midwives. There are then certain provisions as to the number to form a quorum, and the nature of the examination. It will be seen that, while an examination may be partly written and partly oral, it was not thought that it would be fair to those imperfectly educated women to make other than an oral examination the actual pass test, since one knows how difficult it is, as one finds even in the examination of medical students, to get the candidates to put their knowledge clearly and distinctly in writing; while it may be often elicited from them by *vivâ voce* examination. And then the fee is fixed as low as it would appear possible to fix it—£2. Of this, 10s. is to be paid for the expenses, 10s. is to be paid as a registration fee to the district registrar, and the remainder is to be divided among the examiners present. It is a very small amount to pay indeed, but still, at the rate of 5s. a head for those examining, if there were four persons who came up for examination it would yield them £1, and I suppose each examination would not last more than a quarter of an hour or twenty minutes. Then there are some suggestions as to the duties of midwives, and as to the limits of their action, all of which points are merely suggestions to the Medical Council, for them, in their wisdom, to consider and to approve, or to vary, as may quite possibly be the case—just as they please. But the main points were those of providing for a certain minimum of knowledge on the part of these women, without rendering such requirements nugatory, as would be the case if there were imposed upon them conditions and expenses which they would be unable to meet.

The PRESIDENT asked Dr. West how far he considered that the Medical Bill now before Parliament carried out the scheme which the Obstetrical Society had laid before the Council.

Dr. WEST said that that Bill did not appear in any way to contradict the scheme, but it went merely to the statement of general principles, and it did not enter into details. The impression which he had was that it was intended that the details should be drawn up by the Medical Council, with or without communication with the Obstetrical Society. In Clause 24 the principle was adopted; but the Obstetrical Society was anxious that there should be a scheme for examination and registration under the control of the Medical Council. The Bill did not go into any distinct statement as to what the board should be that should conduct the examination, and it would rest very much with the General Medical Council to determine how the scheme should be carried out. Then there was a provision that the fee should not exceed £5. That fee appeared to the Society to be so high, that if the maximum of £5 was charged it would render the carrying out of the scheme practically an impossible thing. Then there was a provision for the registration of persons so practising, but there was no provision for the giving proof of the capacity or of the character of those who claimed to be registered. Clause 5 gave a permissive power for setting up local examinations, local registers, and so on; but as the power was a permissive one, and not an obligatory one, practically no steps would be taken, and matters would remain very much as they were.

Mr. SIMON said that Dr. West had spoken of the necessity, which everyone must recognise, of keeping the expense down to a minimum. He (Mr. Simon) was particularly anxious to know how far the Society thought that central registration would be essential. Suppose, for instance, that a woman's licence was a county licence, and she changed her residence to another county, might it not be sufficient for her to get her certificate "*viséd*," as it were, and endorsed with the statement that her conduct in the original county had been good? If there was some arrangement of that sort, would there be a necessity for central registration, especially if it entailed expense?

Dr. WEST replied that he did not think that, if the system of local registration was carried out carefully, the system of central registration would be so essential as to warrant the incurring of any very heavy expense.

Mr. SIMON said that he would draw attention to another point in the scheme—that relating to removal for malpraxis. Would Dr. West understand by malpraxis a breach of the important regulations?

Dr. WEST: That will be a matter of detail which would need definition.

Mr. SIMON said that he thought that what the Council understood by malpraxis was misconduct implying brutal ignorance. For instance, suppose a midwife tore out a woman's intestines, or allowed a woman to flood to death without sending for a medical attendant, that would be malpraxis; but he should not suppose that mere breach of regulations would, of necessity, be visited with severity. Was it Dr. West's opinion that the propagation of puerperal fever by slovenliness would come under that head?

Dr. WEST said that he should think that the propagation of puerperal fever by carelessness would be included; but then the particulars of any such case would really need very careful investigation. For instance, it might be done innocently or ignorantly; or, on the other hand, a midwife might be admonished that a patient under her charge had puerperal fever, and she might resist such admonition and go on attending other cases.

Dr. QUAIN: Who are to be the judges in those cases? Who are to investigate them?

Dr. WEST said that it was provided that the investigators

should be the members of the examining board of each district. They would consider the complaint, and it would be competent to them to send a report, with their recommendation on the subject, to the General Medical Council, who might suspend or remove the midwife from the register.

Dr. QUAIN: Do you not think that that would be a very serious addition to the duties of the Medical Council?

Dr. WEST: I should imagine not, because they would have the report; and usually the report made by the body who had carried on the investigation would not give any very serious trouble to the Medical Council.

Dr. HUMPHRY wished to call Dr. West's attention to one important point in which the provisions of the Bill differed from the suggestions made by the Obstetrical Society. It referred to the manner of conducting the examinations. The Bill provided that the examinations should be conducted by persons appointed by the Medical Council. Would not this be a much better plan than having them conducted by the medical men connected with the particular districts in which the midwives were to practise? He thought that they might justly ask the Government to defray the expenses of medical men who should be so appointed to conduct examinations.

Dr. WEST said that the point was an important one, but he must differ from Dr. Humphry. He believed that certificates given by medical men of large local reputation would carry more weight than certificates given by other examiners. He believed, too, that it would be almost impossible to get men holding any considerable position as obstetric practitioners to undertake the work of examining.

Dr. ROLLESTON asked whether, when Dr. West said that he did not think that the work of investigation would constitute a very serious addition to the work of the Council, he meant that it would be simply a light labour, or meant that it would be an unimportant one, and one in which it would be scarcely worth while to call upon the Medical Council to act.

Dr. WEST said that he meant that he did not think that the work would be onerous, because it would be only in grave cases that the Medical Council would have to be appealed to.

Sir JAMES PAGET asked what was the number of midwives that would have to be registered.

Dr. WEST said that Dr. Aveling thought that there would be about 8000.

A member of the deputation said that the number would be about 11,500.

Mr. MACNAMARA: The provisions of your scheme could be thoroughly worked out, as far as I can see, in Ireland.

Dr. AVELING: We have communicated with the President of the Obstetrical Societies of Edinburgh and of Dublin, and they have expressed their wish to co-operate with us in the matter.

Sir JAMES PAGET said that, from the large number of midwives to be registered, the mere mechanical work of the registrar would be greatly increased if a central registration was carried out.

Dr. WEST said that, speaking from his own impression, he thought that, provided that the system of local registration was carried out properly, and proper arrangements were made for the transferring of names from one district to another, there would not be any such advantage in central registration as would counterbalance the very great expense that would attend it.

Dr. BARNES said that the local registers might be sent up to the office of the Medical Council to be filed, but not reprinted.

Mr. SIMON said that the proposals of the Bill, and, in fact, the proposals of the Obstetrical Society, were only to make penal the unauthorised use of the words "registered midwives," or "legally qualified midwives"; but the mischief that was done in the world by incompetent or immoral midwives might be done by persons who would be quite indifferent to calling themselves registered or legally qualified. It was not proposed either by the Lord President or by the Obstetrical Society to render punishable the mere practice of midwifery for gain.

Dr. WEST: No.

Mr. SIMON: Will not you leave a large quantity of mischief just as it stands at the present time?

Dr. WEST replied that it was not the wish of the Society to impose penalties on unlicensed women for the mere practice of midwifery; but it would be observed that there would be certain advantages that the registered midwives were to have. None but registered midwives would be competent to hold parochial or other public appointments; and it was believed that that provision would induce midwives to fit themselves to obtain certificates.

The PRESIDENT said that the Council were much obliged for the information which had been laid before them with respect to the views of the Obstetrical Society.

Dr. WEST said that the deputation were much obliged for the patience with which they had been listened to.

The deputation then retired.

The Council then resolved itself into committee for the further consideration of the new Medical Bill.

On the motion of Mr. SIMON, it was agreed that the Report of last year's Committee on Midwives should be read.

Mr. SIMON thought that as some of the members of the Committee who drew up that report were not now members of the Council, it might be advisable that he should state the reasons which led to its preparation. That Committee was prepared to express the strongest general intention of the Obstetrical Society: it differed only in the view of its proposed machinery, and the gist of the Committee's recommendations to the Government was that the great stress should be laid on local, and not on central action. The view held in committee was that this scheme tended to impose on the Medical Council administrative action which it could not well execute; but it seemed quite clear that the Council could usefully contribute the examination rules. The central registration of midwives would be very expensive. Members of the Executive Committee knew better than the mass of the Council the immense difficulty of keeping the Register of Medical Practitioners reasonably correct. Many thousands of errors had been found in the Register of Medical Practitioners. The difficulty of keeping a register of midwives would be very great, without adequate purpose. In the case of the medical practitioner, it was necessary that he should be identified all over the United Kingdom; but cases would be rare where the midwife would have to be identified except in her own district. The local authority, which would consist of three or four of the chief medical men of the district, would license women to act as midwives, that licence being valid for the county; and if the woman went out of the county, an endorsement on her certificate would be necessary to say that she had received her licence. That seemed to be a simple and cheap arrangement. But according to the Bill the matter would be a very costly concern. (Hear, hear.) The Bill, without going into estimates on the subject, proposed that there should be a registration fee independently of the examination fee, and that the registration fee might go up to £5. As had been observed, anything like an approach to that it would be quite impossible to work. The class of persons with whom the Council would have to deal consisted of women of about the social level of housemaids, nurses, and the like: so that the Council could hardly be disposed to undertake a central registration. Then the suggestion was that the Council should have regulations of a disciplinary kind for midwives, and that it should be the body to strike them off the register. This would be unnecessary. The local committee which licensed them ought to be competent to look to that.

Dr. ROLLESTON rose to order. There was no motion before the Council.

Mr. SIMON said that he should conclude with a motion, which he had now before him.

Dr. ROLLESTON thought the Council ought to know what they were discussing.

The PRESIDENT said that he was not aware that it was necessary that a speaker should state his motion beforehand; although it was understood that, in the case of formal resolutions, it was usual to state them at the outset.

Mr. SIMON said that he would rather defer it until he had concluded his remarks. He went on to say that the Bill made the Council, if they chose to be so, legislators and administrators for the whole subject; but since, if they did not choose to accept the offer, there was no other authority that could, the Council was made responsible for the whole working of midwifery. The Council experienced already great difficulty in discharging its present duties; and it would be unable to cope with the immense quantity of administrative duty which would be imposed upon it in respect

to midwives. The resolutions which he would propose were two—first, to express sympathy with the intention; secondly, to express a difference of opinion as to the means,—"That the Council adheres to the opinions which it expressed last year in accordance with what it regards as the general intention of the proposals of the Obstetrical Society, that legislation for the following two objects would be desirable:—'First, that means, under legal sanction, should be provided for giving credentials of qualification to competent midwives; and, secondly, that the lives of women in labour should, as far as possible, be protected from the incompetent.'"

Sir WILLIAM GULL seconded the motion. There was no doubt that this was a subject more for local administration than one to come under the control of this Council. The present condition of midwifery practice in this country was too vague for this Council to be saddled with the responsibility of initiating and carrying out a scheme. He remembered the expression of opinion that it would be much better to relegate the appointment of midwives to the men practising in the different divisions of the kingdom, who would be more or less responsible for the fitness of the women selected; so that it seemed proper to advise the Government to distribute the powers over the country, and to begin by establishing, in towns or country districts, a means of ascertaining by examination who were competent. If these local authorities were under the control of the Medical Council, then it would work. He was reminded that all this was provided for in the Bill, but so was a great deal more; and if they accepted all that the Bill provided, they would saddle themselves with a grievous duty. The Government ought to be given to understand by the Council that it would simply undertake a general superintendence in the educational department of the subject.

Some further discussion having ensued, the motion was put to the meeting by the President, and carried.

The following (Section 1 of Clause 24) was read by the President:—"(1.) The General Medical Council may, if they think fit, submit to the Privy Council a scheme for the examination, licensing, and registration, under the control of the General Medical Council, of midwives; and such scheme, when approved by the Privy Council, shall have effect as part of this Act, subject to being from time to time revoked, altered, and added to by a subsequent scheme submitted by the General Medical Council to, and approved by, the Privy Council."

Mr. SIMON said that on this Clause he would venture to move—"That the Council, having regard to its own special purposes and organisation, and to the resources of its office, could not undertake to initiate arrangements—which must, for the chief part, be local—for the examination, licensing, and registration of midwives throughout the United Kingdom; nor could accept such administrative responsibilities as would attach to any central authority which might purport to act in control of the local arrangements for those purposes; but that the Council would willingly, if so desired, provide examination-rules for the assistance of administrative authorities, local or central, which might be appointed for the purposes of the law."

Sir JAMES PAGET seconded the motion.

Dr. HUMPHRY moved, as an amendment—"That paragraph 1 of Clause 24 be in substance approved." It was quite clear that the initiative must take place somewhere. (Hear, hear.) In this instance there was no recognised body from which a recommendation could issue, and he thought that it was the province of the Council to draw up a scheme which would comprise rules and regulations such as the Council might advise. He could not see in what other way it could be done. There must be some central authority. This was a matter quite apart from the carrying out of the details. The Council was merely to draw up the general plan of details which would be probably carried out elsewhere; but there must be some body to put it in a proper frame. He thought there could be no objection to accepting this clause of the Bill.

Mr. TEALE seconded the amendment.

Dr. FERGUS said that seeing how the Council had declined to undertake to originate a new scheme with regard to the dentists, he could scarcely see how they could consistently adopt a different course with regard to midwives.

Dr. ANDREW WOOD said that the position of the Council in the matter was this. A resolution had been sent to the Government, stating that it would be desirable that a system of midwives should be provided in the country; and the Government, in legislating on the subject, had, perhaps, thought that the best body for supervising the matter was the Medical Council, and they had, therefore, been asked to be the controlling power. It did not, however, follow that the Council was to initiate the different details of the scheme. He would say that if the Council refused to undertake this duty of supervision it would show that it was not the useful body in the country that it ought to be. If the Council went to the Government saying that they were very much obliged to them for having taken up their view, but that the Council did not want to trouble themselves in the matter, they would put themselves in a false position.

Sir WILLIAM GULL said that this was a larger question than at first sight appeared. If there were examination boards for midwives through the country, it would be competent for this Council to stand in some relation to these boards; but such boards did not exist. It was a great question whether the initiative action should not come from the profession in different parts of the country, and then the Council might be called upon to supervise; but if they were to begin now from chaos, and say, "We will initiate everything in the kingdom," they could scarcely be alive to what they were doing. He even doubted whether it was in the power of the Council to do so. Where was the operation to begin, and upon what lines were they to go? He saw the necessity of something being done, but it seemed to him that they were beginning to have a central organisation before they had anything to act upon.

Dr. ROLLESTON said that the lines for the Council to go upon in the matter were provided by the example of Austria, Russia, France, and other countries. Dr. Fergus had asked why he (Dr. Rolleston) had not accepted the same lines with regard to dentistry. The answer was, that regulations had been laid down for dental practitioners, and the Council exercised supervisory powers with regard to them; but in respect to midwives no such scheme was in existence. There was no other body to initiate a scheme; and if the Council did not do so the country would. In 1873 a report was drawn up by a committee of this Council, which suggested that the Council should initiate a scheme.

Dr. QUAIN remarked that Dr. Rolleston was referring to a report which had never been adopted by the Council.

Dr. ROLLESTON said that its not having been adopted was a very interesting fact, and he did not intend to dispute it; but the report was drawn up by persons for whose opinions he had very great respect. Then there was Dr. West speaking strongly for it; and Mr. Stansfeld thought that it would be supplying a national want if an association was set on foot for the purpose. There was no corporation so well fitted as the Medical Council for doing this. They were largely paid, and they ought to do something in return. He hoped they would not go upon the plan of "*Non possumus*," and how not to do it, but set about doing it at once.

Dr. AQUILLA SMITH was thoroughly in favour of the amendment. He thought it did no more than ask the Council to accept the control of the matter. He took it that this clause did not impose an actual duty on the Council, but that it was quite permissive. The first words of the clause were—"The General Medical Council may, if they think fit," etc.

Mr. SIMON thought that Dr. Smith misunderstood the value of the word "may," which constituted the permissiveness in this clause. If the Bill became law, the "may" would become "must." Supposing a case where the local authority was unwilling to act, and there were no local examiners, an appeal would be made to the Council, and then it would have to make a scheme and appoint examiners.

Dr. HUMPHRY said, was it not better that the Council should submit a scheme the details of which it could best carry out? It was far better that the Medical Council should submit the scheme, than that any other body should put forward a scheme imposing upon the Council duties which it would not undertake.

Sir WILLIAM GULL asked Dr. Humphry if he would suggest where the operation was to begin.

Dr. HUMPHRY said that he was willing to do so when the principle was admitted that the Medical Council should be the body to submit a scheme.

Dr. QUAIN said that from first to last the principle of Clause 24 was that the Council should undertake not

initiation, but supervision. There were bodies to be appointed to initiate rules of examination, and there were examiners, and why should they not act? With regard to registration, there were 20,000 midwives in all parts of the country, and it would be simply impossible to undertake the registration of them. He hoped that the Council would not undertake that responsibility, which ought to begin elsewhere.

The amendment was then put to the meeting, thirteen hands being held up in favour of it, and one against it. The amendment was then put as a substantive motion, and carried.

The Council then adjourned for a short time.

On re-assembling,

The REGISTRAR read the following communications:—

(*a*) Communication from the Royal College of Surgeons of England, in regard to John Baxter Langley:—

March 18, 1878,

Sir,—In pursuance of the 28th Section of the Medical Act of 1858, I am directed to acquaint you, for the information of the General Medical Council, that the attention of the Council of this College having been called to the fact that, on October 22 last, Mr. John Baxter Langley, admitted a Member of this College on June 16, 1843, was convicted of fraud at the Central Criminal Court and sentenced to eighteen months' imprisonment with hard labour, and a duly certified copy of such conviction having been laid before them, the Council, in pursuance of the provisions of Clause 3, Section 18, of the By-laws, relating to the misconduct of Fellows and Members, adopted, on January 10 last, the following resolution, which was confirmed on the 14th inst., viz.:—"That, in the opinion of the Council, the offence of which Mr. John Baxter Langley has been convicted is of such nature as to render him unfit to remain a Member of the College, and that he accordingly be removed from being a Member of the College." (Signed) EDWARD TAMMEA, Secretary.

W. J. C. Miller, Esq., Registrar of the General Medical Council.

(*b*) Certificate of the conviction of John Campbell White, in regard to whom the English Branch Council recommended that the General Council order his name to be removed from the Register:—

I, Thomas Moss Shuttleworth, Clerk of Assize for the Northern Circuit, and having the custody of the records of the Courts of Oyer and Terminer and Gaol Delivery, holden in and for the county of Lancaster, do hereby certify that at the session of Oyer and Terminer and Gaol Delivery held at Manchester, in and for the said county, on Friday, the eleventh day of January, in the year of our Lord one thousand eight hundred and seventy-eight, before the Honourable George Denman and Sir Charles Edward Pollock, knight, and others their companions, justices and commissioners, assigned to hear and determine divers felonies, treapasses, and misdemeanours, and also to deliver the gaol of the said county of the prisoners being therein, John Campbell White was duly convicted upon an indictment then and there depending of feloniously and unlawfully using certain instruments with intent to procure the miscarriage of one Elizabeth Coy, and was thereupon ordered for the said offence to be kept in penal servitude for five years, which said conviction still remains in full force, and not reversed or made void.

Given under my hand this twenty-eighth day of February, in the year of our Lord one thousand eight hundred and seventy-eight.

T. M. SHUTTLEWORTH.

(*c*) Certificate of the conviction of Owen Patrick O'Hare:—

COUNTY OF ANTRIM } TO WIT. } On the application of W. E. Steele, Esq., Registrar of the Branch Medical Council of Ireland, I hereby certify that at a General Assizes, session of Oyer and Terminer and General Gaol Delivery, held at Belfast, in and for said county of Antrim, on the twentieth day of March, one thousand eight hundred and seventy-eight, one Owen Patrick O'Hare was, in due form of law, indicted, tried, and convicted, on his plea of guilty, for that he, the said Owen Patrick O'Hare, on the twenty-first day of November, 1877, did feloniously deliver to Patrick McCann a certain paper falsely purporting to be a copy of a process of the Superior Courts of Common Law in Ireland, to wit, a copy of a writ of summons and plaint, he well knowing the same to be false, and that he caused the same to be delivered to one Margaret Crosbie and to one Daniel Crosbie. And that the said Owen Patrick O'Hare was thereupon ordered and adjudged by the Court to be imprisoned for twelve calendar months, from the date of committal in her Majesty's gaol in and for the said county.

Given under my hand this sixth day of April, in the year of our Lord one thousand eight hundred and seventy-eight,

HEN. M'CORMICK, Deputy,
Clerk of the Crown for said county of Antrim, and the Officer having the custody of the Records of the Court where the said Owen Patrick O'Hare was so convicted.

rown Office of Antrim, April 6, 1878.

It was unanimously agreed that the names of John Baxter Langley, John Campbell White, and Owen Patrick O'Hare should be removed from the Register.

On the motion of Dr. ANDREW WOOD, the Council resolved itself into committee on the Bill.

Dr. HUMPHRY moved—"That Section 2 of Clause 24 be in substance approved." The section was—"(2.) The examinations may be conducted by any medical board or boards, authority or authorities, who consent thereto, or by persons appointed by the General Medical Council, or otherwise as provided by the scheme." It was quite open to the Council to supervise these examinations; so that whatever their opinions might be as to the best modes of conducting those examinations, their views were compatible with this clause.

The motion was seconded by Dr. AQUILLA SMITH, and carried.

Dr. HUMPHRY read Section 3 of Clause 24 as follows:—"(3.) Every person who is certified to have shown by her examination that she is qualified to practise midwifery shall be licensed either by the General Medical Council or by a medical authority, or otherwise as may be provided by the scheme, to practise midwifery, and be entered in the midwives' register upon payment of such registration fee, not exceeding £5, as may be fixed by the scheme." They came now to the question of registration. The keeping of a central register for midwives could not satisfactorily be carried out without a great deal of extra labour. He therefore begged leave to propose on this point—"That in the opinion of this Council it is not necessary that a central register of midwives should be kept; and that the duty of keeping the registers should devolve upon the authorities having power of government in the several places in which the examinations are conducted."

The motion was seconded by Sir JAMES PAGET, and, after a short discussion, was carried in the following modified form:—"That in the opinion of this Council it is not necessary that a central register of midwives should be kept, but that there should be local registers, and that the duty of keeping them should devolve upon the authorities having power of government in the several places in which the examinations are conducted."

Dr. ANDREW WOOD thought that it would be important to say that every person registered as a midwife should bear a good moral character.

Mr. TEALE thought that that was a detail of rules.

It was moved by Mr. MACNAMARA, seconded by Dr. AQUILLA SMITH, and agreed to—"That the word 'midwifery,' in lines 2 and 5 of Section 3 of Clause 24, be changed to 'as a midwife,' and that the same change be also made elsewhere throughout the Bill."

On the motion of Dr. HUMPHRY, seconded by Sir JAMES PAGET, it was resolved—"That Section 3 and 4 of Clause 24 be modified in accordance with the foregoing resolution, and that it be provided that a certificate of good character be required in the case of those who present themselves for examination or registration."

Mr. MACNAMARA wished to call attention to an important point in Paragraph *b* of the following section (4) of Clause 24:—"(4.) There shall also be entered in the midwives' register in one alphabetical list with the above-mentioned licentiates every person not registered in the Medical Register who at the date of the scheme coming into operation—(*a*) holds a licence in midwifery of, or a certificate of fitness to practise as a midwife from, any of the medical authorities; or (*b*) is *bonâ fide* engaged in the practice of midwifery, and who claims to be registered before the expiration of twelve months after the scheme comes into operation, or any longer period allowed by the scheme, and produces sufficient evidence of her title to be so registered and pays the registration fee." He thought that the existing rights of midwives ought to be protected. A woman might come forward, saying that she was a midwife, and claim all the privileges of that woman who had undergone examination. He thought that midwives claiming to be registered as such ought to have been two years in practice.

Dr. WOOD said that it was not customary to make registration of this kind retrospective. All that they could provide was that a woman should bring evidence of having been engaged in the practice, and evidence of good moral character.

It was moved by Dr. HUMPHRY, seconded by Sir JAMES PAGET, and agreed to—"That Section 5 of Clause 24 be in substance approved."

On the motion of Dr. ROLLESTON, seconded by Sir JAMES PAGET, it was resolved—"That the following be in substance an addition to Section 5 of Clause 24:—'Persons not upon such a register shall not be eligible for public appointments as midwives.'"

Dr. HUMPHRY moved, Sir JAMES PAGET seconded, and it was resolved—"That Section 6 of Clause 24 of the Bill, to the end of Sub-section 1, be in substance approved."

It was moved by Sir WILLIAM GULL, seconded by Dr. ROLLESTON, and agreed to—"That, instead of Sub-section 2 of Section 6 of Clase 24, the following be substitued:—'(2.) The registers of midwives shall from time to time, and at least once a year, be printed, published, and sold in the

several districts of the United Kingdom, as directed by the General Medical Council from time to time; and that copies of these registers shall be forwarded to the Medical Council on January 1 in each year.'"

It was agreed, on the motion of Dr. HUMPHRY, seconded by Sir JAMES PAGET—"That lines twenty-eight to forty of Section 6 of Clause 24 be in substance approved."

Dr. HUMPHRY moved, Sir JAMES PAGET seconded, and it was agreed to—"That, with reference to Section 6 of Clause 24, the Council is of opinion that the duty of prosecuting under this clause should devolve upon the local authorities specified under Section 5."

It was moved by Dr. ANDREW WOOD, seconded by Dr. AQUILLA SMITH, and agreed to—"That Clauses 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, be in substance approved."

The Council then proceeded to consider Clause 22 with regard to unregistered persons. A discussion ensued as to whether a licentiate of a foreign university, being in this country, but not registered in England, could under this clause assume the title of "Doctor" without rendering himself liable to a penalty. It was eventually resolved, on the motion of Sir JAMES PAGET, seconded by Dr. ROLLESTON—"That the attention of the draughtsman be called to the first and third paragraphs of Clause 22 of the Bill," which were as follows:—"(1.) If a person who for gain either practises medicine or surgery, or a branch of medicine or surgery, or is engaged in the cure or treatment of diseases or injuries, and is not for the time being registered in the Medical Register, takes or uses the designation of any qualification or medical diploma which entitles a person to be so registered (including any recognised medical diploma granted in a British possession or foreign country), or the designation of licentiate in or professor of medicine and surgery or medicine or surgery or a branch of medicine or surgery, or the designation of physician, surgeon, apothecary, or doctor, or any designation used to distinguish registered practitioners of medicine or surgery or of a branch of medicine or surgery, or any designation implying that he has obtained a qualifying certificate under this Act, or is registered or entitled to be registered in the Medical Register, or is duly qualified to practise medicine or surgery or a branch of medicine or surgery, he shall for every such offence be liable, on summary conviction, to a fine not exceeding twenty pounds." "(3.) If a person who for gain either practises medicine or surgery, or a branch of medicine or surgery, or is engaged in the cure or treatment of diseases or injuries, wilfully takes or uses any of the above-mentioned designations to which he is not entitled, he shall for every such offence be liable, on summary conviction, to a fine not exceeding twenty pounds."

It was moved by Dr. ANDREW WOOD, seconded by Sir JAMES PAGET, and agreed to—"That Paragraph 4 of Clause 22 be in substance approved."

It was moved by Dr. ANDREW WOOD, seconded by Dr. PYLE, and agreed to—"That the attention of the draughtsman be called to Paragraph 5 of Clause 22."

It was moved by Dr. ANDREW WOOD, seconded by Dr. AQUILLA SMITH, and agreed to—"That Paragraph 6 of Clause 22 be in substance approved."

On the motion of Dr. ANDREW WOOD, the standing orders were suspended till the business now before the Council should be completed.

The Council then resumed.

Dr. ANDREW WOOD said that the Executive Committee hoped that the business of the Council would conclude to-morrow. (Hear, hear.)

The PRESIDENT asked the Council to bear in mind that Dr. Waters would be there the following morning at eleven o'clock, when he (the President) hoped that the members would attend.

Then the suggestion was made that the Irish and Scotch members of the Executive Committee should remain in town over Wednesday night in order to complete the work and put it into shape without delay. Under those circumstances it was understood that the Council ceased to-morrow evening.

SEVENTH DAY—WEDNESDAY, APRIL 17.

At the sitting this day,

The PRESIDENT said: I have to state to the Council that, pursuant to the instructions given on Monday, several members of the Council were present this morning, and received a deputation from the Medical Reform Committee. The deputation consisted of Dr. Waters (of Chester, Chairman of the Medical Reform Committee), Dr. Davey (of Bristol), Dr. Wade (of Birmingham), Dr. Stewart (of London), Dr. Leech (of Manchester), Mr. Wheelhouse (of Leeds), Mr. Nicholson (of Hull). Perhaps it will be sufficient for me to say that the interview lasted a considerable time, and that Dr. Waters, on behalf of those who acted with him, desired to impress on the Medical Council the importance of a change in the constitution of the Council; and the principle of that change, as I understood it, was that the Council should consist of one-fourth of persons representing the profession, one-fourth of persons nominated by the Government, and one-half being representatives of the various medical authorities in the United Kingdom. It was added that the total numbers of the Council were not a matter of so much consideration for himself and those for whom he acted. The Council might consist of the same number, or of a greater number, or of a diminished number. Many questions were asked on both sides, and the deputation left before two o'clock. Perhaps it would be right to add to this statement that, of course, no opinion on this subject was expressed on behalf of the Council, the Council having given no authority to that effect.

The Council then resolved itself into committee, to continue the consideration of the Medical Act (1858) Amendment Bill.

Dr. ROLLESTON gave notice that, in connexion with Clauses 14 and 20, he should move a resolution to secure that female practitioners should undergo a separate education and a separate examination, and be enrolled in a separate register from male practitioners.

Dr. HUMPHRY said that it would be well for the Committee to have clearly in their minds what the Act really provided in these respects.

Dr. ANDREW WOOD said that he thought that they could not come to any proper conclusions on these matters unless they had first explained to them what was the position given to women in the present Bill. After that had been done Dr. Rolleston would be in a position to move that these provisions be either approved or otherwise.

Dr. ROLLESTON said that the Clauses 14 and 20 might have been better arranged, but a very little alteration in their phraseology would make them clear; but on the last day of the Council it was of much more vital importance for them to address themselves to principles than to merely verbal alterations. In reference to Clause 14, which bore on the subject of examination-rules, for securing uniformity of examination for qualifications, Sub-section 4 began—"The examination-rules shall provide for the admission of women to the examinations, provided that—"

Sir WILLIAM GULL proposed that the sub-section should stop at the word "examinations."

Dr. ROLLESTON said that the public did demand that women should be admitted to the practice of the profession, but he should have been glad if the rules relating to the examination of women had come after the clauses which spoke of conjoint schemes. It appeared to him that purely permissive legislation would not do in this matter, and that the question of the admission of women really called for some compulsion if they were to have the thing settled, and to have a disagreeable matter put out of their way for the future. He wanted the Council to put upon the statute-book an enactment to the effect that the examination-rules should provide for the admission of women to the examinations. He would move that that part of the sub-section be adopted.

Dr. PYLE seconded the motion.

Sir JAMES PAGET asked what would be the position of women if conjoint schemes were made. There had been already a suspicion abroad, and more than a suspicion, that this Act would work hardly in the case of women. At present women could be admitted to the Register by examination by any one of the bodies or authorities. If this Bill passed into law, that would not be hereafter possible. The new Act would require a double qualification from every person who was to be placed on the Register. Women would, therefore, need to be examined both by a medical and a surgical authority. At present there was not one surgical authority which had expressed its willingness to examine women for any diploma which it could give, or might be authorised to give. At present there was no power in the Bill to examine women except in a conjoint scheme.

Dr. ROLLESTON said that that difficulty might be obviated

by putting into the clause the words, "Any board, either now or hereafter authorised to give licences."

Sir James Paget apprehended that the examination-rules, as explained by the Duke of Richmond, were intended not for the case of conjoint boards alone, but, as the Duke had more than once expressed, to take the place of conjoint boards if they were not established, and that, in that case, examination-rules should be framed which should secure, so far as possible, that there should be a united examination scheme throughout the kingdom; therefore the position of women would be that they must pass under the examination of a medical and a surgical body. He apprehended that the Medical Council would not approve the rules of any surgical body which did not provide for the examination of women. That was what the plain reading of this Act would be if conjoint schemes were not enforced. The Medical Council, under that Act, would be required to see that the examination-rules of the several bodies by whom double qualifications were to be given should provide for the examination of women. At present he did not say whether that would be right or wrong. If the Bill passed without compulsory conjoint schemes, all the surgical authorities of England, Scotland, and Ireland would be obliged to provide examination-rules for women.

Mr. Simon directed Sir James Paget's attention to Paragraph 8 of the clause, which was—"(8.) If it appears to the General Medical Council that any medical authority fail to comply with the examination-rules, they may represent the same to the Privy Council, and upon such representation Sections 21 and 22 of the Medical Act (1858) shall, so far as circumstances admit, apply as if the representation were a representation within the meaning of those sections."

Dr. Humphry thought that Sir James Paget had not got quite to the bottom of the clause. He had quite rightly pointed out that if there were no conjoint boards, women would have no definite avenue to the profession; but Sir James Paget had gone on to indicate the mode in which that avenue would be made, and had stated that the rules would compel the authorities to provide a common examination, which common examination would admit women. He (Dr. Humphry) did not think that that was the case. The Bill provided for the admission of women to the Register in two ways—either through examination by a board or through examination by two separate authorities, which separate authorities gave an examination, one in medicine and the other in surgery. But there was nothing whatever which would compel those authorities to admit women to the examinations.

Mr. Simon said that as the Bill stood any actual or any possible diploma granted by the College of Surgeons would be a qualification granted by that authority. The provision was that the rules should not force the authority in that respect.

Sir James Paget said that the Bill would force the authorities to examine and give a certificate of qualification.

Dr. Humphry said that the section might be approved, it being understood that there would be a conjoint board in each division of the United Kingdom. ("No, no.") He thought that there was no doubt, if the Bill passed, that that would be the case.

Mr. Simon said that they were resolving themselves into a committee of attorneys, and going into minute legal criticisms which they were not competent to conduct to a successful issue. What they had to consider was, what were the principles upon which the Council would advise the Government to act. He had had a great deal to do with this question, and he could see that there was pitfall within pitfall. This was the most difficult bit of drafting to discuss in the Council which they could have. He would suggest that the discussion be taken irrespectively of the words, and proceed on the principles of the question. What did they consider right as regarded the admission of women to the profession? Should it be permissive or compulsory; and, in either case, under what conditions? Should the permission be given to admit women on the same terms as men, and only on those terms, or with differences? Those were the questions to be considered.

Dr. Andrew Wood was not prepared to agree to the clause. He thought that there were pitfalls in it. What they agreed to last year was that women might be put on the Register if they could get any of the bodies to take them. If the Council were to agree to the clause as it stood, they would bring out a result which would be very grateful to him personally, because it would prevent the women being put on the Register at all. The clause provided that no person was to be put upon the Medical Register who had not a double qualification in medicine and surgery. Under such a clause no women would be registered; therefore, if women were to be admitted to the Medical Register, it would be a mere "mockery, a delusion, and a snare," to leave the clause as it stood.

Dr. Rolleston said that he should be quite content to introduce the words, "That the examination-rules for any conjoint scheme of the future shall provide for the admission of women to the examinations." He was very glad to have heard it laid down that they should discuss principles, and not haggle about words.

Mr. Macnamara said that there were a great many licensing bodies which had a great objection to the admission of women; and if the conjoint schemes must provide for the admission of women, the establishment of such conjoint schemes would be rendered more unlikely than it was at present.

Sir William Gull moved that the words should be, "That the Medical Council shall frame examination-rules for the admission of women." Let them pass that first.

This having been seconded, Dr. Rolleston withdrew his motion. The motion was then carried.

Mr. Simon: I will move that we add the words—"with such distinction as may be judged necessary between the cases of women and men." It was not necessary now to discuss what those distinctions should be. All that was required was that the authority which made the examination-rules should be at liberty, if it saw fit, to make a distinction between the cases of men and women.

The motion was seconded by Sir William Gull.

Dr. Rolleston said that the issue put before the Council was whether they would exercise the very important function of saying what those distinctions were, or whether they would leave it to the framers of the conjoint scheme, or each examining body, to do so. He hoped that the Council would not do what was equivalent to abdicating its functions in that respect, though it was quite true that the statement of the distinctions would involve a certain responsibility upon the Medical Council. He wanted it put on record that the Council did consider that the education should be conducted apart, and that the examination should be conducted apart, and that the names should be kept apart in the Register. He hoped that the Council, instead of postponing the decision as to the distinctions which were to be made, would decide now that they were of opinion that security should be taken in the Bill for separate education and separate examination.

Mr. Macnamara considered that the proposal made by Dr. Rolleston was highly objectionable. Any woman who claimed a right to have her name inserted on the Register should be subjected to the full examination. A very important public question was involved as to women being separately registered. If a woman got her name on the Register, she was as fully entitled to practise medicine and surgery as any man. He would go farther, and say that it would be a very great insult to the woman to adopt Dr. Rolleston's suggestions, for he was perfectly sure that a woman was as competent to get herself up on all points as a man. No woman who was strong-minded enough to submit herself to examination ought to claim any exemption on the score of sex; and he submitted that, in the interests of the public, a woman should be liable to answer upon every part of the profession which she was seeking to enter.

Dr. Rolleston said that, as a matter of form, he entirely accepted what Mr. Simon had said. His only objection was that it was not sufficiently specific.

Dr. Humphry thought that the whole subject of the distinctions to be made in the examination ought to be left open for the good judgment of those who had to conduct the examination, without the introduction of any kind of legislation on the subject. He thought it would be better to leave the clause as it stood, without Mr. Simon's addition to it.

Mr. Simon said that Section 14 provided for the entire government of examinations and the making of examination-rules. For the making of those rules there was a certain constituted authority. The Medical Council was, in the

first instance, the regulating authority; but the action taken by the Medical Council was to be approved by the Minister who, for the time being, was in office. That Minister would, of course, judge this question from his own point of view. He might, for instance, take the view which Mr. Macnamara had just expressed—an extreme view—in relation to the women question. He might say, "Women shall not go into the profession unless they are identically what men are." The Minister, having to exercise his discretion, and, perhaps, having a little preference in his own mind for a particular system, might say, "I see nothing in the Bill to authorise me to sanction a distinction between the two sexes." Suppose the Council said to the Minister, "We see our way to require such-and-such things in the case of men, but we do not see our way to require them in the case of women, and we consider that to require those things of women would be virtually to exclude them, and to prohibit them, in an indirect way, from entering the profession. If we require that their practical experience should be identically the same as that of male medical students, this would be, in effect, to exclude them." If that were the view of the Council, and the Council made certain differences, without some such words as he (Mr. Simon) had proposed, the Minister might consider that the Medical Council had no power to make distinctions of that kind. Unless a certain latitude were allowed to those who made the rules, they would have no discretion to make any difference between the course of study required of men, and that required of women.

Mr. Macnamara then moved, as an amendment—"That Paragraph *b*, Section 4, of Clause 14, be approved of." The whole principle of Paragraph *b* was involved in Mr. Simon's resolution. The paragraph was as follows:—"(*b*) They shall not compel a woman, in order to obtain such qualification as will entitle her to be registered in the Medical Register, to pass, if she object to do so, the same examination as men, without any distinction on the ground of sex."

This amendment was not seconded.

On the suggestion of Sir James Paget, Mr. Simon consented to omit the word "but" from the commencement of the words which he desired to add to the subsection. The motion of Mr. Simon was then agreed to.

Dr. Rolleston proposed—"That Paragraph *a* be accepted by the Council." This was as follows:—"(*a*) They shall not compel any medical authority, who at the passing of this Act have not any obligation to grant, and have not granted, a medical diploma to women, to admit a woman to examination for a qualification granted by that authority."

Mr. Turner seconded the motion.

Mr. Simon asked which were the authorities that had any obligation to grant a medical diploma to women. He would move—"That the Council think it expedient that the statute should name any particular examination to which women may of legal right claim to be admitted." Unless that was made clear, there would be endless litigation.

Sir William Gull suggested that they should call the attention of the Lord President to the fact that they had no sort of power to require examination-rules for the admission of women.

Dr. Rolleston: Still, I think that if we had the words "no medical authority shall be compelled," that would be simply to take security that no compulsion should be brought to bear upon an individual corporation. That is what we want. All we have to say is this—that no medical authority shall be compelled to do it.

Sir William Gull: How are you to do it?

Dr. Andrew Wood: How are they to be registered? They must have a double qualification.

Mr. Turner suggested the adoption of the words of the report of last year—"They shall not compel any medical authority which has not, before the passing of the Act, examined women for qualifications, to grant," etc. He wanted to get rid of the word "obligation."

Dr. Rolleston moved the following amendment—"That no medical authority which, at the passing of this Act, shall not have undertaken to grant, and has not granted, a medical diploma to women, shall be compelled to admit a woman to examination for a qualification granted by that authority."

Mr. Turner: I will second that.

Sir James Paget said that the effect of such a clause, if it became law, would be that women would be excluded. That was quite plain. If they passed such a clause, let them do it with their eyes open. By this Bill, Russell Gurney's Act would be repealed; and Russell Gurney's Act was the only authority to admit women to the Register. The Bill would require that before a woman should be admitted to the Register she should be examined in medicine and surgery. He would repeat that that would make it simply impossible for any woman to be placed on the Register. The Council had better face that fact.

Mr. Simon said that at the present time they could only come on at the option of the authorities.

Dr. Aquilla Smith said that Sir James Paget's objection was quite sound. Unless some licensing body agreed to admit them, they never could be admitted.

Mr. Simon said that they were at one on the general point. If Sir James Paget would presently move a substantive resolution covering the whole ground, and expressing the views of the Council on the admission of women, it would simplify the case very much. But what they now had to do was to try to make the clause such that it would work without embarrassment, for the words were of very doubtful import.

Dr. Rolleston said that they might get over the difficulty by some such words as these—"But any conjoint examining board that shall hereafter be formed shall be compelled to admit women to its examination."

Dr. Fergus said that his impression was that the only thing which prevented the resolution being passed was the double qualification. He held that the double qualification was in the Bill, but it was not in the resolutions of the Council. Mr. Simon had moved a resolution which was carried by a majority, to the effect that no person could be put upon the Register whose qualifications had not been tested in medicine and surgery and midwifery. That was not a double diploma, but it was only a testing.

The motion—namely, "No medical authority who at the passing of this Act has not granted a medical diploma to women, shall be compelled to admit a woman to examination for a qualification granted by that authority"—was put and carried unanimously.

Upon the motion of Sir William Gull, seconded by Dr. Hudson, it was also resolved—"That the attention of the draughtsman be drawn to the deficiency of power in the Council to carry out the Act in respect of examination-rules as regards women, in Section 4 of Clause 14."

It was then moved by Dr. Rolleston, seconded by Sir William Gull, and resolved—"That, provided there be no conjoint scheme in operation in any division of the United Kingdom, or there be no admission of women to examination for a double qualification in such division of the kingdom, it shall be in the power of the Council to establish a Board for the examination of women in such division of the kingdom."

Dr. Rolleston repeated his suggestion that the Council should pass a resolution to the following effect:—"Any conjoint examining board to be hereafter formed shall be compelled to admit women to its examination." ("No, no.")

The President said that he believed that such a resolution would be a most serious bar to the formation of a conjoint scheme. He knew personally that there were bodies who would endeavour to throw out any conjoint scheme in England if it was to be a compulsory part of such a scheme that women should be admitted.

It was resolved, upon the motion of Mr. Macnamara, seconded by Mr. Simon—"That Paragraph *b* of Sub-section 4—namely, 'They shall not compel a woman, in order to obtain such qualification as will entitle her to be registered in the Medical Register, to pass, if she object to do so, the same examination as men, without any distinction on the ground of sex'—be omitted."

Dr. Rolleston said that he should have to move that in the place of the clause just omitted there should be inserted provisions requiring that the education, examination, and registration of women be separate from those of men. He would move the three points separately. He then moved—"That the medical education of women be conducted separately from that of men."

Sir William Gull seconded the motion. He took it that there was not a man at that table who did not desire to carry out the wishes of the public in respect to the admission of women; but he believed that they were of opinion that in the interests of public order the education and examination

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of male students of medicine should be conducted entirely apart from the education and examination of women. Words to that effect were in their Minutes of 1875.

Dr. HUMPHRY said that, however desirable it might be to educate and examine men and women separately, he confessed that he did not think that it was a subject for legislation. They might as well have legislation to the effect that the education of boys and girls should be separate. Would it be possible for any Act of Parliament to legislate that men and women should not attend hospital practice and lectures together? In some cases men and women students worked together very well. He had in his own class both ladies and gentlemen attending his lectures, and he never found any evil resulting from it. That, however, was not the question. The question was whether the requirement that they should be separated should be introduced into the Act of Parliament. He was in favour of leaving the matter to the discretion and moderation and good judgment of the parties concerned. A good deal had been said about liberality. He really thought that liberality meant trust and confidence in other persons.

Mr. SIMON said that he hoped that Professor Rolleston would reconsider the subject. He believed that the Professor overrated the magnitude of the danger. This was a crisis in the history of medical education, and those who had to act must proceed tentatively. This might very well be left an open question to be decided by those who had the charge of the education and examination of the students.

Dr. AQUILLA SMITH thought that what was proposed by Professor Rolleston was far too restrictive. For instance, there were lectures on chemistry, botany, and electricity, at which both ladies and gentlemen attended.

Mr. MACNAMARA said that the resolution would clearly throw another difficulty in the way of women going into the profession. It would require that each professor gave a double course of lectures on his particular subject. There were a great many subjects which might be safely studied by men and women together. ("Vote.")

After a few words from Dr. ROLLESTON in reply, a vote was taken, and the resolution was carried.

A corresponding resolution, requiring that the examination of women should be conducted separately from that of men, was then moved by Professor ROLLESTON, and also carried.

It was proposed by Dr. ROLLESTON, and seconded by Sir WILLIAM GULL—"That women who pass any examination giving a legal qualification shall have their names entered on a separate Register."

Dr. QUAIN, in supporting the motion, said that, if there was to be a distinct examination for women, it would be certain that women would have a different qualification from men; and nothing would be more objectionable than to put men and women with different qualifications on the same register. There was a separate register for colonial practitioners and foreign practitioners. He thought that, in the same way, there should be a separate register for women.

A division was taken on the motion, and there appeared in favour of it nine, against it eight.

Dr. ANDREW WOOD asked that the names and number of the division might be recorded.

This was done with the following result:—Majority, 10: Mr. Bradford, Mr. Macnamara, Dr. Quain, Dr. Rolleston, Dr. Leet, Dr. Fergus, Dr. Pyle, Dr. Apjohn, Dr. Hudson, Dr. Haldane. Minority, 8: Dr. Pitman, Dr. Andrew Wood, Sir William Gull, Sir James Paget, Mr. Turner, Mr. Teale, Dr. Humphry, Dr. Aquilla Smith. Did not vote 5: The President, Dr. Scott Orr, Mr. Simon, Dr. Storrar, Sir Dominic Corrigan. Absent, 1: Dr. Pettigrew.

Mr. SIMON proposed the following addition to the last resolution:—"Such separation of names not to imply any difference of legal rights." ("No, no.")

Dr. ROLLESTON: I shall be glad to second that.

The motion was put, and carried by six against five.

The remaining paragraphs of Clause 14 were approved of in substance.

The Committee then adjourned for a short time.

Upon business being resumed,

Mr. MACNAMARA called attention to Clause 4 of the Act, namely—"Where a person, who either has obtained after the commencement of this Act a double qualification within the meaning of this Act, or has obtained before the commencement of this Act a qualification to be registered under the Medical Act, 1858, produces or sends to the Medical Registrar the document conferring or evidencing such qualification, with a statement of his name and address, and the other particulars, if any, required for registration, and pays the registration fee, he shall be registered in the Medical Register." He said that the meaning of this clause was, most undoubtedly, that every person who was qualified, whether in England, in Ireland, or in Scotland, must, in order to be registered, send his evidence of qualification to the Registrar in London, along with the registration fee of five guineas, and thus all the fees would be centralised in London. He did not know whether this provision was inserted by accident or by design. He would propose—"That, in the opinion of this Council, it is not desirable to transfer to the Registrar of the General Medical Council the powers possessed by the registrars of the several branch councils, under the Medical Act of 1858, to register duly qualified persons and to receive the fees payable for such registration; and that a copy of this resolution be transmitted to the draughtsman of his Grace the Lord President's Bill, with the request that he will reconsider, in the spirit of this resolution, the registration clauses of the present proposed Medical Act (1858) Amendment Bill." A similar objection arose with regard to Clause 9, Sub-section 5, which was—"The Medical Register shall be deemed to be in proper custody when in the custody of the Medical Registrar, and shall be of such a public nature as to be admissible as evidence of all matters therein on its mere production from that custody." If this were to be carried out, Mr. Miller, the Registrar of the General Council, would have to attend any court of law in Ireland or Scotland whenever it was necessary to give evidence of the contents of the Register.

Dr. AQUILLA SMITH seconded the motion. He said that, according to Clause 9, the Registrar would have to attend to give evidence, whereas, under the Act of 1858, a copy of the Register could be received in evidence. If the Bill was passed with this clause, whenever a practitioner instituted a suit for the recovery of his fees, Mr. Miller, the Registrar, would have to be subpœnaed to bring the Register with him.

Dr. ANDREW WOOD supported the views set forth by the mover and seconder of the resolution. He said that the word "registrar" was used in Clauses 4 and 9, and if they looked at the definition clause they would see that the word "registrar" meant the Registrar of the General Medical Council.

The PRESIDENT said that he could throw some light upon that subject, because he had written to inquire what were the reasons for the change. The answer, which he received only the other day, said—"The provisions respecting registration are a repetition of those of Lord Ripon's Bill. It was, I understood, necessary to make better provision for the correctness of the Register, and this could only be done by making the registration central, under the control of the body really responsible for the registration, and abandoning the half-and-half system which exists at present, and which, in argument, is indefensible, and which, in practice, seems, if not to be unworkable, hardly to work well." Under these circumstances, he (the President) thought that it would be desirable to pass a resolution to the effect that the whole matter should be reconsidered. It had already been before Mr. Ouvry.

The resolution was carried unanimously.

On Clause 14—

Sir DOMINIC CORRIGAN moved that Sub-section 2 of the clause should be as follows:—"The examination-rules shall not require a candidate to adopt the practice of any particular theory of medicine or surgery." He said it would be seen that there was a difference between this and Sub-section 2 as it stood in the Bill, which was as follows:—"The examination-rules shall not require a candidate to adopt or refrain from adopting the practice of any particular theory of medicine or surgery." In a speech in support of the motion Sir Dominic said he would urge that candidates ought to be required to refrain from certain homœopathic methods of treatment, as, for instance, the refusal to perform simple operations, to stop bleeding, or to relieve the distended bladder. In connexion with this point he referred to instances which had come under his own observation.

Dr. AQUILLA SMITH seconded the resolution. He said that the question was a very simple one, and did not require any words from him.

Sir WILLIAM GULL, while agreeing with Sir Dominic

Corrigan's view, said that he did not consider the question quite so simple as Dr. Smith had stated. He believed that no government in the world would take out the words to which Sir Dominic objected.

Sir Dominic Corrigan said, in reply to what Sir William Gull had said, that if the Council was to pass the sub-section without amendment it would be inferred that they regarded it as correct in principle. He did not care one farthing whether the Government took out the words or left them in, but he wished the Council to relieve themselves from being parties to what he might call disgraceful conduct with regard to the treatment of human life. For his own part he would not put his hand to the diploma of a man who would not perform such operations as those to which he had referred. He hoped that they would relieve themselves from the imputation of letting loose upon the world persons who would sacrifice human life by their system of treatment. Let that responsibility be left to the House of Commons.

A few observations having been made by Mr. Simon, a vote was taken, and the motion was lost, the numbers being five for and eight against.

On Clause 15—

Dr. Humphry moved an addition to the third paragraph. He said that as the clause stood it would not be in the power of any licensing body to withdraw from the scheme referred to. He would therefore suggest that the following words be added:—"But that power of withdrawal from such scheme on the part of any of the medical authorities be provided, in the event of there not being an examining board in each division of the United Kingdom, as recommended by the Council in its Resolution 3 of the meeting on April 12."

This proposal was seconded by Dr. Quain, and carried.

Mr. Simon said that he thought this would be the proper time to propose that any of the authorities, whether acting separately or in combination, ought to have power to institute, if they saw fit, a special examination for women, and to give a special diploma.

Dr. Humphry said that that was provided for in Clause 20.

Mr. Simon said that he thought it was doubtful whether it was provided in Clause 20, but he would willingly bring on the question when that clause was being considered.

Clause 15 was then agreed to.

Clause 16 was passed without comment.

On Clause 17—

Mr. Simon proposed that after the words, "shall be entitled to receive from each medical corporation such one only of those diplomas as that corporation from time to time provide," there should be added the words, "under the scheme," or "under the examination-rules," or words to that effect, so as to limit the clause, and not enable the candidate to choose his diplomas.

Dr. Pitman hoped that the Council would understand that it was intended by this clause that all who passed the examination of any conjoint board should be empowered to claim from the corporations who took part in the board some one of its qualifications. There seemed to be a doubt on the subject among those who attended a deputation to the College of Physicians the other day. The question was specifically put, whether, in the event of the conjoint board being in existence, it would be in the power of any of the corporations to refuse to grant its licence to a woman who passed the board; and it was said, "No, they would be compelled to grant it." If they looked at the other clauses of the Act, the Act would seem to give a permissive power, but he did not think that that was the intention. There would be power to institute a new qualification, so that a corporation would not be able to make the excuse—"If we grant our qualification it would admit to a place in the corporation." It should be clearly understood that the clause was to give power to persons passing an examination to claim one of the qualifications.

A little further discussion ensued, and the clause was in substance agreed to.

Clause 18 was agreed to without any observations being made.

On Clause 19—

Mr. Simon suggested that the attention of the draughtsman should be drawn to the great largeness of the words "such information as the Council may require." The expression seemed to want some limitation.

Clause 19 was then agreed to.

On Clause 20—

Mr. Simon proposed—"That in Paragraph 2, after the words 'to persons of both sexes,' there be added the words 'or of either sex.'" He wanted to provide for the possibility of an authority granting a special diploma only to women, and he wanted to secure against any mistake being made as to the existence of that power. He believed that to be the intention of the clause. Facilities for the medical authorities to act according to their own judgment were all that he wanted.

Dr. Pitman held that the words which followed would secure what Mr. Simon desired.

Mr. Simon said that he understood that the examination-rules of the proposed enactments should provide for the examination of women, but he did not understand them to mean that they should carry with them an obligation on the authorities to examine women. They seemed only to carry with them the obligation that if women were to be examined by the authorities they should be examined in a particular way.

Sir James Paget said that it would be incumbent on the Council not to sanctiou rules which did not provide for the examination of women.

Mr. Simon varied the words of his proposal, and moved that the words to be added should be—"with distinction, if judged necessary, between the diplomas of men and women."

The motion was seconded by Sir William Gull.

The proposal, having been briefly discussed, was submitted to the committee, and negatived by a majority of five.

Clause 20 was then approved, as was also Clause 21.

This concluded the consideration of the Bill in committee, and the Council resumed.

Six o'clock, the usual hour for the rising of the Council, having arrived, the standing orders were suspended, upon the motion of Dr. Andrew Wood, in order that the business of the session might be concluded.

Resolved, upon the motion of Dr. Storrar, seconded by Mr. Simon—"That the resolutions adopted by the University of London this day be received and entered on the Minutes."

A copy of these resolutions was handed in by Dr. Storrar. The resolutions were as follows:—

Report of a Committee of the Senate of the University of London on the Medical Act (1858) Amendment Bill adopted by the Senate of the University at its Meeting on Wednesday, April 17, 1878.

The Committee to which the consideration of the Lord President's Bill has been referred by the Senate, have limited their attention to that portion of the Bill which relates to the qualification of medical practitioners and the conditions of registration.

In the Bill of 1858 it was provided that a diploma or licence obtained from any single medical body, whether university or corporation, should entitle the holder of it to be placed on the Register as a qualified medical practitioner, although such diploma or licence might have been obtained by an examination not including medicine on the one hand, or surgery on the other.

The fundamental principle of the present Bill, as expressed in Clause 3, is that no person shall be placed on the Medical Register unless he "has shown himself by examination to be qualified to practise both medicine and surgery."

In this principle your Committee entirely concur. It has always been fully recognised in the examination scheme of the University of London, which has from the first required a knowledge of surgery on the part of every candidate for its degree of Bachelor of Medicine, and has latterly instituted a special degree of Bachelor of Surgery (the examination for which is open only to such as have already obtained the degree of Bachelor of Medicine), for the sake of *formally* conferring that double qualification which it previously conferred *actually*.

Since, by the "Medical Practitioners Act" of 1876, the degree of Bachelor of Surgery granted by a university has been made a registrable qualification, every Bachelor of Medicine of the University of London, who shall have taken the additional degree of Bachelor of Surgery, will be entitled to claim registration for the double qualification required by the Lord President's Bill.

A further object of this Bill, expressed in Clause 14, is that "the double qualification may be granted on like terms in all cases."

In this view also your Committee entirely concur; deeming it of fundamental importance, as well to the profession as to the public, that there should be a uniformity of minimum qualification in all parts of the United Kingdom. The Medical Act of 1858 aimed at establishing such a minimum, by giving to the General Medical Council the power of reporting to the Privy Council the case of any medical authority whose tests should in their judgment be inadequate to secure it; and by giving to the Privy Council in the last resort the power of suspending the ability of that body to confer a title to practise.

The experience of twenty years having shown that the provisions of the Act of 1858 are inadequate to secure a satisfactory minimum, the present Bill aims to establish the desired uniformity by giving to the Medical Council power to frame examination-rules (1) for the several medical bodies acting separately, and (2) for the same bodies forming Conjoint Medical Boards.

Under Clause 14 of this Bill the Medical Council is directed to frame, revoke, alter, and add rules for regulating *any* examination of persons

desiring to obtain a double qualification; and to determine the subjects thereof, the standard of passing, and the mode of conducting it.

Against any such possible interference with the examinations of the University, your Committee feel it requisite that the Senate should most strongly protest. As long as each medical authority has the power of giving the double qualification (either by itself, or in conjunction with another body), the desired uniformity can only be secured either by "levelling up" or by "levelling down." While your Committee deem it unreasonable to expect that the examinations of all the other bodies should be raised to the standard of those of the University of London, they would regard it as a most serious injury, not merely to the University but to the profession and the public, that its standard of education and examination should be lowered down, from the maximum of what may be required from candidates for a degree, to the minimum indispensable for admission to the Medical Register. They cannot believe that such interference could be within the intention of the framer of the Bill; but not the less is it a part of its constructive operation.

The only mode, as it appears to your Committee, in which the desired object can be secured, is the institution of a uniform scheme of examination in each of the three kingdoms; which, framed on the basis of the highest attainable minimum, should confer a "qualifying certificate," constituting the *sole* title of its holder (so far as professional ability is concerned) to be placed on the Medical Register.

The possibility of instituting such a scheme for England, by the use of the powers conferred by Clause 19 of the Act of 1858, has been for several years past a subject of amicable discussion among its medical authorities. In this discussion the representatives of the University of London have from the first taken a leading part; and it is scarcely too much to say that they have rendered great service alike by the firmness with which they have taken their stand upon fundamental principles, and by their readiness to make concessions as to matters which they have not regarded as essential

It is understood that the "Committee of Reference," composed (as suggested by this University) of two representatives from each of the medical authorities of England, has nearly completed the construction of a scheme for what is termed in the Lord President's Bill a Medical Board, whose "qualifying certificate" shall be a guarantee that every holder of it shall have shown himself by examination competent to practise both medicine and surgery. Further, whenever this scheme may be brought into action, all the universities and medical corporations of England are prepared to relinquish their independent rights of conferring a title to practise; so that the possession of the "qualifying certificate" of the Conjoint Board shall hereafter constitute the only *examinational* claim for admission to the Medical Register.

But since, under the Medical Act of 1858, no one can be placed on the Medical Register except in virtue of a diploma or licence from some one or more of the medical bodies, and since the fees paid for such diplomas or licences constitute an important part of the income of the medical corporations, this scheme provides that one-half of the fees to be paid by all candidates, save those proceeding to university graduation, shall be divided among those corporations, the other half being appropriated to the expenses of the examinations.

[It was provided, however, from the very first, that university candidates should be exempted from all but the *final* examination (in medicine, surgery, and midwifery), and that the fee to be required of them should only be such as might be regarded as covering the expense of that examination. Such candidates, having obtained their qualifying certificate from the Conjoint Board (without which they will not be admissible to their Second M.B. Examination), will only be able to claim a place on the Register when they shall have obtained their university degree, unless they gain admission to one or more of the corporate bodies by the payment of such fees as may be imposed by those bodies.]

But as the scheme elaborated by the Committee of Reference is framed with the idea of considerably raising the minimum standard of medical education and examination, it is obvious that, so long as this minimum remains as at present in the sister kingdoms, it cannot be put in operation without serious peril to the interests of the English medical corporations; since there is a class of candidates to which the existence of a lower standard elsewhere will prove a more effectual attraction than any pecuniary consideration.

Further, the scheme, as at present framed, gives to any of the medical bodies the power of withdrawing from it after due notice; and there might be reasons other than those of self-interest for the exercise of this power.

Now, the Bill of the Lord President is obviously intended to promote the formation of such conjoint medical boards; and to give the force of law to such arrangements as may have been voluntarily agreed upon by the constituent bodies of such boards, with the approval of the Medical Council. Moreover, it gives to the Medical Council the same power of framing examination-rules for such conjoint boards as it gives in regard to separate medical bodies. And, when such a board shall have once been established and brought into action, the provisions of this Bill do not seem to permit any of its constituent bodies to withdraw from it.

But this Bill does not enable the Medical Council to insist upon the establishment either of conjoint boards or of any scheme of qualifying examination, otherwise than by the action of the separate bodies controlled by its examination-rules in the sister kingdoms, so that except in so far as, through the operation of those rules, the Medical Council can raise the minimum standard of the several authorities of Scotland and Ireland, it cannot secure that uniformity of primary qualification on which the English authorities have agreed.

As your Committee are satisfied that any such *modus operandi* would be ineffectual for its avowed object of securing "that the double qualification may be granted on the like terms in all cases," and that the clause which sanctions it would give to the Medical Council a very undesirable power of interference with the independent action of the medical authorities, they are strongly of opinion that the only feasible means of securing such uniformity is to confer upon the Medical Council the power of *enforcing* (with the sanction of the Privy Council) the institution of a single scheme of qualifying examination in each of the three kingdoms, which shall be essentially the same for all.

In the opinion of your Committee, the Medical Council, accepting as its basis the scheme already worked out by the voluntary association of the medical bodies of England, referring back to the Conjoint Board any points which it could suggest for amendment, and finally settling that scheme under the sufficient powers it at present possesses, should be empowered to say to the medical bodies of Scotland and Ireland respectively:—"We desire you to unite yourselves, under such conditions as you may agree on, into a conjoint board, which shall frame a scheme of education and examination equivalent to that which we have already sanctioned for England. If you do not submit to us such a scheme by certain date, we shall ourselves institute an examination for the qualifying certificate; and the possession of this certificate shall constitute the only examinational title for admission to the Medical Register." It seems probable that, rather than resign into the hands of the Medical Council the power of granting such qualifying certificate, the medical authorities of Scotland and Ireland would find it possible to co-operate as harmoniously as those of England have done in framing conjoint schemes for their respective kingdoms.

Further, if such conjoint boards be voluntarily formed, a power of voluntary withdrawal shall be given to each constituent authority; but such withdrawal shall be equivalent to the dissolution of the board; and it should then be in the power of the Medical Council to institute a qualifying examination, which should take the place of that previously carried on by the board, the separate bodies not regaining their power of giving an independent title to registration. By such a provision there seems good reason to expect that the harmonious action of the constituent bodies would be promoted, if not secured.

Your Committee, therefore, while strongly objecting to those provisions of the Lord President's Bill which give to the Medical Council the power of framing examination-rules either for individual bodies or for conjoint schemes (as to which last they consider the existing powers adequate), not only concur in, but would greatly extend, the power given to the Medical Council in promoting such conjoint schemes, feeling assured that no amendment of the existing Act can have any other than a limited and imperfect action, which does not provide for the institution of a uniform system of examination and certification in the three kingdoms, such certification being based on the highest attainable minimum for the "double qualification."

To one other point only do your Committee feel it necessary to allude—namely, the admission of women to the medical profession. While fully agreeing with the principle already laid down by the Medical Council, adopted in the Russell Gurney Act, and sanctioned in the Bill of the Lord President, that no one of the medical bodies should be *required* to admit women within its pale, your Committee are strongly of opinion that to any general qualifying examination, whether instituted by a conjoint board of medical bodies, or by the General Medical Council, women should have a statutory claim for admission; and that such women as pass that examination should thereby gain a title to be placed on the Medical Register as qualified medical practitioners, without being admitted either as graduates of any university or as members of any medical corporation.

The report of the Finance Committee was then laid before the Council and adopted. The report shows that the income of the General and Branch Councils for the year 1877 has been £6035 9s. 8d., which is less than the income of the preceding year by £250 17s. 1d. The expenditure for the year 1877 has been £6684 19s. 3d., a sum exceeding the expenditure of the preceding year by £773 0s. 1d. It will, therefore, be evident that, while the income has been less, the expenditure has been greater than during the preceding year. Comparing the actual receipts with the actual expenditure, there remains a deficiency on the year of £649 9s. 7d.

Dr. Aquilla Smith moved the following amendments on Clause 13 of the Medical Act (1858) Amendment Bill:—"(1.) That all moneys held in trust by the Branch Councils for England, Scotland, and Ireland, and now invested in Government securities, be transferred to trustees to be appointed by the General Medical Council, and that, at the end of every financial year, the balance to the credit of the respective branch councils shall be paid to the trustees aforesaid; save and except that the Branch Council for England may retain, at the end of every year, a sum not exceeding £200, and the Councils for Scotland and Ireland a sum not exceeding £100 respectively, to enable them to pay salaries and other expenses before sufficient registration fees be received. (2.) That all moneys payable to the respective councils shall be paid to the treasurers *or registrars* of such councils respectively, and shall be applied to defray the expenses of carrying *the Medical Acts*, 1858 *to* 1878, into execution in manner following—that is to say, separate accounts shall be kept of *the receipts and* the expenses of the General Council, and of those of the branch councils. Returns shall be made by the treasurers of the respective branch councils, at such times as the General Council shall direct, of all moneys received by them. The expenses of the branch councils shall be defrayed, under the direction of those councils respectively, out of the moneys so received as aforesaid; and the expenses of the General Council, including those of keeping, printing, and publishing the *registers, and the preparing, printing, and publishing the British Pharmacopœia*, shall be defrayed, under the direction of the General Council, out of the fund held by the trustees. (*Note.*—The provision respecting the percentage rate has been omitted, and the words introduced in this amendment are in italics.)"

The motion was seconded by Sir Dominic Corrigan, and afterwards negatived by a large majority.

Dr. Andrew Wood moved—"That the report of the Committee on the Medical Act (1858) Amendment Bill be brought

up, and that the resolutions adopted by the Committee be adopted by the Council, and referred to the Executive Committee to be transmitted to the Government."

Carried unanimously.

Sir Dominic Corrigan moved—"That while the Council (as expressed in Resolution 7, on page 189 of vol. xiv. of the Minutes) cannot undertake the duty of prosecuting unqualified practitioners, they, nevertheless, think it their duty to draw the attention of the Local Government Board of England to a practice, which, it would appear, exists in England, of practitioners in charge of medical relief districts employing unqualified assistants to act for them in the treatment of medical and midwifery cases, tending to the detriment of the public and other evils; and they would suggest to the Local Government Board of England the consideration of the rule in Ireland, that no medical officer in charge of any dispensary district is permitted to have a substitute to perform his duties unless for a limited time, and unless such substitute is fully qualified to the satisfaction of the Dispensary Board, and with the sanction of the Local Government Board."

Dr. Aquilla Smith seconded the motion.

Mr. Simon entirely agreed with the spirit of the proposal. His only doubt was whether they ought not to point out to the Government the principle which ought to govern the case, namely, that no one should be allowed to act as a deputy for any medical officer unless he was possessed of the same professional qualifications as were required for the medical officer himself. ("Oh, oh!")

Sir Dominic Corrigan said that he would not go so far as that.

Mr. Simon said that he heard certain expressions of horror from the other side of the table; but he would ask, what was the meaning of having the law that the poor should be attended by a man possessed of certain qualifications, if that officer might appoint a deputy who had not those qualifications which he himself must possess? If such a thing were allowed, the law would be a sham.

Sir James Paget said that the principle which Mr. Simon had laid down would hinder the surgeon of a hospital from having a dresser to dress the wounds of his patients every morning. ("No, no.")

Mr. Teale thought that the Council ought to have more information before they could pass a resolution on the subject.

Sir Dominic Corrigan said that his motion was merely for the purpose of drawing the attention of the Local Government Board to the question.

Upon being submitted to the meeting, the motion was agreed to.

On the motion of Dr. Andrew Wood, it was resolved that the answers from the medical licensing bodies to a letter sent to them by the Executive Committee of the Medical Council, in regard to the preliminary education and examination of medical students, should be entered on the Minutes.

A few remaining matters which stood on the programme were remitted to the Executive Committee to be dealt with.

Upon the motion of Dr. Aquilla Smith, it was resolved —"That the powers and duties heretofore delegated to the Executive Committee be vested in the said Committee until the next meeting of the General Medical Council."

The proceedings of the session were terminated by the passing of votes of thanks to Dr. Andrew Wood, for his services as Chairman of the Business Committee; to Dr. Quain and Dr. Pitman, for their services as Treasurers; and, lastly, to Dr. Acland for his presidency of the Council.

Transfusion in Anæmia.—Prof. Bitot, of Bordeaux, relates (*Union Méd.*, April 9 and 16) eight cases of transfusion performed on four persons with success by an improved apparatus which he describes. He attaches great importance to endeavouring to prevent the shivering occurring after the operation (which he regards as a true febrile paroxysm) by the administration of quinine. He terminates his paper with these conclusions:—1. Transfusion may prove a sovereign remedy in cases of anæmia caused by hæmorrhages independent of cancer. 2. It may prove very useful in cases of physical degeneration caused by hyperæmia. 3. It is rather mischievous than useful in disorders of a cancerous nature. 4. It is very prudent to administer quinine to the patient two days prior to the operation.

ORIGINAL LECTURES.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

LOCALISATION OF CEREBRAL DISEASE.

Delivered at the Royal College of Physicians of London.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.

Lecture III.

II. *Irritative Lesions of the Motor Area.*

Hitherto I have directed your attention more particularly to destructive lesions of the motor area indicated by paralysis of voluntary motion, general or partial, theoretically separating them from irritative lesions indicated by unilateral convulsions or monospasms. Practically, however, they cannot be separated from each other by a hard and fast line; for many cases of limited destructive lesions are associated with unilateral convulsions or monospasms, and I have already referred to instances of this association. There are numerous cases, however, in which the predominant, and sometimes the only, feature has been a convulsive affection limited to a limb or combined in the way in which monoplegiæ are combined, or which, commencing in a constant and definite way, becomes generalised into a unilateral convulsion with or without loss of consciousness, or occasionally passes into bilateral convulsions. It is the great merit of Hughlings-Jackson to have first clearly indicated the pathology of these affections.

I have already alluded to some of the observations and generalisations which have been made by Bravais, Bright, Wilks, etc.; and I ought to mention here the very close approximation to regional localisation of the lesions most commonly causing convulsive affections of the opposite side at which Mr. Callender(a) arrived. Callender concluded that convulsions occurred more particularly with superficial lesions of the cortex in the neighbourhood of the middle meningeal artery—an approximation amply borne out by subsequent clinical and experimental research.

From the mere occurrence of a unilateral convulsion with loss of consciousness, or of an epileptic attack in which the convulsions are exhibited mainly on one side, we can form no opinion as to the nature or seat of the lesion. We may suppose, and with reason, that the opposite cerebral hemisphere is more particularly at fault; but there need be no discoverable lesion; and, should a lesion exist, it need not be in any definite position. This is in accordance both with clinical facts and also with those of experiment, for I have found that long-continued irritation applied to any part of the hemisphere other than the motor area may result in an attack of unilateral convulsions. If, however, the convulsion be of the character of a monospasm, or if, tending to become generalised, it begin invariably in the same way and do not cause loss of consciousness, and if it be followed by paresis or paralysis more or less permanent, we may diagnose an irritative lesion of the motor area of the opposite hemisphere.

The seat of the lesion may be approximately determined by the rules as to the localisation of destructive lesions, but only approximately, as the diagnosis of the seat of an irritative lesion is naturally more uncertain than that of a destructive lesion, owing to the difficulty of determining the extent of the zone or the special point in this zone in which vital irritation concentrates itself. Yet many cases are on record in which the phenomena of irritation have been such as to allow exact regional diagnosis in accordance with the principles of localisation of distinct centres.

The morbid anatomy of irritative lesions is various. They are all such as tend to induce irritability and hyperæmia of the cortical grey matter or subjacent medullary tracts: a condition which I have invariably observed in my own experiments. Magnan(b) has found the same condition of hyperæmia of the cortex in the epileptic convulsions induced by the introduction of absinthe into the system; and MM. Pitres and Franck(c) have shown that, in the partial or

(a) *St. Bartholomew's Hospital Reports*, 1867; *Medico-Chirurgical Transactions*, 1871.

(b) "Recherches sur les Centres Nerveux," 1876, page 101.

(c) Société de Biologie, meeting of December 29, 1877; *Le Progrès Médical*, January 5, 1878.

unilateral epileptiform attacks to which dogs are liable after injury to the cortex, the grey matter surrounding the cicatrix is so hyperæmie, tumefied, and irritable, that even mechanical stimulation, which normally has no effect, is sufficient to cause motor discharge.

The irritative lesion may, therefore, be an acute inflammation, or a condition of irritability set up by some chronic morbid product. Most frequently the lesion is some form of meningo-encephalitis; and of these syphilitic disease is by far the most common, so that now syphilitic epilepsy is sometimes spoken of as synonymous with "Jacksonian epilepsy." Tubercular affections, tumours or cysts situated superficially, cicatrices of old wounds, spicula of bone, etc., are all capable of producing irritation.

Hughlings-Jackson is of opinion that the lesion causes the centres to become charged to a state of high tension, so that, under certain vital conditions, they discharge themselves in a sudden and explosive manner, and become exhausted for the time being; hence the temporary epileptic or hemi- or monoplegia. This would account for the occurrence of intermittent effects with a constant lesion; for, according to the law of discharge formulated by G. H. Lewes,(d) stimulations which fall short of actual discharge of a nerve-centre increase the tension; hence, after a certain accumulation of stimuli, sudden discharge is readily induced.

Frequently the disease, which begins as an irritative lesion, tends to invade and destroy the region on which it grows, and leads to permanent paralysis with secondary degeneration; irritative phenomena being liable to occur so long as the vitality of the grey matter and subjacent medullary fibres has not been absolutely annihilated.

"Jacksonian epilepsy," in the early stages at least, has frequently the character of a monospasm, which may be brachial, facial, or crural, or these combined, as in the manner of monoplegiæ. When the monospasm tends to become generalised into unilateral convulsion, the spasms seem to march usually in a certain definite order. After facial monospasm, the arm next becomes affected, and then the leg. If it commence in the hand, it goes up the arm, then to the face, and next attacks the leg. If it begin in the leg, it next invades the arm, and then the face. This order is very rarely inverted. Usually, when the convulsions have become unilateral, consciousness is lost, if not before. When the convulsion becomes bilateral, as is sometimes the case, Hughlings-Jackson finds that the spasms march in the reverse order: *e.g.*, if it have passed from the leg to the face, it ascends the opposite leg, and so to the arm and face. I have not confirmed this in experiments on animals, for I have frequently seen the same order followed on the other side as on that on which the spasms began. It would be in accordance with the bilateral association of motor nuclei (which Dr. Broadbent has applied so successfully to the explanation of the comparative escape of bilaterally associated movements in cerebral disease), that bilaterally associated movements should have most tendency to be discharged together. This fact has been well brought out by MM. Franck and Pitres, for they have shown that bilateral convulsions may still occur from excessive irritation of one hemisphere even when the motor centres of the other have been extirpated.

And many clinical cases might be cited which do not harmonise with the views of Hughlings-Jackson as to the march of bilateral spasms.(e) It is not, however, my intention to discuss at length the pathology and symptomatology of irritative lesions—subjects which are well known to the profession in this country through the writings of Hughlings-Jackson, and abroad more particularly through the writings of M. Charcot. I will content myself with calling attention to one or two of the more accurately recorded cases of circumscribed lesions with irritative symptoms, in order to show how closely the situation of irritative lesions (notwithstanding all the elements of uncertainty pertaining to them, as compared with destructive lesions) may be determined from the symptoms manifested; and, as I have already intimated, I allude only to those in which irritation or spasm was the predominant or only symptom, and only to those verified by post-mortem examination, though I might justifiably cite others of the same kind, depending particularly on syphilis, which recover.

1. *Crural Monospasm or Protospasm.*—Of spasms limited to the leg, or invariably commencing in the leg, there are not many cases on record free from complication with paralysis, or in which the lesion remained circumscribed till death. I have already quoted two cases from Bourneville, in which crural monospasm complicated with paralysis was the chief symptom. A case is recorded by Broca(f) of crural monospasm cured by injury to the left side of the skull which was caused by trephining; but the exact position of the lesion I do not find recorded.

MM. Charcot and Pitres(g) quote a case from Griesinger of spasm of the leg frequently recurring, and also invading the arm, followed in the intervals by paralysis of the leg and arm. The lesion, however, was not strictly limited in this case. A hydatid cyst, 4 centimetres by 4·3 centimetres, was found on the surface of the opposite hemisphere, in such a position that its anterior border corresponded with a line drawn perpendicularly upwards from the external auditory meatus, *i.e.*, about the upper extremity of the fissure of Rolando. There were also several smaller cysts on the frontal and parietal surface of the hemisphere. If the spasm can be ascribed exclusively to the large cyst, then its position agrees with the motor centres of the leg.

Hughlings-Jackson(h) has described a case in which fits began almost invariably in the right leg, and were frequently limited to it. The leg began to become weak, and more so after each fit, the paresis deepening ultimately into a permanent paralysis. In the last stages signs of general affection of the left hemisphere—aphasia, etc.—manifested themselves. A tumour was found at the upper posterior part of the left frontal lobe, about two inches in diameter, bounded posteriorly by the fissure of Rolando, and extending forward into the posterior part of the first and second frontal convolutions.

Another case is given by Hughlings-Jackson(i) of convulsions beginning in the left great toe, often confined exclusively to the left leg, and followed ultimately by paresis of the left foot. This patient also had paralysis of the right third nerve. After death a syphilitic lesion was found "at the upper part of the posterior ascending or ascending parietal convolution, extending over part of the upper end of the ascending frontal, and over several of the adjacent convolutions of the parietal lobule" of the right hemisphere. On the right third nerve a tumour of the size of a pea was found. This case is in exact correspondence with the situation which I have assigned to the motor centres of the foot and leg.

2. *Brachial Monospasm or Protospasm.*—Of spasms limited to, or beginning in, the arm or hand, depending on localised cortical lesion, there are several cases on record. As a rule the fits begin in the fingers, and more especially in the thumb and index finger—in the most volitional movements of the upper extremity, according to Hughlings-Jackson; but this is not necessarily or invariably so. In the upper extremity, it must be remembered, there are several combinations of movements which have each a representative in the cortical motor area. These centres being all situated within a moderate compass, and all liable to be discharged by one irritative lesion, it is nevertheless possible that each may be the primary origin of the discharge, and so the mode in which the monospasm commences may vary accordingly. Hence the necessity of making minute investigation of the march of the spasm in any particular case.

Hughlings-Jackson has recorded several cases of brachial monospasm. I will only mention those in which the lesion of the cortex was single and limited. A man had frequent convulsions limited to the right arm, which subsequently became partially paralysed. A nodule was found situated at the hinder extremity of the first frontal convolution of the left hemisphere. In this case there was also a tumour in each lobe of the cerebellum, but there were no cerebellar symptoms. The march of the spasm was not recorded.(k)

In a second case of convulsions, nearly always limited to the right arm, and followed by temporary paralysis of that arm after each fit, the lesion, which was diagnosed by Hughlings-Jackson during life, was a nodule, situated at the "posterior extremity of the first frontal convolution where it joins the ascending frontal." In this case it was noted that the spasms always began in the shoulder and went *down* the arm, contrary to the usual order.(l) This is an important case, as showing that the spasm began in muscles which, as

(d) "Physical Basis of Mind," page 290.

(e) See Gowers' "Cases of Convulsion from Organic Brain Disease" (*British Medical Journal*, September 26, 1874); "Case of Intracranial Tumour," by Bramwell (*British Medical Journal*, September 1, 1877).

(f) Société de Chirurgie, meeting of December 16, 1866.

(g) *Op. cit.* (h) *Medical Times and Gazette*, September 4, 1875.

(i) *Ibid.*, September 18, 1876. (k) *Medical Mirror*, September 1, 1869.

(l) *Medical Times and Gazette*, June 5, 1875.

the experiments on monkeys indicate, relate to the movements of the arm as a whole, and not to those of the fingers or wrist.

In a third case,(m) convulsions invariably began in the left thumb. After death, a tumour of the size of a hazel-nut was found under the grey matter at the posterior extremity of the third frontal convolution of the right hemisphere. Some granulations existed in the bed from which it was enucleated, or in the grey matter near it.

In a fourth case, the spasms began in the right hand, and occasionally in the right cheek. Before death, left hemiplegia came on, which, however, soon passed off. Disease was found in both cerebral hemispheres, probably syphilitic. In the left hemisphere, *i.e.*, the side opposite the spasms, adhesion was found between the dura mater and the brain in a region including "the lower part of the ascending frontal and ascending parietal convolutions, to a trifling extent to the hinder part of the third frontal, and several of the convolutions of the upper wall of the fissure of Sylvius behind the ascending parietal." In the right hemisphere—the side opposite the paralysis—"on the surface, behind the fissure of Rolando, was a mass about the size of a chesnut. The dura mater was firmly adherent to it. There was very little softening about it.(n)

In a fifth,(o) temporary right hemiplegia came on after a unilateral convulsion in which the patient did not lose consciousness. Convulsions occurred from time to time, beginning in the little finger of the right hand, occasionally in the right cheek, and followed always by slow and hesitating speech. After death, a syphilitic tumour of considerable size —as large as three small walnuts—was found growing into the cortex about the junction of the frontal and parietal lobes, surrounded by an area of softening in the posterior part of the frontals, ascending frontal and ascending parietal, and partly of the island of Reil. The sphenoidal lobe was also softened. This case, though of interest, is rather a complex one, and should, perhaps, scarcely be quoted as a limited lesion.

Dr. Dreschfeld(p) has recorded a very interesting case of brachial monospasm depending on syphilitic disease, the nature and position of which he accurately diagnosed during life. The patient suffered from repeated attacks of convulsion limited to the left arm, of which the phenomena were "sudden clenching of the fist, flexing of the wrist, and pronation of the forearm of the left side, the left angle of the mouth being at the same time strongly drawn downwards. This sudden tonic spasm lasted for several seconds, and was then followed by a few clonic spasms of the same extremity and a slight tremor of the arm; the patient at the same time was very agitated and looked very pale, but remained perfectly conscious. He stated that these paroxysms had always had the same character, varying only in degree." Death occurred from phthisis two years after the first onset of the disease. On post-mortem examination, the dura mater was found adherent to the brain on the right side, over a space including the greater part of the ascending parietal convolution and the supramarginal lobule.

To these cases, in which irritative symptoms chiefly predominated, I may add one or two others, which may be considered as belonging equally to irritative and destructive lesions. The cases are reported in full by MM. Charcot and Pitres.(q) A case is recorded by Lepine, of left hemiplegia, followed by convulsions, limited chiefly to the left arm. A small hæmorrhage, of the size of a nut, was found at the "posterior extremity of the first frontal convolution of the right hemisphere." In another, by the same observer, of left hemiplegia, convulsions occurred, either limited to the left arm, or invariably commencing there. A yellow patch was found at the base of the first and second convolutions of the right hemisphere. A third case is given by Mahot,(r) of monoplegia and monospasm of the right arm. A glioma of the size of a pigeon's egg was found on the middle third of the ascending frontal convolution of the left hemisphere. In a fourth, recorded by Henrot, convulsions began in the fingers of the left hand, and were repeated at intervals, followed by left hemiparesis. A mass of tubercle was found embedded in the grey matter of the ascending frontal convolution of the right hemisphere, about the middle third. In this case, however, there was also a small tubercular mass on the right side of the pons.

(m) *Medical Times and Gazette*, November 30, 1872.
(n) *Ibid.*, December 28, 1872. (o) *Ibid.*, March 1, 1873.
(p) *Lancet*, February 24, 1877. (q) *Op. cit.*, page 365.
(r) Société Anatomique, December 15, 1876.

It will be seen from these cases that the situation of the lesion causing brachial monospasm is not an accurately circumscribed one; and yet there is a greater agreement among them, when viewed in the light of experimental localisation of the brachial and manual centres, than may at first appear. As has already been said, there are several centres, each for a distinct movement. In four of these cases, in which the spasms were said simply to be in the arm, and in one of them in which it was noted that the spasms began in the proximal movements of the arm, the lesion was situated at the hinder extremity of the first frontal convolution—a position which corresponds with the localisation of the centres of such movements in this region.

In some cases there was no exact description of the march of the spasm; but in those in which it was more especially noted that the spasms began in the fingers or hand, the lesion was either in, or in close proximity to, the ascending parietal convolution, in which, in the monkey, these movements are especially centralised. Of these, Dreschfeld's case is the most striking, both as regards the precise character of the movements and the limited extent of the lesion—so precise as to have allowed of exact diagnosis, which was verified to the letter post-mortem.

3. *Facial Monospasm or Protospasm.*—Though partial epileptiform convulsions beginning in the face are not uncommon as symptoms, and not unfrequently alternate with convulsions beginning in the hand, yet there are very few cases on record of facial monospasm uncomplicated with brachial monospasm or other convulsive or paralytic symptoms, in which the position of the lesion has been verified by post-mortem examination.

The cases of Hitzig and Wernher, already quoted, in which oral and facial monoplegia and facial monospasm alternated, are about the best examples of this on record. The lesion—the principal, at least—in these cases was the same in position, viz., the lower extremity of the ascending frontal.

A very interesting case, illustrating another fact of experimental localisation, has been recorded by Dr. Bramwell.(s) A woman, who had received a cranial injury some years previously, began to have right-sided convulsions, and numbness in the thumb and forefinger, followed by paralysis of the right arm and leg. She remained subject to frequently repeated convulsions, which always began in the right platysma, and frequently were almost entirely confined to this muscle. On post-mortem examination, a spiculum of bone was found projecting from the inner table of the skull, and causing a very limited lesion of the inferior margin of the ascending parietal convolution. A reference to the figure of the brain of the monkey will show that at the lower extremity of this convolution, and just posterior to the oral and lingual centres, there is an area marked off, irritation of which specially causes action of this muscle. Bramwell's case receives its explanation from this fact; and in Dreschfeld's case, in which spasm of the platysma was also a special feature, the lesion affected this point. Clinical and physiological experiment are here again in harmony.

(s) *British Medical Journal*, August 28, 1875.

Ointment in Gonorrhœal Orchitis.—Dr. Alvaréz recommends the following pomade:—Finely powdered iodoform, one to two parts; lard, thirty parts. In the course of an hour or two, he says, the pain is relieved. It has also the advantage over the mercurial ointment of not affecting the gums. By its well-known resolvent action the iodoform diminishes the duration of the orchitis, and prevents subsequent induration of the affected organ. It must be used more or less strong, according to the degree of inflammation of the epididymis existing.—*Union Méd.*, April 16.

Marino's Antineuralgic Injection.—Ergotine, one-fourth to one-fifth of a gramme; water or glycerine, q. s. Dissolve for a hypodermic injection. It is employed in neuralgic pains, and induces a more or less intense burning sensation, which disappears in the course of half an hour if the puncture be covered by cold wet compresses. Usually it induces neither abscess nor erysipelas. One or at most two injections relieve the pains, but, in order to prevent relapses, from two to six others may be given, according to the intensity and duration of the neuralgia. In tic-douloureux these injections have proved very useful, while in sciatica they have often failed.—*Union Méd.*, April 18.

ORIGINAL COMMUNICATIONS.

THE PREVALENCE AND SEVERITY OF

VENEREAL DISEASES AMONG MERCHANT SEAMEN, BRITISH AND FOREIGN;

AND THE EXTENSION OF THE CONTAGIOUS DISEASES ACTS TO LIVERPOOL AND OTHER SEAPORTS.

By FRED. W. LOWNDES, M.R.C.S. Eng.,
Surgeon to the Liverpool Lock Hospital.

THOSE members of our profession who reside in large seaports, and are familiar with merchant seamen and their ways, will scarcely require a large array of facts and figures to convince them of the prevalence and severity of venereal diseases among these men. Situated as they are, it would be indeed contrary to all human experience were it otherwise. A very considerable proportion of our mercantile seamen are practically as much prevented from marrying as their brethren of the navy—marines or soldiers. They arrive in this and other seaports after a voyage more or less long, sometimes extending over several months, during which they have been in a state of enforced temperance and continence. Various circumstances, among which may be enumerated social indifference and apathy; the deficiencies of our licensing laws; above all, the want of greater control over prostitution and its attendant evils—these have all combined to surround our "sailors' homes" and seamen's boarding-houses with a mass of vice, filth, drunkenness, and disease that will only be fully revealed to our legislators when made the subject of a Government inquiry, which I venture to predict cannot be very long delayed. Though the facts I propose to give in these papers will be readily confirmed by those who have similar opportunities of observation, they will be new and startling to many readers of the *Medical Times and Gazette*, who, from want of similar opportunities, are unaware of the vast amount of misery and suffering caused by these preventable diseases, both among merchant seamen and the unfortunate women from whom they contract them. These latter comprise in our large seaports a numerous and most degraded class, to whom the words of the late Mr. Acton will aptly apply:—"Who are these painted, dressy women, flaunting along the streets, and boldly accosting the passers-by? Who those miserable creatures, ill-fed, ill-clothed, uncared for, from whose misery the eye recoils, cowering under dark arches and among bye-lanes?" Mr. Acton proceeds:—"The picture has many sides; with all of them society is more or less acquainted. Why is the State—that alone can remedy a condition of things that all deplore—alone to refuse recognition? The voluntary system has been tried long enough with its affected ignorance and empty parade of hospitals, penitentiaries, and asylums. Individual efforts are powerless to effect either the cure of disease or the reformation of the prostitute. The nation's weakness can be assisted only by the nation's strength; and I propose to show that concentrated effort, sanctioned by authority, can alone stay the ravages of a contagious and deadly disorder, and that only by methodical and combined action, and by gradual and almost imperceptible stages, can any moral cure be effected."(a)

I will first proceed to show that venereal diseases are very prevalent and severe among merchant seamen.

We have both negative and positive evidence—negative by comparison with the navy, the seamen of which are under close medical observation. Before the Contagious Diseases Acts were in force, the ratio of syphilis (primary and secondary combined) was, in 1861, 100·4; in 1862, 108·6; and in 1863, 104·2 per 1000 respectively. Since then the ratio has fallen to 48·6 in 1874, and to 45·8 in 1875.(b) These returns are for the Home Station, and prove, not only the benefits of these Acts to the seamen of the navy, but give us some idea of the amount of disease which must have existed among the prostitutes frequented by naval seamen in those ports where men-of-war are for the most part stationed. These are chiefly Portsmouth, Plymouth, Sheerness, and Devonport; also Dartmouth and Southampton in a less degree. In the "Report of the Health of the Navy for 1859," Dr. Bryson says—"Portsmouth and Plymouth still maintain an unenviable notoriety for containing a population amongst whom venereal complaints exist to an extent unknown in almost any other town, whether in this country or abroad. In the course of eight months seventy-three cases of syphilis and forty-eight of gonorrhœa were placed on the sick-list of the *James Watt*, nearly all contracted at Plymouth and Devonport." Similar statements are made as to other ships stationed at these ports, especially the *Royal Albert*, *Brunswick*, and *Cæsar*. In 1860 Dr. Bryson says—"There can be no mistake in ascribing three-fourths of the total number of cases to the infected communities of Portsmouth, Devonport, and Sheerness." In 1861 he says—"Compared with the preceding year there is a large increase in the ratio of venereal complaints; and though no death occurred under this head, eighteen men were discharged invalided as unfit for further service. Syphilis, as heretofore, appears to have prevailed with great virulence both at Plymouth and Portsmouth. In fact, considering the number of men infected at the former place, it becomes a question whether it were not conferring a boon on the naval service to prevent the crews of all seagoing ships from landing at Plymouth, where not only venereal but other contagious diseases exist to an extent unheard of in any other part of the world." Also—"In the *Donegal* there were 272 cases, of which two-thirds at least were contracted at Devonport and Plymouth." Again, in 1862 it is said—"In the *Edgar*, in a period of about six months, there were 120 cases of syphilis and sixteen of gonorrhœa. The whole of this venereal disease was contracted at Portsmouth, and it occasioned a very considerable loss of service. About fifty cases of syphilis were discharged to hospital. On leaving Portsmouth, after completing the fitting-out of the ship, a general inspection of the ship's company was made, when forty-four men were found to be suffering from venereal disease." An estimate was subsequently made as to the cost of these diseases to the country, and it was calculated that, taking into consideration original and consecutive diseases, it could not be placed at a smaller sum than £50,000 for the naval service alone in the year 1862.

Now, it cannot be contended that merchant seamen are more moral than their naval brethren; nor are we justified in assuming that the prostitutes in Liverpool, Hull, Bristol, and Cardiff are of a higher grade, or less free from disease than were those in Portsmouth, Plymouth, and Devonport when the above Reports were published. It is, indeed, too much to be feared that if there is any difference at all, it is against, rather than in favour of, the merchant seamen and the common women whom they frequent. The former include a large number of foreigners and men of our own country, of too degraded a class ever to be permitted on board our war-ships; while to describe the latter would be to repeat with but little alteration the description given in the Reports of the Select Committee of the House of Commons (1869) and of the Royal Commission (1870), of the horrible condition of the women in the naval ports already mentioned. In a former paper published in the *Medical Times and Gazette*, November 20, 1875, page 569, I have attempted to give some description of the poor creatures who surround the Sailors' Home and frequent other parts of this town; and in a pamphlet noticed in the *Medical Times and Gazette*, August 5, 1876, page 154,(c) I have given more complete details. It is enough to state here that there are upwards of 1200 prostitutes known to the local police, and that the great majority are of the lowest and most degraded class. In Hull there are, according to the last report of the head constable, 606 prostitutes within that borough, of whom 447 are returned as kept in 220 "disorderly houses and frequented by the lower orders." In Cardiff the number of prostitutes is about 200, and the majority are of the most degraded class. I have been unable to procure any reliable information from Bristol, but it is well known that the number of prostitutes is proportionately as great as at the other seaports I have named, and the condition of those who are frequented by seamen on a par with the same class in this town, Hull, and Cardiff. Among such, disease must largely prevail; and assuming that venereal disease is at least as rife amongst the prostitutes in these ports as it was among those in

(a) "Prostitution," second edition, pages 8 and 9.
(b) "Statistical Report of the Health of the Navy."

(c) "The Extension of the Contagious Diseases Acts to Liverpool and other Seaports Practically Considered," pages 81 to 84.

Devonport, Portsmouth, Dartmouth, etc., when the Contagious Diseases Acts were first enforced, we shall be quite within the mark by taking one-third of the whole number as diseased, or 33 per cent. We have thus abundant negative evidence of the prevalence of venereal disease among merchant seamen. Thirteen years ago the Medical Committee appointed by the Government, with the late Mr. Skey as chairman, thus alluded to the subject:—

"The Committee would at the present moment, when the attention of Parliament is drawn to the subject of better legislation for the mercantile marine, respectfully call attention to the concluding passage in their report."—Page iii.

"They cannot ignore the existence of a fertile source of disease in the seaport towns, which the Contagious Diseases' Prevention Act, even as proposed to be amended, would still leave untouched, viz., that which is introduced by sailors of the merchant service of our own and other nations. These men, it is well known, are frequently diseased, and often remain for a long period without any kind of treatment. This involves so many important considerations that the Committee only venture to call serious attention to the subject."—Page xxxiv.

But a few positive facts are of more value than any number of negative deductions, and though in the case of merchant seamen returns of disease are less easily procured than is the case with naval seamen, still enough can be ascertained to prove the truth of the above extract. The majority of patients in the male wards of the Liverpool Lock Hospital are, as might be expected, merchant seamen, the proportion being twenty out of twenty-five, or 80 per cent. Hence I am in a position to give some reliable information so far as this town is concerned. But besides this, I have, as Local Honorary Secretary to the Association for Promoting the Extension of the Contagious Diseases Acts, taken pains to procure authoritative information from colonial and foreign seaports, which has been most readily and kindly furnished, and will be of great interest to readers of the *Medical Times and Gazette*. This I propose to give first; then some particulars respecting this and a few other seaports; and, in conclusion, to show how only can these diseases be diminished in their prevalence and mitigated in their severity.

Mr. Merlin, H.B.M. Consul at the Piræus, writes:—"It would save H.M.'s Consuls much trouble and the Government a good deal of money if shipowners insisted on the sailors they engage being examined before signing articles. A number of men are now engaged in England suffering from syphilis, who fall sick as soon as the vessel is at sea, and have to be discharged at the first port, where they are nursed and cured at Government expense, and then frequently sent home as distressed seamen. No shipping-office should be allowed to engage sailors who had not been examined by a competent surgeon."

Dr. S. A. Pisani, Senior Surgeon, Central Civil Hospital, Malta, writes:—"Fresh importations of the disease (syphilis) are operated by sailors making this island from all quarters of the world. British seamen are sent to the hospital as soon as they arrive here, but often they refuse to submit to treatment, and insist on being discharged. They are accordingly discharged at request unfit for work, even greatly diseased. I fear that they find their way to England."

The following extract from a letter I received from Dr. John Patterson, Chief Surgeon and Superintendent, British Seamen's Hospital, Constantinople, will be read with interest at the present time, when this last-named city is the object of so much attention from belligerent parties:—"With regard to the unseaworthy condition of many of our mercantile seamen from syphilitic and venereal diseases, I have already officially, four years since, brought it to the notice of her Majesty's Foreign Office. The difficulties attending any enforced legislative measures obviously must be great, and difficult to carry out in practice. That, however, is no reason why something should not be attempted towards mitigating, even if it cannot entirely prevent, the yearly increasing evil—for that it is increasing, no one, I apprehend, with opportunities of observing, will deny. An examination of seamen at the time of shipping would seem to be, at first view, a tolerably easy way of doing something practical towards this end, but I find, from conversations with many intelligent ship-masters, that under present regulations it is next to impossible, and that the recommendation is practically a dead-letter. The reasons they give are, doubtless, well known to you.

"That syphilitic and venereal diseases are communicated to innocent persons on board of ships cannot be doubted, and if we consider the state in which seamen ship, and the close communication they must have, with the very imperfect hygienic condition of the majority of the vessels, the only wonder would be were it otherwise. My practice here presents many opportunities of observation on this point. One in point: I visited a small screw-steamer a short time since, at the request of the captain, to examine his crew. I found the steward with two large suppurating buboes of six weeks' standing. The condition of the wounds and the dressings was perfectly filthy and stinking. The cook was covered with secondary syphilitic eruptions and had ulcerated throat. Two men had large syphilitic ulcerations, one with gonorrhœa. Now, every man was as dirty as well could be; all had shipped with the disease on them, and carefully concealed their state from the captain. Of course they performed their duties imperfectly, and the others of the crew, as a consequence, were overworked. This is only one of numerous instances of a similar character. Men are daily admitted into hospital suffering from various forms of syphilis, most frequently chronic, and in such a state of disease and dirt that anything communicable must be communicated.

"With regard to Constantinople in its relation to seamen, the lower parts of Galata are crowded with brothels of the most infamous character, inhabited by Jewesses and others from Odessa, Galatz, and the principalities, who practise their trade amongst the sailors of every nation. As a rule, they (the women) are of the lowest class of prostitutes; the one virtue they possess is that they seldom drink. These women are much diseased. . . . The youngest boys come under my notice suffering from gonorrhœa. Within the last few days I saw a boy of thirteen with a very acute gonorrhœa. . . . I do not think there is any Contagious Diseases Act in existence at Constantinople. The Municipality is charged with the execution of matters relating to health in the city. It possesses excellent regulations on paper, which in practice are seldom enforced. . . . . There is no special hospital accommodation for diseased prostitutes in Constantinople."

In conclusion Dr. Patterson says:—"In all that relates to the physical and moral welfare of the seaman I take a deep and permanent interest, and this becomes a duty from my official position as chief of the Hospital for the British Seamen at Constantinople. I am therefore glad to find that the action you advocate for the extension of the Act to Liverpool on more general principles will apply in a direct manner to the British sailor, who has quite as much need of legislative protection against disease as other classes of the community. Your pamphlet shows too clearly the necessity of the measures you advocate in Liverpool; and I cannot but wonder that you do not receive the support of the influential shipowners and captains, who so loudly complain of the deteriorated condition of the men they have to employ."

(*To be continued.*)

NOTE ON

A CASE OF CHOREA IN AN AGED PERSON, FOLLOWED BY RECOVERY.

By JAMES RUSSELL, M.D., F.R.C.P.

THE lecture by Prof. Charcot, on "Chorea in Old People," published in this journal of March 9, recalls to my remembrance a case of the disease which I saw last year in consultation with my friend Dr. Norris. A brief notice of the case will be worth preserving. I paid only a single visit, but Dr. Norris has been kind enough to refresh my memory with the following particulars. The patient, a lady, was seventy-seven years of age; she had never had chorea before, nor had she suffered from rheumatism. The sole noteworthy particular in her history was that she had occasional momentary attacks of unconsciousness, none of which, however, were witnessed by Dr. Norris. The sounds of her heart, examined by each of us, were normal. M. Charcot observes that the greater number of old people suffering from chorea whom he had seen "appeared to be in a state of more or less

decided dementia." My present case presented a marked difference in this particular. Dr. Norris describes the patient as being rather nervous and irritable, but her mental condition appeared satisfactory, though, from her being deaf, it was difficult to sustain a lengthened conversation with her. The attack of chorea was a severe one; its characters were those of typical chorea. The movements, which were considerable, were manifested chiefly on the left side (M. Charcot, I observe, notices one case of hemichorea), but the characteristic state of incoördination affected each side. The tongue was especially implicated, so that a troublesome sore resulted from friction of the organ against the teeth; and there was difficulty in swallowing. Dr. Norris knows little of the family history, excepting that two daughters appear highly nervous and impressionable. In one other particular, besides that noted above, my case seems exceptional. M. Charcot observes that though the prognosis is not usually a serious one, so far as life is concerned (though he mentions two cases of death with high temperature), he has "never seen recorded a single case of cure"; "the disease is essentially chronic." Dr. Norris first saw the patient on January 24, 1877: she had then been ill, under another practitioner, for a short time; my visit occurred on February 23, and the abnormal movements ceased three weeks after that visit, under the administration of sulphate of zinc. Dr. Norris's attendance, however, did not end until June 21, but the patient has been quite free from the complaint ever since, and is so still.

REPORTS OF HOSPITAL PRACTICE
IN
MEDICINE AND SURGERY.

GUY'S HOSPITAL.

CASES UNDER MR. BRYANT.

Case 1.—Ovarian Tumour—Incision into Cyst—Cured.

[Reported by Mr. J. T. J. Morrison.]

Amelia R., aged twenty, of dark complexion, slight build, and in a delicate state of health, was admitted into Lydia ward on June 8, 1877, under Mr. Bryant's care, her abdomen being enlarged to an extent equal to the seventh month of pregnancy, and its circumference thirty-five inches and a quarter. There was distinct fluctuation through the swelling, and dulness on percussion. Dr. Galabin saw the patient, and concurred in the opinion that the case was one of ovarian cyst, and not unfavourable for operation. The patient's family history was good; she was unmarried, but had had one child, now six months old; the labour had been easy and natural. Eight months before admission she first noticed a swelling in the right side of abdomen, independently of the general enlargement of pregnancy (seventh month), the swelling being associated with much pain in the right inguinal region and extending down the front of the thigh to the knee. The swelling continued to increase, so that at her confinement it was as large as a good-sized cocoanut, and since delivery the rate of increase was much greater. There had been no secretion of milk in the breast, and she had been obliged to bring up the child by means of a bottle. There had been no appearance of catamenia since her confinement. Her health became considerably impaired, and she lost flesh. When admitted she was ordered tinct. ferri. perchlor. gtt. xv., quiniæ sulph. gr. ij., acid. sulph. dil. gtt. iij., aquæ ℥j., t.d.s.

June 30.—Chloroform was given, and an incision about three inches long in the middle line immediately below the umbilicus was made through the superficial structures until the cyst-wall was reached. There was an increased vascularity of the tissues noticed, and the cyst-wall was firmly adherent to the abdominal parietes, so that it was impracticable to separate it entirely, and therefore an incision was made into the cyst, and its contents evacuated. Some quarts of a viscid straw-coloured liquid escaped, and a number of masses of flaky lymph. The cyst was then washed out with iodine lotion, its cavity dried with sponges, and its edges secured to the skin by several silk sutures on each side, the ends of which were left outside to allow of the edges of the wound being drawn apart. A drainage-tube was introduced. In the course of the operation several vessels were twisted. The wound was dressed with carbolic gauze after the operation, and a morphia suppository introduced. 9 p.m.: Temperature 98·4°. She complained of pain occasionally. Catheter was introduced.

July 1.—12.30 a.m.: Catheter was passed, and another suppository introduced. There was some discharge of blood-serum; it had come through the dressing. The old dressing was not disturbed, but a fresh piece of gauze was applied. The cyst was ordered to be washed out daily with iodine water through the indiarubber drainage-tube which had been introduced. 6.30 a.m.: She had been sick, vomiting about half a pint of fluid milk; she had no sleep: a suppository was introduced. 11 a.m.: Catheter passed; she had been troubled with vomiting at intervals. Ordered acid. hydrocyanic. dil. gtt. iij., liq. morph. hydrochlor. gtt. viij., aquæ ℥ss., 4tis hor. sum. 3 p.m: Still some sickness. Ice alone ordered.

2nd.—She had not been sick since 9 p.m.

3rd.—She was able to take light solid food.

7th.—There had been no action of the bowels since the operation. She had an enema, and felt much relieved by it.

11th.—The cyst was rapidly contracting, and no longer reached into the pelvis. It was washed out daily with iodine lotion.

August 5.—The patient had been improving, and was well enough to get up for a short time. The cavity was closing up well, and there was not much discharge. The circumference of abdomen was twenty-eight inches.

16th.—She had been eating fruit, and was sick and suffered from pain in the stomach, but was afterwards relieved.

18th.—The silk sutures left in the edges of the wound since the operation were removed. The cavity was much smaller.

25th.—The patient's condition was very satisfactory. The cavity held barely an ounce of iodine lotion.

September 8.—The cyst had closed up level with the surface of the abdominal wall, and the wound had healed. The patient had a far more robust appearance than upon admission, and her health seemed re-established. Three days later she left the hospital cured.

Case 2.—Fæcal Umbilical Fistula—Ulceration of Cæcum—Peritonitis—Death.

[Reported by Mr. H. Hine.]

George C., a not very healthy-looking boy, aged thirteen, was admitted into Job ward on September 17, 1877, with aching pains in his sides; worse at night. He also had a sore at umbilicus, which discharged and was painful; since admission fæcal matter had passed through it. The boy had been delicate ever since an attack of scarlet fever, which he had when three years old. He scalded his legs two years before admission, and seemed to have been ill and wasting since that time. He was able to get about, but had occasional sickness. His bowels had been always very loose. He attended at Guy's Hospital for the pain in his sides, and complained at the same time of a pain in his stomach. About three weeks before admission this became very severe suddenly, and a week after his navel began to swell. It became of a purple colour, and in a few days burst, discharging a quantity of matter. It continued to discharge, and all the time there was a fæcal odour.

October 5.—The wound had continued to discharge. He had been all day trying to pass motions. At 4.30 p.m. the child was lying in a collapsed condition, pulse being scarcely perceptible and surface of body cold. His abdomen was much distended. He was taken suddenly ill with intense pain in his abdomen and vomiting in the morning. He had previously been about the ward tolerably comfortable. He died in the evening.

Post-mortem, the cæcum was found to have ulcerated away, and the ulceration extended along the walls of abdomen and discharged at navel.

Poor-Law Medical Officers' Association.—The annual general meeting of this Association will be held at the Freemasons' Tavern, Great Queen-street, Lincoln's-inn-fields, on Tuesday, May 7, at 3 p.m., when several matters of interest to the members of the Poor-Law Medical Service will be discussed.

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Medical Times and Gazette.

SATURDAY, APRIL 27, 1878.

THE GENERAL MEDICAL COUNCIL.

The special business for which the Medical Council had been called together so early this year—viz., the consideration of the Medical Act (1858) Amendment Bill—was concluded on Wednesday, the 17th, and the session, as we last week informed our readers would be the case, was brought to a close. But little business was taken in hand besides the examination and criticism of the Bill, but that was thoroughly done, and, on the whole, in a manner highly creditable to the Council. The speaking generally was good, sometimes very good, and unusually little time was spent in talking about, instead of really discussing, the many questions before the Council, and it must be fully admitted that the seven days of the session were well and worthily spent.

We last week stated that a great deal of time had been consumed on Monday, the fifth day of the session, by the consideration of Section 5 of the Bill—that providing for the registration of colonial practitioners with recognised diplomas. Unfortunately, the draughtsman of the Bill had, apparently, had Lord Ripon's Bill before him when he drew this section of the present Bill, instead of the resolution of the Medical Council on the subject last year. Lord Ripon's Bill required, among other conditions, that the holder of a colonial diploma should have practised for ten years in a colony before he could be registered in the United Kingdom, while the Council had last year decided to dispense with that requirement, and had resolved, "That medical qualifications granted under legal authority in any part of her Majesty's dominions outside the United Kingdom, and entitling to practise in such part, should be registrable within the United Kingdom on the same terms as qualifications which are granted within the United Kingdom, but in a separate, alphabetically-arranged section of the Register." The question was the degree and manner in which the section of the Bill under consideration should be altered in conformity with that resolution. Many amendments were proposed embodying different "measures of wide and liberal legislation, instead of illusory restrictions"; but in the end the section was amended in the way we reported last week, the "conditions" required from a colonial practitioner being *bonâ fide* residence in a British possession outside the United Kingdom, evidence of good character, and the possession of a recognised diploma or diplomas granted in a British possession. The following sections up to Section 13 were "in substance approved," and Section 13 amended in the way we noted last week.

On Tuesday, the sixth day of the session, after the consideration of Section 24 of the Bill (the results of which will be spoken of further on), the Council agreed that all the "miscellaneous" clauses, viz., clauses 25 to 34, both inclusive, "be in substance approved"; and then went back to Clause or Section 22—the section relating to unregistered persons. Some discussion ensued as to the real meaning of parts of the section: for instance, as to whether a licentiate of a foreign university, being in this country, but not registered in England, could, under this section, assume the title of "doctor," without rendering himself liable to a penalty; and it was resolved that the attention of the draughtsman be called to the first, the third, and the fifth paragraphs of the section, and that the other paragraphs be in substance approved.

On Wednesday, the seventh and last day, on going again into committee of the whole Council on the Bill, the Council went back to Section 14—the examination-rules section—with the object of especially considering the sections referring to female practitioners. Some discussion took place as to the meaning and effect of the provisions of the Act with regard to women. Sir James Paget pointed out that, to common apprehension, the Bill, if passed, would place women in a worse position than they now occupy. At present they can be admitted to the Register by examination by any one of the authorities; but by the new Bill every person who desires to be placed on the Register must have a double qualification; and women would therefore need to be examined by both a medical and a surgical authority, and at present no surgical authority in the kingdom has expressed its willingness to examine women. But doubts were expressed as to whether this was a correct interpretation of the Bill, till Mr. Simon wisely observed that the Council were resolving themselves into a committee of attorneys, and going into minute legal criticisms which they were not competent to conduct to a successful issue. He had had a great deal to do with this question, he said, and he could see that there was pitfall within pitfall; and he suggested that the discussion should be taken irrespectively of the words, but proceed on the principles of the question. "What was right as regarded the admission of women to the profession? Should it be permissive or compulsory; and, in either case, under what conditions? Should the permission be given to admit women on the same terms as men, and only on those terms, or with what difference? Those were the questions to be considered." The Council then resolved that Clause 4 of Section 14 should stand thus: "That the examination-rules shall provide for the admission of women to the examinations"; and to this they added the words, "with such distinctions as may be judged necessary between the cases of men and women." Dr. Rolleston hoped that the Council "would exercise the very important function of saying what those distinctions were, instead of leaving it to the framers of the Conjoint Scheme, or to each examining body, to do so"; but the general feeling was in favour of leaving the distinctions to be made to the good judgment of those who had to conduct the examinations. Dr. Humphry wished to leave the matter entirely open, and say nothing

about distinctions; but Mr. Simon pointed out that the examination-rules had, in fact, to be approved by the Minister who for the time being might be in office, and that Minister might happen to have especial views of his own on the subject of the examination of women. He might, for instance, if the Council recommended distinctions to be made between the two sexes, refuse to do so, saying, "I see nothing in the Bill to authorise me to sanction any distinction." Paragraph (*a*) of Clause 4 was then altered, in order to get rid of the word "obligation" from the original paragraph, and was made to run as follows:—"No medical authority who at the passing of this Act has not granted a medical diploma to women, shall be compelled to admit a woman to examination for a qualification granted by that authority." Sir James Paget had directed the attention of the Council to the undeniable fact that this clause, if it became law, would absolutely exclude women from the Register, as no surgical authority admitted them to examination; and, consequently, the Council passed a resolution drawing the attention of the draughtsman "to the deficiency of power in the Council to carry out the Act in respect of examination-rules as regards women, in Clause 4 of Section 14"; and, further, resolved "That, provided there be no conjoint scheme in operation in any division of the United Kingdom, or there be no admission of women to examination for a double qualification in such division of the kingdom, it shall be in the power of the Council to establish a board for the examination of women in such division of the kingdom." It was then agreed that Paragraph (*b*) of Clause 4, Section 14, should be omitted, this being the paragraph that provides that a woman shall not be compelled "to pass, if she object to do so, the same examination as men, without any distinction on the ground of sex." Dr. Rolleston and Sir William Gull then moved that for the omitted paragraph the Council should substitute two paragraphs marked (*b*) and (*c*), providing that the examination-rules "shall secure that in the cases of women desirous of obtaining a legal qualification as practitioners in this country, the medical education, evidence of which is required by the examining board, shall have been conducted entirely apart from that of males"; and that "they shall secure that the examination of female candidates, though conducted by the examining board or boards appointed for the examination of male candidates, shall, nevertheless, be conducted entirely apart from the examination of male candidates." Some objections were made to these resolutions; it was pointed out that some subjects, as chemistry, botany, and electricity, might perfectly well be taught to mixed classes; and it was observed that liberality meant trust and confidence in other persons; and that the matter might be left an open question, to be decided by those who had the charge of the education and examination of students. But both resolutions were carried; and it was also resolved, "That women who pass any examination giving a legal qualification shall have their names entered on a separate register"—ten voting for, and eight against the resolution, while five members declined to vote, and one was absent. To this last paragraph the words—"such separation of names not to imply any difference of legal rights," were added, on the motion of Mr. Simon. The Clauses 5, 6, 7, and 8 of Section 14 were "in substance approved."

Passing then to Section 15, respecting Joint Medical Boards, the Council amended Paragraph 3, by adding words providing power of withdrawal from a scheme agreed to before the passing of the Act, by any of the medical authorities "in the event of there not being an examining board in each division of the United Kingdom as recommended by the Council in its Resolution 3, of the meeting of April 12."

Sections 15, 16, 17, 18, and 19 were "in substance approved"; as was also Section 20, after some discussion, and with a resolution that Paragraph 2 of Clause 2 of the Section should "be altered in accordance with the Council's recommendations as to Paragraph (*a*) of Clause 4 of Section 14. Section 21 was also approved.

With regard to Section 23, providing for the examination, licensing, and registration of dentists, the Council agreed with Dr. Rolleston that it was very desirable that all the medical subjects that could ask for Government interference should be included in one Bill, and they accepted, therefore, with very little loss of time, his resolution, "That it is desirable that provision be made in the present Medical Act Amendment Bill for the registration of dentists." But the Council declined to undertake the labour of originating "a new scheme of examination-rules" for dentists, though willing to be entrusted with "a supervising power" as regards the educational details. The clauses of Section 23 relating to registration were approved of, with the exception of Clause 5, which provides for the registration of colonial and foreign dentists; and with regard to this the Council resolved to suggest that it should be withdrawn, and the clause of Sir John Lubbock's Bill relating to the same objects substituted for it. A division was taken on a resolution, moved by Dr. Aquilla Smith, to omit the words "or in dental surgery" from Paragraph (*a*) of Clause 4, which provides for the registration in the dental register of persons holding "a licence in dentistry or in dental surgery of, or a certificate of fitness to practise as a dentist from, any of the medical authorities." Dr. Smith's object was to guard against dentists calling themselves "surgeon-dentists," and he held that with that view it was very desirable that the words "dental surgery" should not be allowed to occur in this section of the Bill. Sir Dominic Corrigan agreed with him, and seconded his resolution; and Dr. Andrew Wood also argued that it was a matter of great principle that no dentist who did not hold a surgical diploma should be able to call himself a dental surgeon. Mr. Simon and Dr. Storrar protested against any attempts to "tyrannise over the popular use of words," and "to reverse the ordinary accepted term which had hitherto been applied to persons practising dental surgery"; and pointed out that the term "surgeon-dentist" had been recognised as a special term for dentists by Lord Chief Justice Cockburn in the Court of Queen's Bench nearly nineteen years ago; and Sir James Paget added that in 1859 the Royal College of Surgeons in England obtained a charter to grant licences to practise dental surgery, and that a proposal to abolish the term "dental surgery" would be a proposal "to abolish the Royal Charter, and to put under a penalty of £20 anyone possessing a licence in dental surgery if he should use it; and to set aside the judgment of the Court of Queen's Bench, which had never been impugned." Dr. Smith's resolution was negatived by twelve votes to three.

Section 24, which deals with the examination, licensing, and registration of midwives, was under consideration on the sixth day of the session, and occupied the Council the greater part of the day. First, a deputation was received from the Obstetrical Society, the President of which (Dr. West) explained, in a very able address, the views of the Society on the subjects of the Section of the Bill, and enlarged on the scheme proposed by the Society for the same purposes; and answered questions put by various members of the Council with reference to some of the principles and details of the plan proposed in the Bill and in the scheme of the Obstetrical Society. The Council then went into committee on the Bill, and resolved—"firstly, that means under legal sanction should be provided for giving credentials of qualification to competent midwives; and, secondly, that the lives of women in labour should, as far as possible, be protected from the incompetent." Having thus approved of the purposes of

Section 24, the Council then considered its several clauses. Considerable discussion took place with respect to Clause 1, which provides that the Council "may, if they think fit, submit to the Privy Council a scheme for the examination, licensing, and registration, under the control of the General Medical Council, of midwives," etc. On this clause, Mr. Simon moved, and Sir William Gull seconded—"That the Council, having regard to its own special purposes and organisation, and to the resources of its office, could not undertake to initiate arrangements (which must for the chief part be local) for the examination, licensing, and registration of midwives throughout the United Kingdom, nor accept such administrative responsibilities as would attach to any central authority which might purport to act in control of the local arrangements for those purposes; but that the Council would willingly, if so desired, provide examination-rules for the assistance of administrative authorities, local or central, which might be appointed for the purposes of the law." The motion expresses clearly enough the objection very naturally felt to placing on the shoulders of the Council such a labour as the initiation of a scheme for the qualification and registration of midwives; but, on the other hand, it was argued that the Council had represented to the Government that a system of qualified midwives should be provided, and could hardly now say to the Government, "We are very much obliged to you for taking up our view, but we don't want to trouble ourselves in the matter"; that a scheme for doing what everyone allows is necessary must be initiated somehow and somewhere, and that there was no other body but the Council, or at any rate no other so competent and well fitted, to initiate it. Dr. Rolleston even went so far as to declare that the Council are largely paid, and ought to do something for it. Among the profession at large this opinion has prevailed for a very long time, but outside the Council at least the opinion also has been held that the Council have still a great deal of very important business before them pressing urgently for consideration and settlement, which has been from time to time postponed on the plea of want of time. However, the Council generally did not agree with Mr. Simon, and, on the motion of Dr. Humphry and Mr. Teale, resolved, by a large majority, "that Clause 1 of Section 24 be in substance approved." Clause 2, providing that the examinations of midwives "may be conducted by any medical board or boards, authority or authorities, who consent thereto, or by persons appointed by the General Medical Council, or otherwise as provided by the scheme," was also in substance approved; and truly a more catholic clause could hardly have been framed. With regard to the registration clauses, the Council resolved that "it is not necessary that a central register of midwives should be kept, but that there should be local registers, and that the duty of keeping them should devolve upon the authorities having power of government in the several places in which the examinations are conducted"; and "that it be provided that a certificate of good character be required in the case of those who present themselves for examination or registration." The Council further resolved, that "persons not upon the register shall not be eligible for public appointments as midwives"; that paragraph 2 of Clause 6, relating to the publication of the register, should be altered to, "The register of midwives shall from time to time, and at least once a year, be printed, published, and sold in the several districts of the United Kingdom, as directed by the General Medical Council from time to time; and that copies of these registers shall be forwarded to the Medical Council on January 1 in each year"; and that with reference to this clause "the Council is of opinion that the duty of prosecuting under this section should devolve upon the local authorities specified under Clause 5." The rest of this section was "approved of in substance."

The whole of the resolutions passed on the Bill by the Council in committee were brought up on the last day of the session, were "in substance adopted," and it was agreed "that they be remitted to the Executive Committee to be arranged in order and transmitted by the Committee to the Lord President of her Majesty's Privy Council."

On the motion of Sir Dominic Corrigan and Dr. Aquilla Smith, the Council afterwards agreed to a resolution stating that, though the Council cannot undertake the duty of prosecuting unqualified practitioners, yet they thought it their duty to draw the attention of the Local Government Board of England "to a practice, which it would appear exists in England, of practitioners in charge of medical relief districts employing unqualified assistants to act for them in the treatment of medical and midwifery cases, tending to the detriment of the public and other evils"; and referring to the rule in Ireland as respects dispensary medical officers. The object of the resolution is an excellent one, and the scope of it might have been advantageously enlarged. The report of the Finance Committee was received and adopted. It pointed out that, but for the exceptional outlay of sums amounting in the whole to over £945, there would have been this year a balance in favour of the income of £359; and it observed that there had been a decrease in the expenditure on general printing amounting to no less than £470 odd. The answers from licensing bodies to a letter sent them by the Executive Committee, in regard to the preliminary education and examination of medical students, were directed to be inserted on the Minutes; and some communications received by the Council were referred to the Executive Committee. The report of a committee of the Senate of the University of London on the Bill of the Duke of Richmond and Gordon was received and entered on the Minutes, and will be found at length in our report of the proceedings of the Council on the seventh day of the session. The names of three members of the profession were ordered to be erased from the Register; and the name of Patrick Joseph Laurence Finigan, L.R.C.S.I., was restored, it having been erased on account of neglect to send to the Registrar information of a change of address. It must be mentioned also that on Wednesday, the 17th, the President and several members of the Council received a deputation from the Medical Reform Committee of the British Medical Association. The interview lasted a considerable time; and the President afterwards informed the Council that the deputation had fully laid before him their views as to the constitution of the General Medical Council, the chief of these "seeming to be that one-fourth of the Council should be elected by the whole medical profession, one-fourth nominated by the Crown, and one-half elected by the medical authorities of the United Kingdom. The number of the Council was not held to be important—it might be more or less than now, or the same as now." The deputation was informed that the business of the Council during the present session was mainly the consideration of the Government Medical Act Amendment Bill, and the Council might not be able to discuss such an important subject as the reconstruction of the Council; but the members would consider the statements and arguments brought before them with the utmost attention.

THE REPORT OF THE SCOTTISH UNIVERSITIES COMMISSION.

No. III.

MEDICAL TEACHING AND GRADUATION.

THOUGH the Report of the Scottish Universities Commission as to the rules for graduation and the provision for teaching Medicine is far from being as revolutionary as in the pro-

posals with regard to the Arts curriculum, still it suggests many important alterations in some respects vitally affecting the English schools. The essential points are these, viz.:—"That every candidate for a degree in medicine shall, before commencing his professional studies, pass the "First Examination," omitting Greek and including French and German, or taking one of these modern languages along with Greek, and shall devote not less than four years to the course of study at present prescribed by ordinance. That no candidate for degrees in Medicine shall be admitted to the professional examination in human anatomy or physiology, or in any purely medical subject, unless he has passed the examination in the second and third groups of the Natural Science department of the M.A. degree, *i.e.*, in natural philosophy, chemistry, elementary physiology, botany, and zoology. That the final examination for the medical degree shall be confined to the practical subjects of medicine and surgery, both systematic and clinical, obstetrics, pathology, therapeutics, medical jurisprudence, and hygiene, and that no candidate shall be admitted to the examination unless he has passed in the other subjects of the medical curriculum.

"In practice this scheme would work in the following manner:—On commencing his medical curriculum either at the beginning of the summer or that of the winter session, the student would pass the 'First Examination,' and would be freed from the necessity of occupying himself with any but preliminary scientific or medical studies in his further course. He would then be practically compelled to proceed to his preliminary scientific studies, which he would take, some in the winter and some in the summer of his first year, and he would have the advantage of finishing each set by passing his examination in that set at the end of the respective sessions. Having got successfully through the work of the first year, he would proceed to human anatomy and physiology, and the purely medical studies. He would be permitted to go through them and take his examinations in whatever order he pleased, except that the examinations in the practical subjects above named must not be taken before the end of the four years of study."

With regard to this scheme there is a good deal to be said. Thus, to compel a student of Medicine to pass such an examination as that called the "First Examination" is either too much for him or too little for a candidate for a degree in Arts. This First Examination, it will be remembered, comprehends the whole of the classical and mathematical knowledge requisite for a degree in Arts. Moreover, besides this the student of Medicine is required to pass an examination in Natural Science not far from being equivalent to that proposed for graduation in Arts, where Natural Science has been chosen as the main subject. Three years are allowed for the study of such subjects in the Arts scheme: the whole is to be got over during the first year of a medical education.

The scheme proposed above, as regards medical examinations, seems to us to labour under another serious difficulty. Nothing has, we believe, given more dissatisfaction in one of the Scottish universities than the practice of dividing the examinations in anatomy into two parts—one on what is called elementary anatomy, another on advanced anatomy. There is no mention of such a division in the scheme before us, but there is the proposal of one which seems to us much worse, for we find elementary physiology separated from human physiology. Whilst holding strongly to the advantages of a study of elementary physiology in an ordinary course of education, we fail to see its place in the curriculum of the medical student. If it is to take the place of what is still called comparative anatomy and physiology, it would be well to say so, and to make special provision for its teaching. In the meantime, as far as we can see, there is none. We must remember what the purpose of medical education really is: we have to teach men to practise medicine—not to make them either sages or pedants.

A touching appeal was made by the authorities of the University of St. Andrews that they might be allowed to confer their degree of M.D. on *only* fifteen more a year than they are now permitted to invest with that dignity. *Only* fifteen more! for was not Durham about to do as they had been wont to do—to confer degrees without residence? Rightly, as we think, the Commissioners do not support this plea, but advise the University to seek the formation of an adequate medical school by an alliance with the good town of Dundee. There can be no doubt that duly qualified English practitioners labour under a serious disability in not being able to acquire a respectable M.D. degree, should they think fit to take it after passing through a satisfactory curriculum; but provision for this should be made in England, and it is a matter which well deserves the attention of the profession as a whole on English soil. The very slight facilities offered by the University of Aberdeen in this direction have also attracted the attention of the Commissioners, who are careful to suggest their curtailment.

Let us next turn to the provisions for teaching medicine suggested by the Commissioners. They are enough to make the hair of any metropolitan teacher stand on end. Horror would not, however, be the only sensation. In reply to the piteous appeals made to them, the Commissioners recommend that no professor shall have an income of less than £600 a year unless in "exceptional instances," and this altogether irrespective of the amount of work he does or the time he occupies in doing it. As regards this, we do not on the whole complain, though it may seem hard that a man who works three months a year should have as much as one that works six. It is, however, rather in the matter of assistance and teaching apparatus that we, as Southerners, have some reason to complain of handicapping in our competition with Scottish teachers of medicine. Take the following proposals:—

"Some of the scientific professors have given a very large estimate of the amount that should be provided for purposes of assistance and illustration. For example, the Professor of Natural Philosophy in Glasgow, Sir William Thomson, has placed the requirements of that class for assistance at a minimum of about £750, and for apparatus and materials for illustration at a further sum of about £200, making in all a claim of nearly £1000 a year; whereas all the allowance now provided is £100 a year for an assistant from Parliamentary vote, and £100 a year from the University funds for apparatus and class expenses.

"We have endeavoured, as far as possible, to arrive at a just estimate of the requirements of different chairs for these purposes; and, having done so, we recommend that the following provisions, in addition to those now existing, should be made from the public funds. In each case we have stated the lowest sums which we think will be required. The recommendations apply to each of the three universities of Edinburgh, Glasgow, and Aberdeen.

"To the chair of Natural Philosophy there should be attached a first assistant with a salary of £250 a year, in addition to the present mechanical assistant at £100 a year.

"To the chair of the Institutes of Medicine or Physiology there should be two assistants, one at a salary of £150, and the other at £100. There should further be an original allowance of a sum of £1000 for the purchase of apparatus and material of a permanent kind, and afterwards an annual sum of £100 for maintenance and provision of new material.

"To the professorship of Botany two assistant demonstrators should be provided, if the class numbers as many as a hundred, the services of one demonstrator being necessary

for about fifty students. In so far as additional demonstrators beyond two may be required, in consequence of the size of the class, we think that they should be provided by the professor himself. The demonstrators are required to aid the professor in illustrations in the laboratory and also in field work. Their salaries should be £100 each.

"To the chair of Natural History (Zoology) we recommend the like provision of assistants, and under similar conditions to the provision we have specified in the case of botany—viz., two assistants at £100 each, on the footing of the class numbering 100. If the class exceeds that number, any further necessary assistance should be provided by the professor. There should be attached to the class a laboratory for the instruction of the students, and also a class museum, for the original cost of which an allowance of £500 would be required; and for the yearly maintenance of the museum an allowance of £50 should be made. We have already expressed our opinion that a university should not undertake the heavy expense of maintaining a general or public museum.

"To the chair of Geology which now exists in Edinburgh, and to each of the chairs of this branch which we have recommended should be founded in Glasgow and in Aberdeen, there should be an assistant at a salary of £100. A laboratory for the instruction of students and a class museum should also be provided, the latter at an original cost of about £250, and with an allowance of about £25 for annual maintenance.

"To the chair of Pathological Anatomy there should be an assistant with a salary of £100.

"To the chair of the Practice of Physic there should be an assistant at £50 a year. There should also be a clinical tutor to aid the professor or professors engaged in clinical instruction at the infirmary. His salary should be £50.

"For the two chairs of the Practice of Physic and Pathological Anatomy there should be provided a class museum, which might be maintained at an annual cost of £100.

"To the chair of Surgery, and also to the chair of Clinical Surgery where that exists, an annual allowance of £50 for the purchase and maintenance of instruments and mechanism should be made. There should also be a clinical tutor, at a salary of £50, to assist the professor or professors engaged in clinical instruction at the infirmary."

On reading these recommendations one is tempted to exclaim, "Where is all this money to come from?" The Commissioners are under no such difficulty. Whenever university funds are not forthcoming for these and many more requirements, they have a simple answer—fall back on the State. How English teachers and taught are to be provided for concerns them not, but it would be a curious calculation, well worth making, how much money the Commissioners propose to get out of the funds of the State under these schemes. There is at present under consideration a proposal to the effect that the fees in all London schools should be raised to the extent of five-and-twenty per cent. It will be well for the school authorities in London to pause before they sanction this. If all the extra expenses entailed by the requirements of modern teaching are to be paid in Scotland by the State, there will be no great necessity for raising the fees. What, then, is likely to happen if the fees are raised here in London? It will plainly be for the benefit of the Scottish universities.

We are unwilling to take our leave of these volumes, which contain more "human nature" than most with which we are acquainted, without paying one more compliment to the pedantry they embalm. Let it take the form of the following extract:—

"Under present arrangements, the holder of the chair of Materia Medica is required to deal with two subjects which differ very much in importance and have no necessary connexion with one another. The first of these is Therapeutics, or, as Sir Robert Christison has proposed to term it, 'Therapeiology,' and the second is Pharmacy.

"Therapeiology embraces the study of the influence of conditions upon life. So far as such conditions come under the head of climate, station, atmospheric conditions, zymotic agents, diet, and regimen, they should be treated so as to form a scientific basis for the study of hygiene; while the action of medicaments on the economy in the subject of Therapeutics in the stricter sense.

"There can be no doubt that Therapeiology, as thus defined, is one of the most important branches of medical study, and that it has the strongest claims upon the attention of the student. We therefore consider that a full winter course of lectures should be devoted to it, and that the teaching of therapeutics and the scientific principles of hygiene should be the chief, if not the only, duty of the Professor of Therapeiology. This is of more importance now that the Universities give certificates or Science degrees in the department of Public Health. While the Professor of Therapeiology would teach the scientific principles of hygiene, the Professor of Medical Jurisprudence would continue, as at present, to apply these principles to the hygiene of communities, and to the action of the law in relation to them.

"Pharmacy treats of the physical and chemical character of medicaments, and of the means of ascertaining their purity; explains the sources from which they are derived, and the modes of preparing them; and gives instruction in the art of compounding medicines from them. Essentially a practical subject, it can be taught efficiently only in a properly constituted pharmacological laboratory, where the students can examine and prepare the objects of their study under the personal guidance of a competent instructor, aided by an assistant and by a practical dispenser."

When we were students there was something they called Materia Medica, which was neither Therapeutics nor Pharmacy. Perhaps there is no longer anything of the kind—it may be that Pharmacy has taken its place; but in those days Pharmacy always meant something which had to do with a druggist's shop.

DIRECT REPRESENTATION IN THE MEDICAL COUNCIL.

The interview between the Medical Reform Committee of the British Medical Association and the President and members of the General Medical Council, on the 17th inst., was rather a singular one when viewed in the light of certain circumstances of which we wish to remind our readers. Eight years ago the Government of the day introduced a Medical Acts Amendment Bill into the House of Lords, which provided for the compulsory formation of conjoint examining boards, and a uniform minimum examination in each of the three divisions of the kingdom, as well as a satisfactory penal clause for the suppression of quackery. To this Bill, under the fear of worse things, the medical corporations gave way, those of Scotland and Ireland yielding with reluctance. The Bill passed through the House of Lords, and had its second reading in the Commons at a late period of the session, when any opposition, however feeble, could prove fatally obstructive. Dr. Waters, of Chester, was then, as now, chairman of the Reform Committee of the Association, and was pledged to urge the principle of direct representation of the profession on the Council. He used his opportunity. The Government recognised the critical state of public business, and offered a Select Committee of the House of Commons to consider the subject of direct representation. This was refused by the Committee of the

Association, and the Bill was shipwrecked. The profession were thus deprived of whatever boon that Bill would have conferred, and for which there has ever since been such weary clamouring.

A few weeks afterwards Dr. Waters had to defend his conduct at the meeting of the Association at Newcastle. He appealed to the Association to support his action, and he urged as an argument in favour of what the Committee had done that, if they had accepted Mr. Forster's offer, the expense of the Select Committee would have fallen on the Association. The Association were as ignorant as Dr. Waters that such a Select Committee does not cost one penny of expense, and, moved by this fear as well as by other influences, passed a vote of confidence in the Reform Committee. But, as a result, four ex-Presidents of the Association—Dr. Acland, Dr. Stokes, Dr. Paget, and Dr. Rumsey—then and there withdrew from it.

On the 17th inst., Dr. Waters and Dr. Acland were once more face to face to discuss this question of medical reform—Dr. Acland, as President of the Medical Council, receiving Dr. Waters as the perennial President of the Reform Committee. But times were sadly changed. At Newcastle Dr. Waters had boasted of his power, and Dr. Husband had announced that thenceforth no Government could undertake medical legislation without consulting the wishes of the Association, and that the Committee if reappointed would make direct representation the immediate subject of further Parliamentary proceedings. Eight years have since elapsed, and Dr. Acland, the President, and Dr. Quain, a member of the Medical Council, put to Dr. Waters the pertinent questions—How come you here not further advanced, nay, further back, than you were eight years ago? You come now to ask us to aid you in securing joint examining boards, or the one-portal system, in the Bill: was not this a boon of which you deprived the profession by your deliberate act? You come on the last day of our session to plead for direct representation: how have you meanwhile used the great influence of your Association? There is no scheme of direct representation in this Bill which the Government has put into our hands: how far have you matured your plans? What have you done? The answer was truly disappointing. During these eight years the Reform Committee has not once succeeded in getting its schemes discussed in Parliament. It has not even, after this long period of incubation, succeeded in hatching the rudest details of the scheme. Who has seen the "Bill" of which the Committee spoke? But, as Dr. Waters told Sir James Paget, they come now, after the Government has framed a scheme, to say that any Bill which passes must contain provisions for direct representation; that is, they come once more to obstruct. Eight years ago they wrecked a Bill, in the name of the shadowy advantages which were to be derived from "direct representation." Since then, as Dr. Stewart very frankly confessed, they have abandoned active efforts lest they should interfere with the voluntary formation of an English conjoint board. Here was a tacit reversal of their former policy; and at the last meeting of the Association, at Manchester, they were pretty clearly given to understand that the Association was tired of this policy of obstruction, and they were instructed to try to do something practical. In a huff, half a dozen of the Committee resigned, Dr. Waters among the number. But they appear to have thought better of it; and quietly reappear on the scene, obstructive as before and characteristically three months too late, and appoint, too, for their interview an impossible hour in the last day of the session of the Council. Undeterred by the mischief which they did eight years ago, this Committee still persist in seeking to deprive the profession of what is most practical, urgent, and really vital in medical reform. This they do in the name of a principle of which they have not even yet "considered the details," and which they well know to be yet more incapable of being incorporated in a Parliamentary Bill now than it was when they succeeded in so using it as to stop medical reform for a decade, and drove Acland, Stokes, Paget, and Rumsey out of the Association, to which, as president, each of them had rendered inestimable services. By the costly canvass which they are at this moment conducting they can easily succeed in obtaining a large affirmation of the abstract principle of "direct representation." Urged as they state it, such a principle attracts abstract assent. We do not stop to show the fallacies involved in the argument of which they have circulated 20,000 copies, and the petitions with which they have inundated the profession. But when they get such affirmations, no one knows better than do Dr. Waters and his colleagues that, having neglected to influence the Government when they knew the Bill to be in preparation, and having only come to the Medical Council at the last hour of its session, they can only use the petitions and the vote for which they are canvassing to obstruct, and not to further, medical reform.

THE WEEK.

TOPICS OF THE DAY.

At the Worship-street Police-court, last week, a middle-aged woman named Mary Ann Waller was sentenced to six months' imprisonment for having contravened the eighth section of the Infant Life Protection Act of 1872. The Metropolitan Board of Works instituted the proceedings; and the magistrate in passing sentence said that he had felt it necessary to remand the prisoner, in the first instance, to consider whether he should not send her for trial on a charge of manslaughter for having systematically neglected the children entrusted to her care; the medical evidence, however, did not go the length of saying that the children had died through being in her custody, lamentably deficient though her premises were for the purpose. He also felt it necessary to make some remarks on the certificates of death which had been produced before him. Although these certificates were intended for the Registrar-General only, it was much to be regretted that, the medical gentleman called in to attend the child Dugoy being merely an assistant, Dr. Flack should think his account of the cause of death sufficient warranty for the issue of a certificate of death, wherein Dr. Flack certified "I attended." Mr. Bushby believed, of course, that it was done without any evil intention, but thought it was a matter for very great regret that, although the certificates were intended for the Registrar-General, a medical gentleman of position should certify what was not strictly true.

A paper on "An Experimental Inquiry into the Function of Respiration at Various Altitudes" was read by Dr. Wm. Marcet at the last meeting of the Royal Society. The experiments were principally undertaken with the view of inquiring into the state of the respiration of tourists at various altitudes, and under the different circumstances met with on alpine excursions. Pettenkofer's method was adopted in the estimation of carbonic acid. Dr. Marcet confirmed previous experiments as to the fact that the quantity of carbonic acid breathed out is greater after food has been taken; and in his experiments on respiration at high altitudes he endeavoured to neutralise the effects of food by taking an early breakfast and a late dinner, and climbing between the meals. In experiments made while sitting, it was shown that there is an increase of carbonic acid breathed out as a person rises above the sea on a mountain excursion, and that this is due to the fall of the atmospheric temperature, and to the cold produced by increased evaporation from the

body, arising from the diminished pressure of the atmosphere. Dr. Marcet experimented in a similar manner while ascending hills. Walking up rapidly over rocks and grass patches yields most carbonic acid, the amount being 3·155 grammes per minute, which was attended with inhalation of the largest volume of air breathed. Ascending quickly at the height of St. Theodule caused a considerable elimination of carbonic acid through the lungs, amounting to 2·972 grammes. On the other hand, walking leisurely up-hill at St. Bernard gave rise to the production of no more carbonic acid than quick walking on the level ground at the same station.

The Registrar-General's returns for the week ending 13th inst. record an increase in the number of deaths from small-pox both in London and Dublin. In London the number was 58, against 48 and 55 in the two preceding weeks. Of these 58 cases, 25 were certified as unvaccinated and 10 as vaccinated; the medical certificates of the remaining 23 cases not giving any information as to vaccination. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 682 at the end of each of the two previous weeks, had risen to 785 at the end of the week under notice; the number of new cases admitted during the week was 260, against 209 and 160 in the two previous weeks. In Dublin small-pox caused 15 deaths during this week, against 7 and 10 in the two preceding weeks.

A caution has been addressed to the public by Messrs. Evans and Jones, analytical chemists, on the subject of an adulterated violet powder which is now being sold in London. An epidemic of a disease which resembled erysipelas, among very young children, and which in several cases proved fatal, first called attention to the matter, and a packet of the violet powder in use in the nursery having been suspected, it was sent for analysis to the firm in question. The result showed that it contained 25 per cent. of arsenic, and it is surmised that, as arsenic is cheaper than starch, the former had been substituted for the latter. The objectionable article is sold in packets, which, in addition to the maker's name, are labelled, "For use in the nursery," and as there can be no doubt that several children have already suffered from arsenical poisoning through the use of this compound, it is suggested that it would be better for the future to procure it only from tradesmen of respectability.

At a special meeting of the Metropolitan Board of Works held last week, several important matters were introduced. The Works Committee submitted reports on the subject of deposits in the Thames (in answer to the allegations contained in a report made in October last to the Conservators of the Thames, by Captain Calver), of which the following are the salient points:—That there is no documentary evidence to prove that foul and offensive secretions have recently formed within the channel of the river; but, on the contrary, that the condition of the river is gradually improving. That both the water and mud of the Thames have improved greatly in purity since the sewage has been diverted from the metropolis to a point lower down the river. That analyses show that there is no resemblance whatever between sewage mud and Thames mud, and therefore the latter cannot be derived from sewage. That there is no evidence to show that the sewage works its way up the river, and that such a statement is contrary to fact. And that the present muddy state of the river is the fault of the Thames Conservators, who have not sufficiently protected its banks. It was also stated that a communication had been received from the Home Office, acknowledging the receipt of the Board's letter, enclosing a copy of the Thames River Prevention of Floods Bill, and requesting to be informed how far the proposed settlement is agreed to. On the motion of Mr. Freeman, it was resolved to reply that the measure prepared by the Board was the one they considered the best adapted to reconcile the conflicting interests of all parties, and it had received the approval of the large majority of the Board; but the Board had been unable to ascertain whether the provisions of the Bill were entirely satisfactory to all the local authorities and private persons interested in the matter.

A return just issued of cases in which coroners' juries have returned verdicts of death caused by starvation or accelerated by privation, in the Metropolitan District in 1877, shows that the total number of such deaths was 71, of which 47 occurred in the Central Division of Middlesex, 22 in the Eastern Division, 1 in Westminster, and 1 in the Greenwich Division. No such deaths were reported in the Western Division of Middlesex, City of London and Borough of Southwark, Duchy of Lancaster, the Tower of London, the Verge of the Royal Palaces, and the New Wandsworth Division.

SIR JOSEPH FAYRER, K.C.S.I.

The Fellows of the Royal College of Surgeons of England will be glad to receive into their ranks the above distinguished member of our profession, who was elected a Fellow of the College at the last meeting of the Council, under Section 5 of the Charter of the 18th Vict., relating to members of twenty years' standing, he having passed his examination for membership on July 9, 1847. Sir Joseph Fayrer, who is Honorary Physician to her Majesty the Queen, and Physician to H.R.H. the Duke of Edinburgh, President of the Medical Board of the India Office, and a member of many learned and scientific societies at home and abroad, is deservedly well known for his numerous and valuable contributions to medical and general science.

ROYAL COLLEGE OF SURGEONS.

At the same meeting of the Council, Mr. Oliver Pemberton, Surgeon to the Birmingham General Hospital and Professor of Surgery to Queen's College, was also elected a Fellow of the College. This gentleman's contributions to surgical science are well known and highly appreciated. He passed his examination for the membership April 12, 1847. Another distinguished medical officer in H.M. Indian Army, having been elected a Fellow on a previous occasion, was admitted as such—viz., Dr. Norman Chevers, of Tavistock-road, member January 8, 1841. Deputy Inspector-General John Donald, of Winslow, Cheshire, member September 4, 1835, and Walter Carless Freer, of Birmingham, member October 15, 1841, were also admitted Fellows.

CANVASSING FOR VOTES.

We have received a copy of the following reply to a note from Messenger Bradley. Comment on it is needless:—

[*Copy.*]

39, Grosvenor-street, Grosvenor-square, W.,
April 13, 1878.

Dear Sir,—I regret that I am unable to sign the paper you have sent me, inviting Mr. Lund to become a candidate at the next election to the Council of the College of Surgeons.

Mr. Lund's position as a surgeon, and his contributions to surgical literature, I cordially agree with you entitle him to the confidence of the profession; but they do not give him a claim to election on the College Council in preference to many of his seniors in the Fellowship, amongst whom I may name Mr. Lister, Sir Henry Thompson, Mr. Callender, Mr. Hulke, Mr. Heath, Mr. Durham, and Mr. Hutchinson.

There are already three provincial Fellows on the Council, and if the number be increased there may be a difficulty in getting the business of the College transacted. Members of the Council residing at a distance from London are not usually elected on important committees, from a desire not to put them to the serious inconvenience of attendance; and they are practically ineligible for the higher offices of

President and Vice-President, who are expected to attend all committees.

Even if there were not several Fellows from the provinces on the Council, I should demur altogether to the reason you give for Mr. Lund's election as a representative of the provincial Fellows. The Council know nothing of class interests. The interests of the provincial Fellows are equally the interests of the metropolitan.

I am, dear sir, yours faithfully,

S. M. Bradley, Esq. T. H. Curling.

DEATH OF MR. THOMAS CARR JACKSON, F.R.C.S. ENG.

We deeply regret having to record that Mr. T. Carr Jackson died, at his house in Harley-street, on Tuesday last. It is well known that Mr. Jackson had for several months been far from well, and that for some time after the death of his wife, in October last year, he was very seriously ill; but a few weeks ago we had the pleasure of knowing that he was so much better that his colleagues and his very numerous friends were able to look forward to welcoming him back in a short time to the active exercise of the profession he so enthusiastically loved. This was not to be however. A short time ago he again became worse, and died on the 23rd inst. We must be content at present with this simple mention of our loss; but next week we hope to give a notice of Mr. Jackson's life and work.

CLINICAL SOCIETY.

This evening (Friday), at the meeting of the Clinical Society, the following papers will be read:—By Dr. Tilbury Fox, "Cacotrophia folliculorum"; by Dr. Barlow and Mr. Marsh, "Ovariotomy in a Girl aged twelve"; by Mr. Barker, "Wound of an Abnormal Obturator Artery in an Operation for Femoral Hernia"; by Dr. Sangster, "Urticaria pigmentosa" (living specimen).

GENERAL CORRESPONDENCE.

THE DIRECT REPRESENTATION OF THE PROFESSION ON THE GENERAL MEDICAL COUNCIL.

[To the Editor of the Medical Times and Gazette.]

Sir,—The expressions of opinion that have lately appeared in the *Medical Times and Gazette* upon the subject of the direct representation of the profession on the General Medical Council, as well as upon the management of the British Medical Association, encourage me to hope that you will allow me to say something on the subject of the unauthorised *plébiscite* of Dr. Waters, of Chester, and his excellent colleagues in the Reform Committee of the Association, upon the former of these questions. The value which these active managers of the British Medical Association attach to such answers as "yes" or "no" to written questions, appears to vary according to circumstances within a very short time.

Lately, at Birmingham, they considered a vote of the kind, in which Dr. Grigg received 2000 replies of "yes" and twenty replies of "no," as utterly unworthy of notice, and proceeded to mercilessly override it at a meeting at which there appeared to be present less than twenty members of the Association beyond the members of the local branch whipped up by an official post-card.

Now Dr. Waters affects to ignore the vote of a general meeting of the Association at Manchester, which he even hints was "packed," apparently on the sole ground that it considered that, after eight years of complete failure, the Reform Committee might usefully try to promote a really practical measure, instead of obstructing all reform by an inactivity which neither accomplished any reform nor would allow any.

There is here an inconsistency which I can only explain by observing that Dr. Falconer, Dr. Waters, Dr. Wade, Dr. Husband, Dr. Chadwick, and other members who lead in both matters, were opposed to Dr. Grigg's views, which were supported by 2000 members, and thought therefore that the vote of a small meeting, which I will not follow Dr. Waters in describing as "packed," should prevail; while, on the other hand, they are ardent partisans of what they describe as "direct representation" on the General Medical Council, which they believe to be paramount to all other reforms; and, therefore, they consider the vote of a general meeting against them as of no value. I dissent from this mode of conducting the affairs of the Association; and so, I think, would the members generally if they could be persuaded to express their opinions in an active form.

I am, &c., M.D.

THE THROAT HOSPITAL.

Letter from Major-General P. Feilding.

[To the Editor of the Medical Times and Gazette.]

Sir,—I regret to intrude again upon your space, but must ask your readers to collate my letter in your issue of the 6th with Mr. Luck's reply, and they will see how entirely my statement has been corroborated by that gentleman's admissions, for which he has my best thanks.

I complained that a clinical assistant, who had only once partially performed an operation of tracheotomy, was entrusted to perform it unassisted, at the shortest notice, and during the night-time, when the services of an experienced tracheotomist were available. Not only does Mr. Luck admit the fact, but claims credit for what he calls "the careful method adopted at the Hospital," where such a risk is allowed to be incurred! The statement when related by me is called by Mr. Luck "a malicious anecdote," when related by him it is termed "an excellent illustration of the special precautions adopted" at the institution of which he is the champion. With regard to the operation on the Belgian, which Mr. Luck states to have been "most skilfully *accomplished*"—so much so as to warrant the physician in allowing the clinical assistant who then made his *début* in tracheotomy to perform similar operations unassisted in future,—I beg to remark that it was adduced in evidence before the Duke of Grafton's inquiry, that the clinical assistant did not finish (or *accomplish*) the operation, not because a new instrument was used, but because he had not made the opening large enough to admit the tube, and that the medical superintendent had to enlarge the opening himself with the knife. The latter gentleman was present when this evidence was given, but made no remark.

It was also adduced in evidence on the same occasion, and also before the Committee, when I was chairman, that when the clinical assistant performed his second operation he did not know how to insert the tube, and the matron had to do it, which showed that she was not devoid of the "scientific knowledge and surgical ability" which Mr. Luck has so happily alluded to. As to the rest of Mr. Luck's letter, I may safely leave the public to judge between us, and will only express a hope that no one will believe that I really have the power, imputed to me by him, of influencing any four English gentlemen to such an extent as to induce them to act otherwise than impartially in a matter upon which they were called upon to adjudicate. Were it not that a similar accusation against the gentlemen who conducted the inquiry has been deliberately made in the annual report published by the Hospital, I might be inclined to doubt whether Mr. Luck could really be in earnest, especially as he has not hesitated to insinuate that the Prince of Wales aided and abetted in the dishonourable proceedings laid to their charge. The public will, however, now be able to form its own estimate of what amount of credulity is expected from it by Mr. Luck, and can draw its own conclusions without the necessity of my troubling you any more upon the subject, and will, moreover, probably share with me a sense of regret that the Committee of the Throat Hospital do not ask to have the matter at issue investigated by the Royal College of Physicians. Such a course would, I am sure, be most satisfactory to the three gentlemen who retired from the management when I did, and who *with myself*, and at the Duke of Grafton's request, submitted to the Court of Inquiry the subject of alleged mismanagement.

I am, &c., P. Feilding, Major-General.

[If no new *facts* are adduced, it will be well to cease commenting on those already before the public, who are quite capable of forming their own opinions.—Ed. *Med. Times and Ga*.]

MEDICAL NEWS.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 18 :—

Burnie, William Gilchrist, Bradford, Yorkshire.
Reckitt, John Deonis Thorpe, Wainfleet, Lincolnshire.
Smith, Kenneth Rawlings, Oak Villa, Stamford-hill.
Wells, Charles, Hillside, Stowmarket.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

MOORE, J. DANIEL, M.D., Lancaster.—Visitor of all houses licensed for the reception of lunatics within the West Riding of Yorkshire, in place of Dr. De Vitré, resigned.

NAVAL, MILITARY, &c., APPOINTMENTS.

WAR OFFICE.—Surgeon-Major Hugh Deane Massy retires on temporary half-pay; Surgeon-Major John Atkinson retires on half-pay; Surgeon-Major Robert Spence, M.D., retires on half-pay; Surgeon-Major Andrew Robertson Smith, half-pay, resigns his commission; Surgeon Thomas Kearney resigns his commission; Deputy Surgeon-General John Robert Miller, M.D., Bombay Army, to be Surgeon-General; Surgeon George Frederick Wilkes, Royal East Kent Yeomanry Cavalry, resigns his commission; Surgeon Horace Kersey Debenham, Royal South Wales Borderers, resigns his commission.

BIRTHS.

COOMBS.—On April 12, at Moss View, Lower Ince, near Wigan, the wife of Graham Lowe Coombs, M.R.C.S.E., of a daughter.

CORFIELD.—On April 19, at 10, Bolton-row, Mayfair, the wife of W. H. Corfield, M.D., of a son.

MARTIN.—On April 12, at Abingdon, Berks, the wife of Paulin Martin, M.R.C.S., of a son.

MARRIAGE.

ADDISON—JACKSON.—On March 5, at St. Cyprian's Church, Durban, Friend Addison, Esq., of Lower Umvoli, eldest son of W. H. Addison, M.D., of Durban, to Eliza Anna, daughter of W. P. Jackson, Esq., Resident Magistrate of Tugela, Natal.

HARDWICKE—BALDRY.—On April 24, at St. Luke's, Chelsea, William Wright Hardwicke, M.R.C.P., of Rotherham, to Alice Mary, daughter of J. D. Baldry, of Carlyle-square, S.W.

WARD—LYONS.—On April 16, at St. Peter's Church, Espine Ward, F.R.C.S.I., Surgeon-Major Army Medical Department, to Elizabeth Eleanor, widow of J. H. Lyons, Esq.

DEATHS.

CROUDACE, THOMAS, M.R.C.S. Eng., L.S.A., Surgeon-Major 6th Regt. M.N.I., at Thyetmyo, British Burmah, on March 10, in his 52nd year.

DRYSDALE, HERBERT MORTIMER, eldest son of J. J. Drysdale, M.D., of Liverpool, accidentally drowned at Chester on April 22, aged 25.

FLOWER, JOHN SWAN, L.S.A., M.R.C.S., at Holly Lodge, Denmark-hill, on April 18.

JACKSON, THOMAS CARR, F.R.C.S., at 91, Harley-street, Cavendish-square, on April 23, aged 55.

MOORE, ELSIE, wife of John William Moore, M.D., and only daughter of the late John Ridley, M.D., of Moore Hall, Tullamore, King's County, at 40, Fitzwilliam-square West, Dublin, on April 21, aged 23 years.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BRISTOL ROYAL INFIRMARY.—House-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons of London, Edinburgh, or Dublin, or Masters in Surgery of one of the universities of the United Kingdom, and also possess a registered medical qualification. Applications, with testimonials, to the Secretary, on or before May 11.

GARAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, N.—Ophthalmic Surgeon. Candidates must be Fellows of the Royal College of Surgeons of England. Applications, with testimonials, to the Secretary, on or before May 6.

UNIVERSITY COLLEGE HOSPITAL, LONDON.—Surgical Registrar. Applications and testimonials to Talfourd Ely, M.A., Secretary, on or before May 6.

WILTS COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Candidates must be duly qualified and registered medical practitioners. Applications, state age, with not more than six recent testimonials, to "The Clerk to the Committee of Visitors, Wilts County Lunatic Asylum," Devizes, on or before May 15.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Bellingham Union.—The First District is vacant; area 6735; population 1314; salary £15 per annum. Also the Workhouse; salary £17 per annum.

Belper Union.—Mr. G. O. Siddall has resigned the Alfreton District; area 6012; population 7626; salary £27 10s. per annum.

Woodbridge Union.—The Eighth District is vacant; area 9413; population 1465; salary £32 10s. per annum.

APPOINTMENTS.

Chorlton Union.—Charles Holmes, L.R.C.P., M.R.C.S., to the Second District.

Deal.—Sidney Harvey as Analyst for the Borough.

Newmarket Union.—John R. Wright, M.R.C.S. Eng., to the Second District.

Preston Union.—John E. Garner, M.B., C.M., to the First District.

South Metropolitan School District.—John Bowes, L.R.C.P. Lond., M.R.C.S. Eng., to the Herne Bay School.

West Derby Union.—Robert S. Archer, B.M. and M.C. Dub., to the Garston District.

Wycombe Union.—Wm. G. Hayden, L.R.C.P., M.R.C.S., L.S.A., to the Twelfth District.

THE Yorkshire Association of Medical Officers of Health will hold their spring meeting on Tuesday, April 30, at the Town Hall, Easingwold. After the transaction of Association business, several papers will be read on sanitary subjects, and the members will afterwards dine together, by invitation of E. B. Hicks, Esq., of Easingwold.

HARVEY TERCENTENARY MEMORIAL FUND.—The amount subscribed to this Fund now exceeds £1400. Amongst the contributions recently recorded are two, of one hundred guineas each, from the Royal College of Physicians of London, and the Royal College of Surgeons of England. Further funds are, however, urgently needed in order to enable the Committee to close the subscription-list and give the necessary instructions for carrying out the intention of the subscribers.

SOUTH LONDON SCHOOL OF PHARMACY.—On Monday, April 15 (being the first day of the third term of the session), the Secretary, Mr. Baxter, presented the medals and certificates to the following successful competitors :—Medals—Senior Chemistry, Mr. Hutton; Junior, Mr. Davies; Materia Medica, Mr. Parker; Botany, Mr. Stoulham; Pharmacy, Mr. Richards. Certificates—Senior Chemistry, Mr. Barrow; Junior Chemistry and Materia Medica, Mr. Richards; Botany, Mr. Nicholson; Pharmacy, Mr. Pocock.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

W. G. H.—See the columns of the *Progrès Médicale.*

Pauperism in France.—Those who receive public relief in France are rarely able-bodied. The sick in mind or body, the infant, and the aged, form the great mass of recipients of relief. The *depôts de mendicité*, which include both infirm and able-bodied inmates, are rather houses of correction than institutions for the relief of pauperism. French legislation, like that of many other European countries, aims at the prevention of pauperism. Under the French system the object kept in view is to afford the humbler classes such indirect aid as may not only enable them, but induce them, to shift for themselves.

Weather Prognostics.—Although the name of Admiral Fitzroy will always be associated with the subject of weather telegraphy and storm warnings, this country was not the first to issue telegraphic weather intelligence, for in the year 1860, when the possibility of introducing such a system was being discussed here in London, the step had been taken in Holland at the instance of Professor Buys Ballot. But weather telegraphy on its grandest scale is carried out across the Atlantic.

A Young Doctor.—There is a saying of Bacon's to the effect that physicians should regard euthanasia (the word, of course, being used in an extended sense) as the great end of their art.

Lady Doctors.—It has been wickedly remarked that a lady who practises medicine commits two faults: she increases the number of doctors, and diminishes the number of women.

A Courageous Workhouse Master.—At a recent meeting of the Chelsea Board of Guardians, complaint was made that the master had neglected the instructions of the Board in respect to the taking out of the infant children in the workhouse for exercise. The master, however, in justification stated that "in his opinion the weather had been too cold and treacherous to send little children three or four years old out." The Board, after some discussion, rejected a motion disapproving of the master's conduct, and carried an amendment that "he deserved the thanks of the Board for not taking the children out during the inclement weather." The course the master pursued was both thoughtful and prudent.

Heroism.—Mary Ann Chapman, a nurse of the Borough Asylum at Leicester, has been presented with a medal from the Royal Humane Society, and a gold locket by the Asylum Committee, for rescuing a patient from drowning in a deep pit.

COMMUNICATIONS have been received from—

The Secretary of the Clinical Society; Dr. Gee, London; Messrs. Blackwood, Edinburgh; Dr. W. G. Harrison, Baltimore; Dr. Clement Godson, London; Dr. Octavius Sturges, London; Dr. N. T. Cooper, London; Dr. Heaman, London; Dr. J. W. Moore, Dublin; Mr. M. Becher, London; Mr. Howard Marsh, London; Dr. John Williams, London; Dr. E. Sutton, London; The Hon. Secretary of the Harveian Society; Dr. James Rogers, London; Major-General Feilding, London; Mr. W. W. Reeves, London; Mr. F. Craig, London; Mr. Teevan, London: Mr. W. Mitchell, London; Dr. Bucknill, London; Mr. Russell Steele, Hemel Hempstead; Mr. Frederick W. Lowndes, Liverpool; Dr. James Russell, Birmingham; Dr. Ferdinand E. Jencken, Kingstown, Ireland; Mr. W. E. Poole, London; Mr. John Chatto, London; Dr. Thomas Barlow, London; Mr. T. M. Stone, London; Mr. B. R. Wheatley, London; Dr. J. Mitchell Bruce, London.

BOOKS AND PAMPHLETS RECEIVED—

J. Norman Lockyer, F.R.S., Studies in Spectrum Analysis—R. E. Dudgeon, M.D., Rational Medicine—Rickman J. Godlee, M.S., F.R.C.S., An Atlas of Human Anatomy, part iv.—Annual Medical Report of the Madras Government Lyiog-in Hospital for the Year 1876-77—E. D. Girdlestone, Our Debt and Duty to the Soil—Andrew Buchanan, M.D., Physical Life—John Muter, M.A., F.C.S., A Key to Organic Materia Medica—Henry Alleyne Nicholson, A Manual of Zoology for the Use of Students, fifth edition.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Chicago Medical Journal and Examiner—Ecclesiastical Art Review—Canada Medical and Surgical Journal—Glasgow Medical Journal—Archives of Dermatology—Saint Louis Medical and Surgical Journal—Estudos Medicos.

APPOINTMENTS FOR THE WEEK.

April 27. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

29. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Mr. Mason, "Case of Congenital Deformity of Rectum" (living specimen). Mr. Thomas Bryant, "On the Surgical Treatment of Intestinal Obstruction; with Two Cases of Enterotomy."

30. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Mr. W. T. Thiselton Dyer, "On some Points in Vegetable Morphology."

May 1. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern; 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Obstetrical Society, 8 p.m. Specimens: Dr. Cory—Sections of a Uterus on the First Day of Menstruation, showing Desquamation of the Decidua; Section of Dysmenorrhœal Membrane. Dr. Poole—Fractured Fœtal Skull. Dr. Bryden—Case of Hand-behind-Head Presentation. Papers: Dr. Braxton Hicks, "Case of Cæsarian Section. Dr. Potter, "Case of Pregnancy complicated with Malignant Growth in Vagina and Rectum." Dr. R. Cory, "Membranous Dysmenorrhœa."

Royal Institution, 2 p.m. Annual Meeting.

Royal Microscopical Society, 8 p.m. Mr. A. D. Michael, "On New British Cheyleti."

2. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Harveian Society, 8½ p.m. Dr. Buzzard, "A Case of Blepharospasm." Mr. Edmund Owen, "A Case of Epithelioma of Rectum." Dr. John Williams, "Cases of Fibroid Tumour treated by Hypodermic Injection of Sclerotic Acid."

Royal Institution, 3 p.m. The Lord Rayleigh, "On Colour."

3. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal Institution, 9 p.m. Dr. William Spottiswoode, "Polarised Light: a Nocturne in Black and Yellow."

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 20, 1878.

BIRTHS.

Births of Boys, 1276; Girls, 1142; Total, 2418.
Average of 10 corresponding years 1868-77, 2328·0.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	918	855	1773
Average of the ten years 1868-77	778·2	727·5	1505·7
Average corrected to increased population ...	...	...	1611
Deaths of people aged 80 and upwards ...	...	...	59

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	6	3	S	2	17	...	1	...	6
North ...	751729	53	13	S	2	11	1	5	5	2
Central ...	334369	—	4	3	...	11	...	1	1	...
East	639111	S	4	S	2	41	1	3	...	1
South	967692	13	7	10	2	43	1	4	3	9
Total	3254260	80	31	37	S	123	3	14	9	18

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·614 in.
Mean temperature	51·5°
Highest point of thermometer	64·3°
Lowest point of thermometer	41·5°
Mean dew-point temperature	47·0°
General direction of wind	S.W.
Whole amount of rain in the week	0·73 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 20, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending April 20.	Deaths Registered during the week ending April 20.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2418	1773	64·3	41·5	51·5	10·84	0·73	1·85
Brighton	103923	44·1	57	41	61·3	43·6	50·2	10·11	1·18	3·00
Portsmouth ...	129461	28·9	79	50	61·2	44·5	50·8	10·45	1·06	2·69
Norwich	84620	11·3	52	29	65·0	40·5	52·1	11·17	0·51	1·30
Plymouth	73599	52·8	41	48	57·0	47·3	50·4	10·22	1·38	3·51
Bristol	206419	46·4	141	79	63·6	38·4	51·8	11·01	0·90	2·29
Wolverhampton ...	74240	21·9	39	31	62·3	38·3	50·1	10·06	0·90	2·29
Birmingham ...	383117	45·6	286	177	...	...	...	...	...	...
Leicester	121473	38·0	78	45	...	...	...	...	...	...
Nottingham ...	165267	16·6	102	69	64·6	35·8	51·0	10·56	0·45	1·14
Liverpool	532681	102·2	371	317	63·3	37·6	51·0	10·56	0·73	1·85
Manchester ...	360514	84·0	247	208	...	...	...	...	...	...
Salford	170251	32·9	124	60	65·5	40·0	50·8	10·45	1·10	2·79
Oldham	107366	23·0	85	79	...	...	...	...	...	...
Bradford	185088	25·6	126	84	62·8	41·0	49·6	9·78	0·32	0·81
Leeds	304948	14·1	206	128	64·0	42·0	50·9	10·50	0·28	0·71
Sheffield	289537	14·7	227	125	66·0	39·0	51·5	10·84	1·11	2·82
Hull	143139	39·4	111	55	...	...	...	...	...	...
Sunderland ...	112459	34·0	92	58	73·0	42·0	50·6	10·34	1·07	2·72
Newcastle-on-Tyne	144570	26·9	96	62	...	...	...	...	...	...
Edinburgh	222371	53·1	152	114	62·1	40·2	51·3	10·73	0·53	1·35
Glasgow	566940	94·0	372	322	59·7	43·0	51·8	11·01	1·15	2·92
Dublin	314666	31·3	167	180	65·1	33·7	52·9	11·61	0·71	1·80
Total of 23 Townsin										
United Kingdom	8373953	37·9	5669	413	73·0	33·7	51·1	10·62	0·83	2·11

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·61 in. The highest reading was 29·88 in. on Monday morning, and the lowest 29·31 in. on Saturday afternoon.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURE ON
THE INFLUENCE OF TRAUMATIC LESIONS

(1) ON THE DEVELOPMENT OF LOCALISED HYSTERICAL PHENOMENA; (2) ON THE DEVELOPMENT OF PARALYSIS AGITANS.

By PROFESSOR CHARCOT.

It is well known that certain affections, primarily dependent upon the presence of a diathesis, may occur as the result of a traumatic lesion, and may be localised in the part which has been subjected to pressure, contusion, squeezing, or other injury. This is certainly the case in articular rheumatism, whether acute or chronic, and in gout; and the connexion between traumatic action and the development of disease has been very fully investigated from the surgical point of view by Professor Verneuil and his pupils. It has not altogether escaped notice that certain local manifestations of hysteria may appear in the same way and under similar influences; for Brodie in 1837 wrote(a) as follows:—"It often happens that local symptoms of hysteria can be traced to the action of some external cause; and as the traumatic action in question is often very slight, and quite disproportionate to the effects produced, the latter are often only imperfectly understood and interpreted, and are hence taken for something very different from what they are in reality. It is no uncommon thing, for example, to hear a young woman, whose finger has been pricked or pinched, complain, shortly after the accident, of a pain which, starting in the fingers, extends upwards through the hand and forearm. The pain will probably be accompanied by convulsive movement of the muscles of the arm; or even by tonic contraction of the flexor muscles, so that the forearm is held permanently flexed—at any rate, so long as the patient is awake, for the spasm is generally relaxed during sleep. . . . A young girl, eleven or twelve years old, had pricked the index-finger of the left hand with the point of a pair of scissors. The accident was immediately followed by pain along the course of the median nevre. The next day contraction of the muscles came on, and the forearm was bent at right angles with the arm. Some days afterwards all the muscles of the hand and of the forearm became the seat of violent spasm, producing singular muscular movements. Then followed nausea and vomiting, and for two days everything she took was immediately rejected. As time went on the other limbs were affected in the same way, and it became impossible for the child to walk or even to stand. From time to time a spasm of the diaphragm occurred, which threatened suffocation; the jaw would become permanently closed from contraction of the masseter, or a sharp pain in the head would occur which resembled in character the pain of the pricked finger. Surgical intervention only increased the symptoms. Cure took place at the end of two years spontaneously."

A certain number of cases of a similar description have occurred in the practice of M. Charcot, two of which may be narrated here:—

Observation 1.—About the middle of the month of May, 1877, a young lady fell down and bruised the back of her right hand against a footstool. The blow was followed by considerable pain and some swelling; and two or three days later the little finger of that hand became permanently flexed; the contraction advanced successively to the other fingers, and the thumb was adducted to the index and ring fingers. From this time the fist remained permanently closed night and day, even during the most profound sleep. Contrary to the observation of Brodie, the flexion in several of the cases of this kind has been so strong that it has resisted all attempts to extend the joints, and it has been necessary to insert a roll of linen to prevent the nails from wounding the palm of the hand. Forcible extension has always been followed by aggravation of the contraction. So it was in the present case, and there was, moreover, complete anæsthesia of the right hand and of the lower half of the forearm, both on the palmar and dorsal surfaces. There was no antecedent history of nervous disease, and the patient was of a calm and equitable temperament. About two months after the accident, without any apparent cause, the hand all at once opened, and recovered all its movements.

Observation 2.—In April, 1877, a woman, aged twenty-seven, had the right forearm squeezed between a wall and a machine. The bruised parts became very painful, swollen, and ecchymosed, but there was no wound. A few seconds only after the accident the ring and little fingers of the right hand became partially flexed; and in the course of the next few days the three other fingers of the same hand were in their turn affected by contraction. The swelling and ecchymosis soon disappeared, but the pain and contraction continued, and about two hours after the accident the patient entered the hospital. At that time the hand was held rigidly in what may be called the writer's position—*i.e.*, the first phalange semi-flexed, the second and third extended, and the thumb somewhat stiff; moreover, the wrist was rigid. The arm, forearm, and hand were the seat of constant pain, and from time to time became spontaneously worse. The pain became very severe indeed whenever the patient attempted to move the arm, or if the least pressure was made on any part of the limb. It was especially severe if the anterior surface of the forearm was touched, and particularly if pressure was made along the course of the median nerve; if persisted in, such contact brought on a kind of nervous attack, which several times led to loss of consciousness. There was no redness or swelling of the painful parts. The patient was placed under chloroform, but no cause for the acute pain could be found. The contraction still persisted in a considerable degree, whilst the patient was profoundly under the influence of the anæsthetic; the fingers and wrist could indeed be flexed or extended, but when left to themselves they at once resumed their habitual position.

The pain and contraction had persisted without the least modification till the beginning of August, when one day both symptoms suddenly ceased and were replaced by paralysis of motion and sensation affecting the whole limb, the muscles of which were now completely flaccid. Very shortly afterwards the lower limb of the same side became paralysed; the loss of power was not quite so complete as in the upper limb, but the anæsthesia was absolute. This led to a careful investigation of the sensation of all parts of the body, and it was then discovered that there was complete right hemianæsthesia, both of general and special sensation. There was also marked pain in the right ovarian region, which had been absent up to that time.

From that time many other hysterical symptoms successively showed themselves; one day it was extreme dyspnœa threatening suffocation, from which the patient suffered; another day there were pains starting from the præcordial region and shooting towards the left shoulder; or it might be a dry convulsive cough, violent pain in the left temple, or retention of urine. For more than a month the patient vomited after every meal, but without losing much flesh. At no time did she suffer from regular hystero-epileptic attacks. It is important to add that, though nervous and irritable, she had never manifested any signs of hysteria prior to her accident. She remained in much the same condition till the end of October, when she was lost sight of.

The principal facts, then, relating to local traumatic hysteria may be summed up as follows:—Soon after the occurrence of the injury cutaneous hyperæsthesia of more or less intensity may be noticed; and this may be associated with deep-seated pain over the course of nerves, or sometimes in one or more of the joints of the limb; and more or less marked permanent contraction of muscles is generally present. These symptoms rarely remain limited to the seat of the injury, but, as a rule, they extend rapidly to the neighbouring parts, and may even involve the whole limb. Once set up, they often persist, without appreciable change, for several weeks, months, or even years. The slightest pressure or rubbing, or the least movement, increases the pain and contraction; these may, indeed, increase spontaneously without any external cause. At times, but more especially during the course of these spontaneous exacerbations, swelling, redness or increase of temperature may appear in the affected parts. The hyperæsthesia and pain generally give place sooner or later to more or less complete anæsthesia. The muscular contraction may still persist, but rarely in the same degree as before; and it may in its turn be replaced by paresis, or even by paralysis, with flaccidity of the muscles.

The symptoms thus called forth by a mechanical cause are

(a) "Lectures Illustrative of certain Local Nervous Affections."

most often the first signs of the hitherto latent hysterical diathesis, and, as a rule, they are for a long time the only sign of its presence. For both these reasons, we may look upon them as the equivalents of those localised nervous symptoms the occurrence of which constitutes one of the most remarkable characters of "infantile hysteria." Thus it is no uncommon thing to see in young girls of ten or twelve years of age a nervous cough, or spasmodic torticollis; or it may be a permanent contraction of the muscles of one limb, or a painful joint simulating arthritis or hip-joint disease. Such symptoms may exist entirely alone, and may disappear suddenly without leaving the slightest trace behind them. This disappearance, however, is often only temporary; and months or years afterwards, when the symptoms have been perhaps altogether forgotten, we may find that the establishment of the sexual functions is accompanied by the onset of "ovarian hysteria," with its *cortége* of (now almost classical) phenomena—viz., hemianæsthesia of general and special sensation, ovarian pain, peculiar convulsive attacks, psychical troubles, etc. In a few cases this "generalised hysteria" is added to the local phenomena without intermission, and the relation they bear to one another is then fully evident.

What has just been said of localised infantile hysteria may be considered true of localised hysteria depending upon a mechanical cause. Traumatic lesions rarely indeed provoke symptoms of this description, except in young subjects who as yet exhibit no decided symptoms of general hysteria. As soon as "ovarian hysteria" is once fully developed, mechanical lesions no longer seem to produce the same effect.

We are all familiar with the difficulties which may occur in the diagnosis of hysteria, whether general or local. These difficulties are not lessened, but rather increased, by the fact that the symptoms are traceable to a traumatic source. It is all the more important, however, to arrive at a correct diagnosis in the latter case, because, should they be mistaken for signs of arthritis, hip disease, etc., the error will probably lead to active treatment of some kind, which will almost always be out of place, and very generally directly harmful. Observation has demonstrated, in fact, that the application of blisters or the cautery, the use of galvanisation or of faradisation, prolonged immobility, attempts at reduction of every kind, or section of nerves or of tendons—all tend to increase the mischief, and are sometimes followed by the most disastrous results. To speak generally, it is the consideration of the general state which ought almost exclusively to be our guide in the treatment of the local phenomena; and of all methods the expectant is the one which is most likely to succeed. *Apropos* of this part of the subject, we may quote the words with which Brodie in his work already cited commences his discussion of the surgical treatment of local hysterical phenomena. He says:—"The advice I have to give you will most frequently be negative. It is not so much a question of knowing how to act as of knowing how to abstain from acting."

2. It is not only in hysteria that the localisation of pathological phenomena may be determined by the action of a mechanical cause. The same thing may occur in other diseases which, like hysteria, belong to the provisional group of neuroses. This is sometimes the case, for instance, in paralysis agitans. M. Charcot described the case of a lady whose left thigh had been violently crushed by falling out of a carriage. Some time afterwards severe pain occurred in the limb along the course of the sciatic nerve, and this was shortly followed by tremor of the whole limb. At first merely temporary, the trembling later on became permanent and gradually extended to the other limb. M. Charcot also exhibited two other patients whose history was somewhat similar. The first of these, a woman aged fifty-five years, in the year 1873 sprained her left foot, with resulting swelling, ecchymosis, etc. A short time after, the swelling and difficulty in walking still persisting, she discovered that her left foot trembled. The trembling was confined to the left lower limb until 1876, when the hand of that side became affected. The tremor is now very marked in the limbs of the left side, and it is beginning on the right side. The patient, in addition to the tremor, presents all the other characteristic symptoms of paralysis agitans—immobility of the features, rigidity of the neck, unchanging expression, inclination forwards of the trunk, and tendency to fall forwards or backwards.

The second case was that of a woman, seventy-two years old, who for four years has presented the classical symptoms of paralysis agitans limited to the right side of the body. Contrary to rule there is very marked tremor of the tongue and lower jaw. This latter symptom came on last September under the following circumstances:—The patient, in gaping, dislocated the lower jaw; the luxation was immediately reduced without difficulty. From that time the jaw began to tremble, and at the same time her saliva began to flow involuntarily from the mouth.

It is scarcely necessary to offer any commentary on these cases.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

LOCALISATION OF CEREBRAL DISEASE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.

LECTURE III.

(*Continued from page* 457.)

B.—LESIONS OF THE SENSORY REGIONS.

I WILL now direct your attention to the subject of lesions of the sensory regions of the cerebral hemispheres. That the cerebral hemispheres are the seat of sensation or—in order to avoid disputes as to the meaning of sensation—of sensory perception, is abundantly evident both from the results of experimental physiology and from the facts of clinical medicine. And that the regions of the brain we have already considered, viz., the fronto-parietal regions, may be disorganised without causing loss of sensory perception, I consider to be demonstrated both by the facts of experiments on monkeys, and by the clinical evidence which I have laid before you. Some statements which have been made to the contrary, based on experiments on dogs and rabbits, are, as I hope to be able to show you further on, susceptible of a totally different interpretation, and one in harmony with what I have said respecting monkeys and men.

It is clear, therefore, that if the centres of sensory perception are localised in the hemispheres—and this, I think, no one will dispute—they are to be sought for in those regions yet remaining to be considered, viz., the occipital and parieto-temporal lobes. That this is so, we should be led to believe from anatomical as well as from other considerations. For, though I do not place much reliance on mere anatomical investigation as a means of determining the exact course and destination and various connexions of the cerebro-spinal tracts, yet, so far as main features are concerned, it furnishes us with substantial bases for other lines of research. It has been established, I think, beyond doubt, that the posterior strands of the crus, and their connexions with the brain and the cord, are more especially the paths of centripetal or sensory impressions. The researches of Meynert and others would seem to show that these tracts are connected with those parts of the cortex which we are now considering. Beyond these general indications, however, I have considerable doubts as to the results of anatomical localisation. But in addition to general anatomical indications, we have experimental and pathological evidence as to the exact position of the paths which convey sensory impression to the cortex.

The experimental evidence has been furnished by the researches of Veyssière,(a) which have been repeated and verified by Carville and Duret, Raymond, and others. These experiments show that when section is made of the posterior part of the internal capsule, that part of the "projection system" which lies between the optic thalamus and lenticular nucleus of the corpus striatum, there ensues a condition of hemianæsthesia of the opposite side of the body, frequently associated, temporarily however, with some degree of motor paralysis; whereas when the anterior part (two-thirds) of the internal capsule—that part lying between the caudate and lenticular nuclei of the corpus striatum—is divided, motor paralysis, unaccompanied by sensory paralysis, or if so, functional and fleeting, is the constant result.

The facts of human pathology are no less precise. Motor

(a) "Sur l'Hémianesthésie de Cause Cérébrale," 1874.

hemiplegia is invariably the result of destructive lesion of the anterior two-thirds of the internal capsule, which may be accompanied temporarily by hemianæsthesia, if the lesion be such as to cause pressure, or functional disturbance of the posterior third. And we have now a tolerably large body of evidence to show that destructive lesions limited to the posterior third of the internal capsule cause cerebral hemianæsthesia.

The first observations relative to this localisation were made by Türck(b) in 1859; and since then, Charcot, Magnan, Bourneville, Rendu, Raymond, Pierret, Decaudin, Pitres, Boyet, etc., by their observations and researches, have established the pathology and symptomatology of this affection in a manner which leaves little to be desired.

Since the publication of Türck's four cases, in 1859, of the association of hemianæsthesia with lesion of the posterior part of the internal capsule, there have been recorded at least twenty others, all establishing the same fact.(c)

The symptoms of cerebral hemianæsthesia, which correspond with those of that strange and, as regards its therapeutics, mysterious affection termed hysterical hemianæsthesia, are such as to clearly differentiate it from anæsthesia of spinal or mesencephalic origin. The special diagnostic feature is, that all the forms of sensibility, general or special, are impaired or abolished; the organs of sense whose nerves take origin above the medulla oblongata being equally affected with those which arise here. Whereas in mesencephalic anæsthesia, in addition to the usual association of alternate paralysis, sight and smell remain unaffected.(d)

In cerebral hemianæsthesia, tactile sensation is affected unilaterally up to the middle line of the face and trunk; there being more or less complete insensibility to touch, pain, temperature, and also abolition of muscular sensibility, with complete retention of electro-motor contractility. The conjunctival, nasal, buccal, cutaneo-mucous membranes are also anæsthetic. The viscera, however, remain sensitive, and deep pressure, as on the ovary, etc., is felt as before. In hysterical hemianæsthesia there is usually hyperæsthesia in the ovarian region, and frequently also the condition termed by Charcot hystero-epilepsy. Taste, smell, and hearing are deficient or almost entirely abolished in a similar manner on the one side. As regards vision, the symptoms are especially noteworthy. The eye on the anæsthetic side is rarely rendered completely blind. There is rather a condition of amblyopia or diminution of the acuteness of sight, and a very remarkable contraction of the field of vision, more especially as regards the perception of colour. Landolt has found that the field of colour-perception becomes contracted in a manner corresponding to the relative extent of the colour-field in the normal state. Normally the blue field is the largest, next the yellow, orange, red, green, and last in order the violet, which is perceived only by the most central parts of the retina. In cerebral hemianæsthesia the sensibility for violet first disappears, then for the green, and later for the orange. Sensibility for yellow and blue may still persist; but in the higher degrees of anæsthesia all colours merge into a uniform sepia tint. Landolt(e) has lately pointed out another important fact, viz., that the affection of vision is not altogether unilateral, but that the eye on the side of lesion participates, though to a less extent, in the anæsthesia.

It is further noteworthy that in this form of amblyopia, ophthalmoscopic examination reveals no organic lesion or degeneration of the optic nerve or retina, in the first instance at least; any atrophic changes which may show themselves subsequently being the consequence, and not the cause, of the blindness.

It is clear from these facts that the older theories respecting the decussation and distribution of the fibres of the optic tracts, and the representation in each hemisphere, only of the corresponding parts of both retinæ, are untenable. If this were the case, we should have, as the result of a central lesion, a hemiopia of both eyes; whereas we have not a hemiopia, but an amblyopia, which, though to some extent bilateral, is most marked on the side opposite the lesion.

(b) *Sitzber. der kais Acad. der Wissensch.*, Band xxxv.; 1859.
(c) For references, etc., see Grasset, "Localisations dans les Maladies Cérébrales," Montpellier, 1878.
(d) See Couty, "De l'Hémianesthésie Mésocéphalique," *Gaz. Hebd.*, 1877, page 30, *et seq.*"
(e) *La France Médicale*, February 3, 1877.

Yet we know that hemiopia is not an uncommon symptom in connexion with intracranial disease; but from the facts mentioned we may conclude that in such cases the lesion must be situated below the cerebral cortex.

The scheme of the optic tracts and their relations given by Charcot enables us to give a satisfactory explanation of these facts. Each optic tract contains two sets of fibres—the outer, passing to the eye on the same side; the inner, decussating with their fellows of the opposite side in the chiasma, and passing to the corresponding part of the opposite eye. The fibres which do not decussate in the chiasma, undergo decussation in the corpora quadrigemina, and pass on with the fibres which have done so to the opposite hemisphere, so that each hemisphere is brought into relation with the whole of the opposite eye. This scheme does not represent the bilateral relation of each hemisphere to both eyes, which is indicated by Landolt's researches; but we can account for this by the bilateral association in the lower ganglia. It is easy to see that a lesion of the one optic tract will cause bilateral hemiopia; and that a lesion in the region of the corpora geniculata, or posterior part of the optic thalamus, will have a similar effect, as in a case reported by Hughlings-Jackson.(f) We may also have cross amblyopia and bilateral hemiopia, as in a case reported by Gowers,(g) but as there was no necropsy, the position of the lesion is only a matter of speculation. I hope to be able to show you that these clinical observations are in harmony with the results of my experiments on monkeys.

It is evident that the lesion which causes hemianæsthesia, being in the medullary fasciculi, produces this effect, not by destroying the centres of sensory perception, but by causing solution of continuity of the paths of centripetal impressions; and the question is, whether the sensory fibres, like the motor fibres of the internal capsule, are distributed to localisable areas in the cortex. On this point, experimental physiology is, I think, in some respects at least definite enough; though it must be admitted that the same cannot as yet be said of clinical medicine and pathology. To these let us now turn.

Lesions of the Occipital Lobes.—I will first direct your attention to the occipital lobes, and compare the results of experimental investigation with the facts of disease of these regions. In reference to experimental investigation, we must rely mainly, if not exclusively, on experiments on monkeys; as in other animals, these lobes are not specially differentiated and developed. I have found, as the result of numerous experiments, that electrical irritation may be applied to the occipital lobes without producing any objectively discoverable reaction. Neither does destruction or complete removal of these lobes, singly, or on both sides, cause any appreciable sensory or motor disturbance. Animals so mutilated continue to see, hear, touch, taste, and smell, and retain all their powers of voluntary motion. The results of destruction, like those of irritation, are, therefore, mainly negative, and do not succeed in throwing very clear light on the functions of these regions. In one or two instances, I should mention that there seemed to be some affection of vision; but in these cases, I found that the lesion had extended beyond the occipital lobes, into the angular gyri; while in those in which the lesion did not extend beyond the occipital lobes, no such symptoms occurred. As a rule, the animals rapidly succumbed, with one exception; and I also observed that, contrary to the usual effects of destructive lesion of other parts of the hemispheres, the animals refused to eat: an occurrence which, from my numerous and close observations of the effects of destruction of every other part of the brain, I regard as in some way causally related to this lesion.

I admit that the inference as to causal relationship is considerably weakened by the fact that, in one of the animals in which I had removed both occipital lobes, the appetite for food returned after five days' abstinence. I have, however, attempted, whether successfully or not, to explain this, and propounded the hypothesis that the occipital lobes are specially related to the visceral sensibilities, and are the anatomical substrata of the correlated feelings which form a large portion of our personality and subjectivity. Whether the hypothesis is well founded or not, I leave to further investigation; but one thing is, to my mind, clearly established

(f) "A Physician's Notes on Ophthalmology" (*London Hospital Reports*, vol. viii., part ii., 1875).
(g) "On Athetosis" (*Medico-Chirurgical Transactions*, vol. lix., case 7).

by these experiments—viz., that lesions of the occipital lobes, whether unilateral or bilateral, cannot be regarded as the direct cause either of motor or special sensory affections; and, therefore, I would at once discard the anatomical views of Meynert, Huguenin, and others, which would place the central terminations of the optic tracts in the occipital lobes. They are not, I think, in harmony either with physiological experiment, or, as far as I can discover, with the facts of human pathology.

Though many speculations exist, to some of which I shall refer, as to the symptoms dependent on lesions of the occipital lobes, it does not as yet appear, as the following cases will show, that there are any symptoms, attaching to disease of these lobes, so definite and constant as to establish any direct causal relationship between them, or indicate the functions which these regions subserve. Lesions of the occipital lobes are, as a rule, *latent*.

M. Vauttier(h) records a case of yellow softening of the right occipital lobe, and, to a larger extent, of the internal aspect of the left (quadrilateral lobule). No affection of motion or sensation existed; and, with the exception of considerable hebetude, there were no other symptoms of cerebral affection.

Pitres(i) relates a case, in which, in consequence of a fall on the head, an abscess, the size of a billiard-ball, formed in the postero-inferior aspect of the brain. There was no paralysis of motion or sensation, and mental obtuseness was the only indication of cerebral lesion.

Sir William Gull(k) has recorded a case of abscess of the left posterior lobe, also without any objective symptoms.

A similar case, in which the abscess was situated in the right occipital lobe, is recorded by Rodocalat.(l)

Other cases, reported by Bleynie, Hébread, Martinet, Merriman, Ogle, Parrot, Ballinger, etc., are cited by M. Pitres in his before-mentioned work,(m) to which I would refer the reader.

It may be said, in reference to these cases, that the lesions being unilateral, and of slow growth, the absence of symptoms may be explained by functional compensation by the same or the opposite hemisphere. There are, however, some cases on record of traumatic lesions of the occipital lobes, also negative as regards objective symptoms.

Marcé(n) records a case of contusion, with effusion into the meninges, and softening of the cortex in the right occipital lobe, without any symptom as regards sensation or motion.

In addition to Vauttier's case already mentioned, a very important case of bilateral lesion of the occipital lobes has been put on record by Sestrié.(o) In Sestrié's case there was an abscess in each occipital lobe, without any objective symptom; although the patient's memory was somewhat defective, there was nothing very remarkable in his mental condition.

Leger(p) relates a case of tumour invading both occipital lobes, in which, beyond general mental obtuseness and headache, there were no objective symptoms. Sight was not impaired in this case, notwithstanding the existence of a cerebral tumour in this region. Except, therefore, as regards the fact of latency of lesions of the occipital lobes, these cases do not give us much positive material for generalisation.

Joffroy(q) attempts to establish a relation between lesions of the occipital lobes and the occurrence of acute sloughing of the sacrum; and thinks that the occipital lobes may be trophic centres. He quotes three cases in support of this hypothesis. One, a case of general paralysis, in which, though the cerebral lesions were not confined to the occipital lobes, yet the sacral sloughing was greater on the side opposite the lobe most affected. In the other two there was only slight unilateral lesion: in the one case, a small focus of hæmorrhage; in the other, of softening, with sloughing on the opposite side of the sacrum.

But, in reference to this hypothesis, it needs only to be remarked that sacral sloughing occurs in connexion with hemiplegia where no affection of the occipital lobes has been detected; and lesions of the occipital lobes are not even commonly associated with such results. Cases have occurred, and been carefully examined, in reference to this point since the publication of M. Joffroy's views, without confirming them. One such case is reported by Sazic,(r) and another by Dreyfus-Brisac.(s) These may be taken in conjunction with the other cases mentioned; for it is not likely that such a serious objective affection would have been overlooked had it actually existed.

In connexion with softening of the occipital lobes, M. Charcot has occasionally noted, in addition to headache, etc., cutaneous formication and similar subjective sensations, but no true anæsthesia.

Hughlings-Jackson and Bastian are of opinion that disease of the posterior lobes is more frequently associated with mental derangement than disease of the anterior lobes or other parts of the brain. Hughlings-Jackson goes somewhat further, and thinks that such derangements, particularly "defective perception," are more commonly seen when the right side is affected, and that irritative lesions here give rise to coloured vision and other subjective ocular spectra. These are not put forward, however, as other than hypotheses, and I agree with Dr. Bastian when he says—"More extended observations, however, seem needed before we can safely arrive at a positive conclusion on this difficult subject."(t)

Even on my own hypothesis as to the relation between the occipital lobes and the organic sensations, I should regard it as highly probable that lesions of the occipital lobes should cause profound mental disturbances. For, if our feelings are our chief motors, it might readily be allowed that lesions of the anatomical substrata of such an important element of our feelings and emotions should lead to mental derangement.

But, not to indulge further in speculation, I think we have to admit that up to the present the facts do not enable us to generalise with certainty as to the positive effects of lesions of the occipital lobes. It is clear, however, from the negative effects of extirpation or disease that we cannot place in the occipital lobes the central terminations of the fibres of the internal capsule which convey impressions of special sense to the cortex.

(To be continued.)

(h) "Essai sur le Ramollissement Cérébral Latent," 1868.
(i) "Lesions du Centre Ovale." (k) *Guy's Hospital Reports*, 1857.
(l) *Bull. Soc. Anat.*, 1870, page 289. (m) *Op. cit.*, page 134.
(n) *Bull. Soc. Anat.*, 1854, page 295. (o) *Ibid.*, 1833. (p) *Ibid.*, Nov., 1876.
(q) Soc. de Biologie, *séance* December 4, 1875.

(r) *Bull. Soc. Anat.*, December 15, 1876. (s) *Ibid.*, March 23, 1877.
(t) "Paralysis from Brain Disease," page 289.

THE PARIS INDIGENTS.—Under this title the *Progrès Médicale*, April 19, furnishes a summary of the triennial census taken in 1877 by the Assistance Publique, the object being to ascertain the number of indigent persons registered and the proper distribution of assistance in the twenty arrondissements. According to the returns, the total number of individuals relieved at their own homes in the three years terminating in 1877 amounted to 113,317—viz., 23,026 men, 38,477 women, 25,607 boys under fourteen, and 26,207 girls under fourteen. Among these were 43,662 "heads of families"; but this term is used in a somewhat elastic sense, since it embraces 6241 unmarried persons, 2156 abandoned wives, 15,366 widowed persons, and 693 unmarried mothers. The number of indigent married "heads of families" is 17,841. The number of the indigents has slightly diminished since the census for 1874.

IODINE INJECTION OF THE KNEE-JOINT.—Dr. Orlow states (*St. Petersburg Med. Woch.*, April 6), that he has performed this operation in ten cases—in eight on account of chronic serous effusion, and in two for purulent collections. In none of them did any ill effect result, the patients being at once dismissed after the injection had been made. Two of the cases occurred in children, and the others in persons aged from twenty-six to forty-five. Seven were females, and three males. A trocar (about double the thickness of an exploratory trocar) was employed, the puncture being made at the outer side above or below the patella, according to the amount of distension, anæsthetics never having been employed. The discharged fluid varied in amount from four ounces to four drachms. The injection consisted of one drachm of the tincture of iodine of the Russian Pharmacopœia and three drachms of water. Some portion of this flowed out again after two or three minutes, and that which remained in the joint excited but slight temporary irritation, so that the patients were able to leave the dispensary on foot. The inflammatory condition of the joints was rapidly ameliorated, and during eight months no relapses have taken place, the only after-treatment resorted to having been closure of the orifice of the puncture by adhesive plaster.

ORIGINAL COMMUNICATIONS.

INDIGENOUS LEPROSY.

By GEORGE GASKOIN,
Surgeon to the British Hospital for Diseases of the Skin.

In a previous number of the *Medical Times and Gazette* (January 26, 1878), I quoted certain cases of elephantiasis which had happened of late years in this country, and I added something of my own which served in a measure to show how naturally I am led to the conclusion that leprosy, in some one or other form, is still existing in the community. It follows that we do not well to dismiss it from our thoughts in the course of our professional avocations. Nor can we be sure that leprosy is not still active among us as a dyscrasia. True it is, that general opinion, with little consideration or inquiry, has stamped it as a specific disease; and thus observation has been blunted, and we have been blind to every fact not in accordance with this assumption. We think that it is departed from the land; and once gone, that it has left no remainder behind.

As to this point, we had better acquaint ourselves with what has been written on the subject by Dr. John Adams, at the beginning of the century, as found in his work on "Morbid Poisons," A.D. 1806:—"It may be affirmed," he says, "that the disease, not being contagious, does not come within the description of a morbid poison. *This is probably true.* But in this country, where it is little known, it has been often confounded with other complaints. A correct description is also the more necessary of a disease that so rarely appears, for that it does sometimes appear is no less certain. Dr. Baillie has introduced me to a case, and informs me of another that occurred to him some years ago. (a) Mr. Pearson also tells me that he has met with a case."

Here, then, we find Dr. Adams remaining under the full persuasion that leprosy like that of Madeira is still existing in Great Britain, and that something that belongs to it is distributed among other diseases. And this is probably the case with us now. The existence of leprosy has habitually no place in our thoughts. We look on it as an exotic which need give us no concern.

How different is it with dyscrasiæ which are or have been recently dominant! I do not refer to the "medical constitution," but to the habit of mind that is generated by the rarity or absence of any complaint. Take the example of gout. What a number of affections we refer to it, and even where no gout is traceable in the family: for we do not always bring it to the test of inquiry; if we did so, there would be a large remainder to be accounted for. Some word, too, might be said of scrofula.

But let us allow, *en passant*, that there is no other dyscrasia in this country so worthy to be compared to leprosy as the chronic rheumatic arthritis or rheumatic gout, and that the two diseases have much analogy, and also much in common. It is not, then, without excuse, or at least beyond explanation, that we have referred to other heads of disease those things that appertain to leprosy. No doubt in contraction of muscle, in contracted tendon, in gangrene and sphacelus, in benumbed nerve, in dyscromia, there occur among us many manifestations which, in a land more infested with leprosy, would pass for suspected, if not confirmed; but so long as we were under the spell which decided for us beyond appeal that leprosy could not happen in England, as was very much the case in the middle of the century, even so long we refused to admit any evidence, or amount of evidence, that elephantiasis was present in the land.

Thus, in the year 1852, there occurred in Guy's Hospital a case of elephantiasis Græcorum in very large proportions and of the most undeniable character, but Dr. Addison, the first dermatologist of his day, was so much under the dominion of the idea that leprosy could not happen in England, or perchance was so much in awe of the existing prejudice, that he recorded the case as spurious—a verdict which posterity will scarce confirm so long as the evidence remains. And in other instances we shall observe an equal hesitancy.

It is well to direct attention to the excellent commentary of Dr. Samuel Wilks upon this case, as found in *Guy's Hospital Reports*, A.D. 1859.(b) "It is probable," he says, "that though it prevails as a common disease only under certain more favouring circumstances, yet that no country is absolutely free from elephantiasis." The case reported on is that of an Irishman born at Cork, but long domiciled in London. Whether we read the history of the case as given by Dr. Gull, or study the drawings and models preserved in the Museum, we may be convinced there never was an example of elephantiasis more unmistakable than the above.

That I may not appear too forward on this subject, I will mention in what degree I am supported by a certain shade of opinion abroad. There is a kind of ulcer called the penetrating plantar ulcer, which has attracted some attention, especially in France, and it has been described by Nélaton and many others. It is an ulcer which I have certainly met with in this country. Only within a few years, and not at all in the first period of my observation, this kind of ulcer has been referred to the category of lepra anæsthetica.(c) In like manner I am inclined to insist that certain cases reported in England under the head of gangrene of the skin (and notably by Brodie) are no other than forms of leuce; and, in fact, such cases in France have been described as such, and the term gangrene is quite unequal to comprise their phenomena. But I would go much further than this, and say that in other cases of spontaneous gangrene, such as that related by Mr. Solly in the *Medico-Chirurgical Transactions*, vols. xxii., xxiii., I am not averse to the view that something of the same principle is at work, or of the same inheritance. In the limitation of races and families it is probably active still. I might also refer to those "dead feelings" which are so frequently inherited and shared by many of the same family—they are not irrelevant to this issue; from all which I would enforce this lesson: that we should widen rather than contract the field of observation and inquiry, and not allow ourselves to be shut up in any pedantic definition.

I am indebted to the kindness of Dr. S. Wilks for giving me further details of a case he mentioned to me in conversation some few years since, and which, at the time I first heard of it, I concluded to be no other than leprosy. The woman who was the subject of this complaint was twenty-eight years of age. Her first application for relief was made to a well-known oculist, as she was nearly amaurotic. At the same time she suffered from bad neuralgic pains in the face, and it was imagined her brain was diseased. She then came under the observation of Dr. Wilks, who took notice of the state of her face and hands, and entered the case in his note-book as one of elephantiasis Græcorum. "Her whole appearance," he says, "was most remarkable: she looked like a stuffed figure, from apparently great thickening of the skin and subcutaneous tissue. Her countenance was truly hideous, and her features, her mother said, were so wholly altered and deformed, 'it was very fortunate she could not see herself.'" The nose was large and broad, and the lips projected like those of a negress. Her ears also were thickened and prominent. She wore enormous gloves, and her fingers were like nothing else than a bundle of sausages. The patient died in a comatose condition some seven years from the commencement of the disorder. This instance was wholly indigenous.

It occurs to me here to mention a case which came before me in the year 1873-74. A girl with a specially dark skin, but altogether of English blood and antecedents, appeared in my clinique. At that time she was bordering on thirteen years of age. She had large liquid eyes, and a vast development of the upper lip, somewhat beyond what is ever seen in scrofulous subjects. The patient was otherwise not badly made nor ill-shaped. She evidently belonged to the lower class. This girl exhibited to me in the right leg that class of spotted morphœa which is, or was, known in the school of Guy's as vitiligoïdea plana. It was indeed a full and excellent specimen of this affection. The spots were pretty large and closely set, and the complaint reached as far as the knee. There was also some swelling of the foot on the same side, with soreness. The girl informed me that she had been an inmate of one of the metropolitan hospitals (I believe it was St. Thomas's), where she was treated for elephantiasis. At that time there were blisters and sores between the toes, and more swelling was present in the foot than when she was under my care. At the same time that I had this

(a) See page 264, second edition, advertisement to paper on "Leprosy in Madeira."

(b) Description of some wax models illustrating elephantiasis.—*Ibid.*

(c) Poncet, *Gaz. Hebdom.*, 1872; Eslander, *Deutsche Klinik*, 1871, No. 17.

patient under view, I was also in attendance on a young woman from the West Indies, who was then in an advanced phase of leprosy, and I had an opportunity of observing the same condition of vitiligoïdea plana in the legs of both patients. The appearance was absolutely identical.

If I finished here I might be accused of overlooking two interesting papers in the *Clinical Society's Transactions*, vols. iii. and v., under the head of "Lepra Anæsthetica." Both of them are of an interesting character. The first of these, from the hand of Dr. Buzzard, is a fine clinical study. I am convinced I shall not be found singular in regarding the case related as being one of indigenous leprosy. The second paper, full of judicious remarks, is by the lamented Dr. Anstie. It contains a short but sufficient account of a hawker in Westminster, who was well known about the period of 1869 and some time before; and this case also must be claimed as indigenous.

CASE OF PSORIASIS TREATED BY AN OINTMENT OF CHRYSOPHANIC ACID AND BY PHOSPHORUS PERLES.

By RUSSELL STEELE, L.R.C.P.E., M.R.C.S.

Frederick H., aged fifty-three, engineer in a paper-mill, a strong, hearty-looking man, first came under my care on January 16, 1878, suffering from psoriasis occurring in large patches, situated on the backs of both forearms and elbows. There was also one patch on the right hip. No history of syphilis. He stated that the disease had existed nearly eight years, and had baffled all treatment. Having recently read of Dr. Balmanno Squire's successful treatment of this disease, by means of an ointment of chrysophanic acid and phosphorus perles, I determined to give it a trial.

He was ordered to take one-thirtieth part of a grain of phosphorus (contained in the usual phosphorus perle) three times a day directly after food, and to rub into the patches, every night and morning, an ointment containing two drachms of chrysophanic acid dissolved in one ounce of lard.

January 19.—He says he feels better. The eruption does not look so bright, and seems clearer in the centre of each patch; not so scaly. The finger-nails are dyed of a reddish-brown colour. There is a slight reddening of the skin for a little distance round the patches. The clothes are stained a dirty purple colour.

26th.—The patches are looking wonderfully better; no scaliness; skin in centre of most of the patches smooth and of natural colour. He says the eruption has not looked so well for a long time, and is greatly pleased with his progress. To take two perles three times a day. Skin reddened very much over both arms.

February 4.—He says that on taking two perles, as ordered, epigastric pain is caused, so he is only to take one perle three times a day, and to continue the ointment. With the exception of two patches situated on the skin over the right and left elbows, all the other patches have vanished except their actual margins, which are slightly raised, and still a little scaly.

9th.—He came to see me to-day for a fresh supply of ointment and perles. He says that notwithstanding his having experienced epigastric pain after taking two perles at a dose, he determined to try again, and is now able to take them without discomfort. The patches on the elbows are rapidly disappearing. Only the actual margins of the other patches remain, and these are beginning to get broken and dotted.

16th.—Still to continue taking two perles at a dose, and to go on with the ointment. Getting better. No fresh spots of eruption.

23rd.—To use the ointment with only a drachm of the chrysophanic acid to the ounce of hot lard. The margins of the patches on the right arm are completely broken up, and exist only as widely-scattered points, those on the left arm disappearing more slowly. To take three perles for a dose, but to stop if any pain at the epigastrium is caused by them.

March 2.—There are merely a few scattered points of eruption remaining on the right arm. The eruption on the left arm is rapidly vanishing. The perles are taken without discomfort.

16th.—The eruption on both arms has very nearly all gone. Just a few scattered red points, free from scaliness, to be seen. To take three perles twice a day. To continue ointment.

30th.—All the eruption has disappeared. To suspend treatment.

Queen-street, Hemel Hempstead.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CHARING-CROSS HOSPITAL.

INTESTINAL OBSTRUCTION—RIGHT INGUINAL COLOTOMY.

(Under the care of Dr. SILVER and Mr. BARWELL.)
[Reported by H. C. Rowbotham, Assistant Surgical Officer.]

H. H., aged forty-two, a painter, a well-developed man, was admitted into the hospital on February 12, 1878.

Previous History.—Patient stated that his health had always been good. He had had a chancre when twenty years of age. His wife had had no children, but had miscarried several times. During the last few years patient had suffered from severe griping pains in the epigastric region; these he attributed to lead colic. He has not had wrist-dropping or any other form of paralysis. With the exception of the colic, he had never had any intestinal trouble; had never been subject to constipation, his bowels being opened usually twice daily, and the stools of the normal form and consistence. There has not been any discharge or hæmorrhage from the bowel, except occasional slight hæmorrhage from external piles. He had not lost flesh, and his appetite was always good until a month previous to admission. There is no history of malignant or other disease in patient's family.

Present Illness.—Ten days before coming into the hospital patient ate some pickles, and from that event he dates his illness. It was followed by severe epigastric pain and diarrhœa, lasting for two days. After this he was constipated; and his bowels have not been opened since. He began to feel very low, and was not able to work. He consulted several practitioners, and took large quantities of purgative medicines, but received no relief. He could pass nothing by his bowels, not even flatus; he suffered from a constant feeling of nausea and fixed pain about the umbilicus.

State on Admission.—Patient has an anxious expression, but no appearance of cachexia. He has a slight "blue line" along his gums, and a syphilitic eruption on his legs. His abdomen is swollen and tympanitic; yet the hand placed over its central part, more especially below the umbilicus, easily detects vermiform movements of the small intestines. The enlargement of the belly is not quite symmetrical, being greater on the right side. The most distinct sound of tympanitic expansion is elicited in a region lying above and to the right of a line drawn from the anterior-superior spine of the right ilium to the left eleventh rib; the remaining surface of the abdomen—including, therefore, the cæcum and descending colon—though somewhat tympanitic, gave a clear note. There are no signs of any form of abdominal hernia or stricture of the rectum. He has constant pain and slight tenderness just above the umbilicus; complains of intense thirst, but has no desire for food. His tongue is furred and brown in the centre; pulse quick and thready. A few hours after admission he vomited about two pints of sour, yeasty, green fluid. Was ordered a liquid diet in small quantity.

February 13.—Patient is no better. He vomited several times during the night. The vomit appears to be a mixture of decomposed bile and intestinal juices: it has a sour odour. Evening: Patient vomited six times in the course of the day, and hiccoughed occasionally. He vomits whether he takes food or not. Pulse 120, bounding; temperature 100°; urine high-coloured and scanty. Ordered enema ol. ricini Oj.

14th.—No better; abdomen more distended and tympanitic. O'Beirne's long tube (twenty-five inches long) was with some difficulty passed into the rectum, and could be felt in

the ascending colon; soap enemata were injected, but came away immediately, and unchanged in character. Ordered half a grain of extract of opium every four hours. Evening: Patient has vomited and hiccoughed frequently throughout the day; pulse rapid and weak; temperature 100·8°.

15th.—He is very prostrate; pulse 150, weak; temperature 99°. He continues to vomit, and hiccoughs frequently, but the vomit is not fæcal; the abdomen is more distended and tympanitic. At Dr. Silver's request, Mr. Barwell aspirated the colon. The descending colon was first punctured, but nothing came away. The transverse colon was punctured next, and a little flatus was withdrawn. Evening: Patient has experienced no relief; his face is flushed; pulse 140, full; temperature 101·1°; belly more distended; vomiting and hiccough continue. O'Beirne's long tube was again passed to its full length; patient placed in a warm bath for half an hour, and thirty minims of tincture of belladonna administered.

16th.—He is more prostrate; pulse rapid and weak; temperature 99°; expression very anxious. He complains of a feeling of fulness, has cold clammy sweats; tongue is foul, hard, and brown in the centre. He continues to hiccough and vomit frequently, and appears worn out.

Mr. Barwell, after consultation with his colleagues, determined that nothing short of operation could save the patient. As the precise seat of obstruction, though it certainly lay above the sigmoid flexure, could not be determined, he considered it best to open the peritoneal cavity and explore; but as he thought the obstruction was most probably in the ascending or transverse colon, he decided to make his incision in the region of the cæcum, so that if no further indication should be obtained, an artificial anus might there be established.

Operation.—The patient being placed under the influence of chloroform, the carbolic spray was directed on the parts, and all antiseptic precautions were used during the operation. An incision was made from a point an inch outside the situation of the external abdominal ring, vertically upwards parallel to the linea alba for about two inches, the integument and muscles being cut through; the fascia transversalis was laid bare and divided on a director; the peritoneum now exposed was divided in the same manner. The peritoneum was thickened and congested, and the peritoneal fluid which escaped was opalescent. A knuckle of gut was protruded, but was found on examination to be distended small intestine; this was returned. The operator passed his hand into the abdominal cavity and explored, and found the cæcum to be full, but there was nothing indicative of other morbid conditions at the ileo-cæcal valve or elsewhere. He next extended his incision a little outwards, and brought the cæcum into view; two strong silk ligatures were passed through its front wall, and it was thus drawn out of the wound. An incision about an inch in length was made in the cæcum, and a large quantity of fæculent matter came away; it had a very offensive smell, was green, and of the consistence of melted pitch. About four large wash-hand-basinfuls of this matter were withdrawn. An enema-tube was passed through the wound in the cæcum along the colon, and warm water was injected. The edges of the wound in the gut were now closely stitched with silver-wire to the edges of the wound in the abdominal wall. The carbolic spray was now removed, and a large sponge soaked in a warm solution of carbolic acid was placed over the artificial anus and fixed with a binder. Patient was ordered extract. opii gr.ss. every two hours, and half an ounce of brandy every hour. Evening: Patient appears to be progressing favourably; he states that he feels considerably relieved, and has no pain except from retention of urine. About six ounces of high-coloured urine (no albumen) were drawn off with a catheter. Pulse 90; temperature 100·1°. To continue the opium, and brandy when required; to take iced barley-water. The sponges were changed, and a bowlful of fæculent matter came away.

February 17.—Patient passed a good night; pulse 90, full; temperature 98·1°. Appears to be in good spirits; complains of thirst. Notwithstanding the free evacuations, his abdomen is much distended and tympanitic, and there is tenderness on pressure. The opium to be taken every four hours. Evening: Patient appeared to be going on well until to-night; he is a little delirious and drowsy. Pulse rapid and weak, but responds to stimulants; temperature 99·1°. Patient rapidly became worse, and died comatose at 2 a.m.

Autopsy, twelve hours and a half after Death.—On opening the abdomen the peritoneum was found to be hyperæmic, and the intestines glued together with firm bands of lymph; the liver was similarly attached to the diaphragm, the transverse colon, and one or two coils of small intestine. A slight increment of fresh hyperæmia seemed to radiate from the operation-wound. A stricture of the colon, three-quarters of an inch long, was found about two inches above the splenic flexure. On making a longitudinal section through this piece of gut the mucous membrane was seen to be quite normal; but the peritoneal, subperitoneal, and muscular coats were firmly matted together by inflammatory tissue, whose deposition and subsequent contraction had so reduced the lumen of the gut that a small probe could with difficulty be passed along it. This material was evidently not old, as it could, without the use of any great force, be stretched, restoring thus nearly the normal calibre of the intestine. Well marked, though not large, gummata were found in the liver.

Remarks by Mr. Barwell.—Much of the interest of this case depends upon the difficulty in diagnosing the position of the stricture, and in selecting the seat of operation. The shape of the abdomen, the nature of the sound elicited by percussion, the fact that O'Beirne's tube could be passed to its whole length (although some inches of it were probably curved back), and the return unaltered of the large enemata, showed that in all probability left lumbar colotomy would open the intestine below the obstruction. The choice then lay between right lumbar and right inguinal colotomy; the latter was decided upon because it was considered probable that the obstruction lay in the ileo-cæcal valve, and because the situation of the incision gave greater facilities for exploration than could be obtained by the former operation. In either case, since advanced peritonitis existed before the operation, the man would inevitably have died. The operation gave him great relief, and rendered his end less painful and distressing, while it certainly prolonged life.

Professor Balfour's Testimonial.—A meeting of Edinburgh graduates was held at the house of Dr. Duckworth on the 15th ult., to promote the above object in London and elsewhere. It was announced by Dr. McIntosh, F.R.S., of Murthly, that about £250 had been already collected from friends and former pupils of Dr. Balfour. A most excellent portrait of the Professor has been painted by Sir Daniel Macrae, President of the Royal Scottish Academy, and this is to be presented to the Senate Hall or Library of the University. It is desired to procure a *replica* of this, from the same hand, as a gift to Dr. Balfour's family, and additional subscriptions for these purposes are being sought. A London committee was formed, consisting of the following members:—Rt. Hon. Lyon Playfair, C.B., M.P.; Dr. Murchison, F.R.S., St. Thomas's Hospital; Dr. Crichton Browne, F.R.S.E., Lord Chancellor's Visitor in Lunacy; Sir Joseph Fayrer, K.C.S.I., Charing-cross Hospital; E. Chisholm Batten, M.A., Lincoln's-inn; Dr. Allen Thomson, F.R.S.; Dr. Sieveking; Dr. Farquharson, St. Mary's Hospital; Professor Huxley, Sec. R.S.; Joseph Lister, F.R.S.; Dr. William Playfair; Dr. Priestley; Dr. Ferrier, F.R.S., King's College Hospital; Dr. Burdon Sanderson, F.R.S., University College; Dr. Duckworth; Dr. Lauder Brunton, F.R.S., St. Bartholomew's Hospital; Dr. T. Spencer Cobbold, F.R.S., Middlesex Hospital; Dr. Laidlaw Purves, Guy's Hospital; Dr. Potter; Mr. R. Davy, Westminster Hospital; Dr. Grey Glover; Dr. George Harley, F.R.S.; Dr. A. Hughes Bennett, Westminster Hospital; Henry Rutherfurd, Esq., Inner Temple; Mr. Carruthers, F.R.S., British Museum; Dr. H. Season Wilson, London Hospital; Dr. T. Watt-Black, Charing-cross Hospital, etc. Various secretaries were nominated in the provincial towns, in India, and the colonies. It is believed that the scheme only requires to be known to the numerous pupils of the zealous and beloved professor of botany, scattered all over the world, to insure a ready response. It was thought fitting thus to mark the kindly services of Dr. Balfour, who had acted as Dean of the Medical Faculty for more than thirty years, and had recently retired from that office. Subscriptions will be received by any member of the committee; or may be sent direct to David Smith, Esq., Treasurer of the Royal Society of Edinburgh.

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Medical Times and Gazette.

SATURDAY, MAY 4, 1878.

THE MEDICAL ACT AMENDMENT BILL.

It has no doubt been noticed that when the President of the General Medical Council reported to that body the result of his interview, on April 15, with the Lord President, he stated that his Grace had said that if the second reading of his Medical Act was passed, he "would introduce the Bill in Committee for the consideration of all the amendments which had then been presented to him, and for their full discussion"; and he further fixed on the 20th of the present month as the day for going into committee on the Bill, and promised that all amendments which should come before him before that date should receive his best attention. We suppose that the first promise above quoted must not be interpreted as meaning that his Grace will introduce the amendments which had then been suggested to him as amendments supported by the Government? The effect of that would be to make the Bill, in some of its most important provisions, to all intents and purposes a new Bill; and it is, perhaps, too much to expect that the Ministry will have the courage to take such a step as that, which would amount to a confession that they had utterly mistaken the feeling of the profession with regard to the formation of Conjoint Boards of Examination. But the Minister in charge of the Bill, the Duke of Richmond and Gordon, asked for criticism of the Bill, and it has been given with unsparing frankness and candour; and the effect may be that he will gladly suffer, or at least not unwillingly accept, from other quarters, larger amendments than he himself would be willing to propose. He has acknowledged the importance of providing a uniform and satisfactory test for admission to the profession throughout the kingdom; he has admitted that he thought a Conjoint Scheme possibly the best mode of providing such a test; and has gone so far as to confess that "he thought it would be dishonest of him to say that it would not be an advantage to the country to have a Conjoint Board: but it was not always easy to carry out by Act of Parliament what one thought desirable." But it is well known that the Bill as at first drawn, and as it was when it was first described in our columns, on March 16, not only confirmed the Conjoint Board of the examining bodies in England, but "recommended—previous to compulsion, if necessary," the formation of similar boards in Scotland and Ireland; and it is equally well known that it was only the fear of the Scotch opposition that induced the Duke to tone down the Bill into a mere permissive measure as regards conjoint boards. He now knows that on this point his present Bill will be opposed by the Marquis of Ripon, though that nobleman allowed it to be read a second time in the House of Lords without taking the opinion of the House on it; that the General Medical Council, the London Colleges, the Senate of the University of London, and other English medical authorities, have in discussing the measure all declared in favour of making conjoint boards compulsory, and have also declared that the Bill will infallibly break up the only Conjoint Board Scheme already elaborated—that of the English examining authorities: further, that they have decided against the principle of giving the Medical Council the right of initiating the examination-rules—a prominent, if not a vital part of Section 14 of the Bill; and that the Medical Council have declined to undertake the origination of a new scheme for the education and examination of dentists, as provided for by Section 23. These are the main points with regard to which amendment of the Bill is considered imperatively necessary; but the Medical Council have also suggested the great desirability of important changes in several other sections, as in Section 5, providing for the registration of colonial practitioners having recognised diplomas; in the clauses of Section 14 which refer to female practitioners; and in Section 15, respecting joint medical boards. It may be supposed that the British Medical Association also will bring to bear all the weight it can in favour of compulsory joint examining boards. Looking at all this, the Duke of Richmond may very well feel hopeless of being able to pass his Bill in anything like its present shape, and he must find himself compelled to consider whether it would not be better, from every point of view, to have the courage of his own opinions, and, reconstructing his Bill in accordance with them and with the amendments suggested to him, gain the support of the powers we have mentioned, and brave the Scotch opposition, than to endeavour with the concurrence of the Scotch to carry the Bill as it stands. We do not know yet whether the British Medical Association will again act on the principle of refusing half the loaf they demand because they cannot get the whole at once, and so help to imperil the Bill, whatever it may offer short of "direct representation on the Medical Council"; but at the worst a statesman would, we imagine, much rather be defeated in a gallant attempt to carry a strong measure, than fail because his Bill was a weak one, and admittedly a compromise with his own opinions.

THE ARMY MEDICAL DEPARTMENT.

The Committee appointed to inquire into the causes of the unpopularity of the Army Medical Department are evidently anxious to spare no pains in their endeavours to justify their appointment, but we cannot admire or see the wisdom or sense of their latest effort. A short time ago we published a letter which they had sent to the medical teaching bodies, asking their opinion of the reasons why the most eligible men are unwilling to enter the Army Medical Service; and that step was a sensible and praiseworthy one. But now they have issued to the examining bodies the following circular:—"In considering the valuable reports

which have been received from the several medical teaching bodies on the circumstances which tend to deter eligible candidates from coming forward for the Army Medical Service, the Committee appointed to inquire into the subject would be greatly helped if they had before them a trustworthy estimate of the average earnings under ordinary circumstances of medical practitioners in civil life. I am therefore directed by Secretary Colonel Stanley to request that on behalf of the [mentioning examining body] you will favour him as soon as possible with an estimate on the enclosed form of the average earnings in question." The "enclosed form" is drawn in three columns, headed—1. "Period of Career"; 2. "Average Annual Earnings"; 3. "Charges of a Professional Nature to be met out of the earnings shown in column 2"; and the "average annual earnings" is requested for "one year after obtaining diploma," and for each succeeding decade up to the age of sixty. It really would be interesting to know by what train of reasoning or through what prompting the new Secretary for War arrived at the idea that the examining bodies keep such a continuous and parental, not to say inquisitorial, watch over all their sons throughout life, or up to "the age of sixty," as would enable them to give him even the faintest shadow of the information he asks for—information which the Income Tax Office alone could give in the shape of "a trustworthy estimate." Perchance the letter was the result of no careful reasoning, but was a flash of inspiration, a "happy thought"? We suspect not: looking at the kind of information asked for, we fear the inquiry was born of red tape out of officialism of the straitest type. For, if Secretary Colonel Stanley were to gain the information he seeks, of what service could it be? A "trustworthy estimate of the average annual earnings" of a civilian practitioner during the first ten years of his career might perhaps aid the Colonel in estimating the bonus to be given to a "short-service" man; but beyond that, at any rate, the money basis would be a most imperfect and mischievous ground to take for reforming the Army Medical Service. Every civilian practitioner who has any real love for his profession, and any belief in himself, counts on the wide and large possibilities of private practice; looks on them as, at the least, probabilities in his own case, and believes that he "carries a field-marshal's baton in his knapsack." But the prizes possible to be gained in a military medical career are *known*, and are strictly defined and limited, and the Service cannot be made sufficiently attractive on money grounds only. We fear that the real *motive*, the *primum mobile*, of the Colonel's letter of inquiry is the old feeling of military jealousy, the determination not to admit medical officers to the same *status* and consideration as the "combatant" officers. If Secretary Colonel Stanley will resolutely put aside this antiquated and absurd prejudice, and then study the "valuable reports" he has received, he will easily see what kind of reforms are needed to make the Army Medical Department once more attractive. He will find, we think, that among the causes of dissatisfaction the following are very generally, if not invariably, mentioned:—The frequent changes in warrants after they have been published under her Majesty's signature, and the uncertainty and distrust thereby excited; the differences made between combatant and medical officers in regard to ordinary and sick leave; the almost absolute refusal to medical officers of exchange privileges; the virtual withdrawal of forage allowance from those entitled to it by rank; the disadvantage at which medical officers are placed in respect of quarters and of soldier-servants; the loss or diminution of the social and other attractions of the Service by the total abolition of the regimental system; and the withdrawal of a carefully kept roster accessible to the Service. The short-service system is also, we believe, very generally objected to. If the Secretary for War and the Committee of Inquiry will ponder these matters in the light of the principle that the military medical officer shall be regarded as in every way as much an officer and a gentleman as the combatant officer is, they will not have much difficulty in dealing with the immensely important task that lies before them—the way to make her Majesty's Army Medical Service attractive to eligible candidates.

STEM PESSARIES.

In the present day people so easily get from place to place, and periodical literature is so well supplied and so much read, that every new thing of any importance is soon known all over the civilised world. In our own profession especially, the members of which have a direct personal interest, for their reputation's sake, in learning and practising every fresh mode of curing or relieving disease, each fresh wave of knowledge is quickly diffused from the centre to the periphery. And therapeutical discoveries, being more immediately of use than those which bear on other parts of medical science, spread more quickly than anything else. When, therefore, we find that a mode of treatment has been for years strongly recommended, and by some persons much practised, and yet has not found favour with the bulk of the profession, it is obvious that for such an exception to the rule there must be a cause. An inquiry into this cause cannot but be useful.

The foregoing remarks are the result of thinking about the instruments known as *intra-uterine stem pessaries*. These contrivances, as most are aware, were introduced years ago by Simpson. They were not, indeed, invented by him, for before his time they had been tried, and, as was then thought, found wanting. But to Simpson belongs whatever credit there may be in having brought them into use at the present time. We might fill several lines with the names of those who, since then, have either invented some new kind of stem, or modified some old one; and several more might be taken up in enumerating those who have recommended their use. But, nevertheless, these instruments are not popular with the great body of general practitioners; and by some of the most eminent specialists in diseases of women their use is either altogether discountenanced, or restricted to a class of cases very limited indeed as compared with those for which their inventors would have thought them fitting.

Why is this discrepancy? In order to find out, let us examine the arguments for their use. The reasons for the adoption of a new treatment may be of two classes—the one theoretical or rational, being deduced from what we know of the etiology, course, and nature of the malady; the other practical or empirical, based on evidence of the successful result of the treatment in question. A method may or may not be supported by reasoning of the former kind; but, if it is to take a permanent place in our resources, the facts of the latter class must be in its favour.

Stem pessaries are used for two principal purposes. One is, to act as a stimulant (some would say irritant) to the uterus, and attract a greater supply of blood to it. There can be no doubt that a foreign body in the uterus will do this; but whether, by so doing, it will benefit the patient, depends upon whether it is desirable that the uterus should be stimulated. This is a question which involves problems much more difficult than that of the selection of the means by which this end is to be effected: and these we shall put aside for the present. Granted a case in which an increased flow of blood to the uterus is needed, and the decision as to whether a stem should be used or not is to be decided by the considerations we shall

shortly point out. The other object for which a stem may be thought necessary is to straighten a bent uterus. Here, as in the other case, a question presents itself *in limine*, viz., does bending of the uterus cause any symptoms? It certainly does not invariably do so. But for the present let us pass on, and admit that this organ may sometimes need an instrument to keep it in its proper shape. If so, a rigid stem inside it will certainly effect this end. There are other cases in which the use of such an instrument is advised, but not always on a theory so clear and so distinct. We choose those in which the indication seems the most obvious.

We will concede, then, these two points (although there is much room for inquiry about each of them)—viz., that it is sometimes desirable to cause an afflux of blood to the uterus, and sometimes necessary to correct the shape of a bent uterus. We now come to the practical question, Is a stem pessary a good and safe thing for these purposes? This can only be decided by the evidence of facts, and of facts recorded in such a way that the profession may have confidence in their accuracy. We must know what is the effect of a stem inside the uterus, both upon the uterus and upon the disease. These are questions which should be settled in the same way as most points in surgical practice. Ligature of arteries, excision of joints, ovariotomy, and similar procedures, have won their way because those who adopted them published full details of the disease the operation was done for, and of the result, whether cure, failure to relieve, or death. Thus in these cases we know what hope we may have of success, and what are the risks to which we expose our patients.

For such data to justify the use of intra-uterine stems, we seek in vain. We find plenty of general statements, to the effect that wonderful cures have been wrought by them, and that harm has seldom, if ever, resulted. *Per contra*, we come upon an equally general statement by Emmett, that pelvic cellulitis is the rule, and not the exception. We find also records of so-called "typical" cases, published as if they proved the benefit of the stem. But we have few detailed statements giving the whole facts; and such as we have do not encourage us to think that we have in this mode of treatment a great boon to suffering womankind. Until evidence of this kind is adduced in its favour, so that readers may draw their own conclusions, we fear that the profession will continue to look askance at these implements. Let him who wishes to further their use publish *the whole* of his cases, detailing the symptoms for which the treatment was undertaken, the condition of the pelvic organs, and the state of the other parts and functions of the body, so that those who read may be able to form some idea of how much the symptoms were uterine, and how much due to other conditions. And let him give us also the result—immediate, temporary, and permanent—of *every case*, not in a few "typical" cases merely, but in *all*. Let us be told not only how the patient was when she left the hospital, but how she was a twelvemonth after that. Let the condition of the patient as to all her functions be detailed with care and definiteness of statement, and not summed up in the simple word "cured." Then we shall know what (with the most improved methods) is the chance of doing harm. We shall be certain (at least, we hope so) that the cases cured by stems were not hysteria, but real disease. In the present lack of exact detail, it is open to anyone to suggest the contrary, without, as far as published facts go, the possibility of disproof. We shall be able then to judge which is the worse, the treatment or the disease—a point as to which statements are at present conflicting.

Such a publication will be a step towards bringing gynæcology nearer to the other branches of medicine, which are so rapidly advancing, by aiming at greater and greater exactness, and by courting the light of day—*i.e.*, the most outspoken criticism.

It is not creditable to any branch of medical science to see one practitioner of it strongly recommend what another hotly denounces as most dangerous. Both cannot be true. At best, each is but one side of the truth. It is only the whole truth which can stand criticism. Loose and inaccurate statements, and assertions unsupported by facts, are but as "words without knowledge which darken counsel." Scientific knowledge is nothing but exact knowledge; and the test of the degree of advancement of any branch of science is the degree of exactness which it has reached. Gynæcology much needs this quality. The subject we have been speaking of is not one in which precision is very difficult of attainment. Therefore we hope that whoever may next try to persuade the profession to use stem pessaries will set about it by giving an exact, unvarnished account of *all* his cases—the positive and the negative facts alike; the successes, failures, and mischiefs of his treatment equally—defining both his knowledge and his ignorance.

THE WEEK.

TOPICS OF THE DAY.

The town of Newbury, in Berkshire, is to be congratulated upon having at length obtained a wholesome water-supply. Up to the present time the town has been supplied from wells, the water from all of which is stated to be more or less contaminated with sewage matter. In May of last year the new undertaking was begun, which had for its object the sinking of a well into the chalk in the valley of Northcroft, a short distance from the town. This well is only fourteen feet deep from the surface, and seven feet in diameter; it was originally intended to carry it down to a greater depth, but on reaching fourteen feet a strong spring was struck, coming in from the chalk, which yields from 20,000 to 34,000 gallons per hour. It was at first supposed that this was the valley water rising through the gravel, and samples were submitted to the late Dr. Noad, F.R.S., who at once pronounced it to be pure chalk water similar to that obtained from the North Kent Waterworks at Crays, somewhat hard, but unexceptionable as a beverage and for domestic purposes. The water is pumped from the well to a reservoir at Speen, capable of containing about 110,000 gallons, and at a height of 110 feet above the surface of the well—a level which commands the whole of the town of Newbury. The supply will be constant, and the charges are to be somewhat less than those in London, where the supply is only intermittent. Newbury will now, therefore, be better off than London as regards its water-supply, unless the scheme of the Metropolitan Board of Works for procuring a constant supply of drinking-water from the chalk should receive the sanction of Parliament—a somewhat doubtful prospect.

An inquest held last week by the Coroner for Central Middlesex, at the Board-room of the Holborn District Board of Works, upon a widow, aged fifty-four, revealed a state of things which it might have been supposed the Artisans' Dwellings Act had rendered almost impossible. The deceased resided with four other persons in a small back room on the ground floor of 1, Crown-court, Holborn, the room being nine feet by eleven in length and width, and eight feet high. On the Sunday she seemed well and cheerful, but very early on Monday morning she began to vomit blood, and expired immediately. Dr. Reginald Taylor, of Gray's-inn-road, said the cause of death was the rupture of a bloodvessel, supervening upon tubercular disease, accelerated by the bad state of the room in which deceased had lived. The chairman and several members of the Holborn Board of Guardians, who were on the jury, desired that the sanitary inspector of

the district might be called. That functionary, on presenting himself, said that four out of the six houses in Crown-court had already been closed under Torrens's Act, and the two left were unfit for human habitation. He knew of cases where nine persons were living and sleeping in one room. Houses were being closed, and the occupants would not go to live at Finsbury-park or elsewhere, but preferred to stop in these "slums." A verdict in accordance with Dr. Taylor's evidence was agreed to, but it is not stated that orders were given to close the houses complained of.

In this country it takes some time to introduce changes, even if they be improvements, but it is satisfactory to be able to record that the authorities of Mile-end have at length erected a mortuary fourteen feet in height, and twenty-four feet by twelve feet, in the grounds of Mile-end Workhouse, to supersede the small shed which for a long time has been used for this purpose. A large number of inquests are held in the course of the year in this district on the bodies of persons found drowned in the Regent's Canal, which runs close by, and the accommodation now provided has been for some time urgently required. In Bethnal-green, preparations are being made for the erection of the mortuary recently sanctioned by the Chancellor of the Consistory Court, to be erected in the churchyard of St. Matthew's; and as complaints have for some time been made of the condition of the present mortuary of Aldgate, situate in the crowded district of Darby-place, it is hoped that the local authorities may be induced to keep pace with the times, and give orders for the erection of a building more suitable for the purpose than that at present provided.

The subject of total abstinence from alcohol in health and disease was discussed at a meeting of the Hunterian Society, held at the London Institution last week. Dr. W. B. Richardson opened the proceedings by reading a paper on the "Physiological Action of Alcohol," in which he entirely deprecated its use. Dr. Thomas B. Crosby, who took the chair upon this occasion, commenced the discussion by referring to the very general use of alcoholic drinks by mankind generally, and he argued that as the number of people who took them lived to a good old age, it certainly appeared as though the use of stimulants in moderation could not be hurtful. He explained that he had tried total abstinence for a fortnight, and felt neither better nor worse, missing his glass of wine in the same manner as he might have missed a condiment at table. The opinion of the majority who took part in the discussion appeared to be with Dr. Richardson, though several were in favour of using alcoholic drinks moderately in health, and occasionally in disease. Dr. Lavies, of the Wandsworth House of Correction, said that of 700 women under his care in the prison, about 500 were drunkards; but he invariably refused to give them anything in the shape of alcohol, and he had never known any harm to result from the total cessation of its use.

From official returns which have just been published, it appears that the stoppages from the pay of soldiers for drunkenness during the financial year 1876-77 amounted to the sum of £179 3s. 5d. In the previous six years the aggregate amount of these fines exceeded the foregoing sum in four years, and was less in two years. The amount thus accumulated is applied to the purpose of granting gratuities to well-conducted soldiers on their discharge from the army.

A Government inquiry was recently held at the Town Hall, Burslem, before Major Tullock, of the Local Government Board, in reference to a proposed loan of £25,000 for the conversion of Bradwell Hall Farm into a sewage establishment for the town. This step has been rendered necessary, owing to the threatened action of the Duke of Sutherland in regard to the pollution of the river Trent. The inspector visited the premises and made full inquiry, and promised that his report should be submitted to the Board at an early date.

The report of a serious outbreak of small-pox at Gravesend appears to have been much exaggerated. Dr. Gramshaw, the Medical Officer of Health, states that there are only ten cases now under treatment in the town, six of these being convalescent, and that the number of deaths since the commencement of the outbreak has been only seventeen.

A correspondent of a morning paper reports that he was recently called in to see a case of supposed small-pox on board a barge anchored in the river between Lambeth and Westminster. On arrival, he found a man suffering from a pronounced attack of the disease, laid up in a cabin about five feet square and six feet high, and occupied by himself, his wife, and children. He at once ordered the man's removal to hospital, but no authority could be found to accept the duty; the land sanitary authorities and the Thames police declined to interfere, and when, at last, the Thames Conservancy consented to lend assistance, the man was dead. From the Saturday of one week to the Thursday of the next this case of small-pox was on board the barge moored in the very centre of the river, surrounded by other barges, with free intercommunication on the part of the people occupying them. It can surely only need for this case to be made public to insure some action on the part of the Thames Conservancy whereby such a risk of spreading infection may in some way be at once met, without waiting till the end of June, when the rules and regulations of the Local Government Board for carrying into effect the Canal Boats Act will come into operation.

It is rumoured that several military members of Parliament are inaugurating a movement to place the Commissariat Ordnance Stores and Medical Departments of the Army under the direct control of the Horse Guards instead of the War Office, with the view, in their opinion, of insuring the greater efficiency of these services.

A very useful measure has been decided on by the School Board of London, on the application of the National Lifeboat Institution: this is the instruction of all their scholars, now numbering 111,000 boys and girls, in the important directions for the restoration of the apparently drowned. These directions are founded on those of the late Dr. Marshall Hall, combined with the instructions laid down by H. R. Silvester, and are the result of extensive inquiries which were made some years since by the institution among medical men, medical bodies, and coroners throughout the United Kingdom and the colonies. Large placards of these instructions, with illustrations printed thereon, are supplied by Messrs. Clowes and Sons, the printers, of Charing-cross, at a merely nominal sum.

The *Times'* correspondent at Bucharest, under date the 20th April, reports as follows:—"I am assured by Baron Mundy, of the Red Cross Society in Turkey, that he finds, after an inspection of all the Turkish hospitals in Russia and Roumania, there is no typhus epidemic in any of these hospitals or in the towns where they are placed, and that the scare on the typhus question has at present no foundation in fact. Many sensational reports have been circulated about the prevalence of typhus in the Russian armies and among the Turkish prisoners. There are many large hospitals in and around Bucharest, and a Consul-General of a continental Power received a report from a person selected to make inspection, that the deaths from typhus at Bucharest averaged thirty per day; whereas, Baron Mundy states he has ascertained from official examination that the deaths from this disease are less than thirty per week. At the same time it is undoubtedly spreading in Roumania,

Bulgaria, and Roumelia. We shall probably have terrible results from this disease after the heat of summer has set in. Attempts at disinfection in such extended territories are utterly useless, as the results are only transitory. Nothing but large working parties under thorough supervision to bury the dead and the thousands of uncovered carcases would, in all human probability, prevent a disastrous epidemic of typhus later in the season."

At a recent meeting of the Birmingham Hospital Saturday Committee it was announced that the amount realised up to that time was £3093, against a total last year of £3160. This result must be considered very satisfactory when the great depression of trade now existing is taken into consideration. The Committee, however, are determined if possible to increase the sum realised each year, and they have resolved to issue appeals to the employers and work-people at the various manufactories, asking them to adopt the system of small weekly contributions, instead of leaving the collection entirely until Hospital Saturday arrives. There is little doubt that such an arrangement would largely increase the amount obtained, if its adoption could only be insured.

A very handsome sum has been bequeathed to the charities of Liverpool by the late Mrs. Harvey, of Holmfield, Aigburth, widow of Mr. E. E. Harvey, of Walton Priory. The testatrix has left £12,800 to be divided amongst the hospitals and other charitable institutions, and a valuable collection of oil and water-colour paintings to the Corporation of the town.

THE MANCHESTER ROYAL INFIRMARY.

A SPECIAL meeting of the trustees of the Manchester Royal Infirmary was held on April 26 for the purpose of confirming, rejecting, or modifying the revised code of rules as approved by the Board of Management. There was a very large attendance, the object of the meeting having excited much interest, but the only rule to which any objection was made was that relating to the appointment of the physicians, the new rule requiring candidates for that office to have resided at least one year in the university where they had graduated. In our number of April 20 we commented on the inadvisability of the rule, and in objecting to it we pointed out that it would exclude graduates of the University of London. We learn, however—what we were not then aware of—that an exception was especially made in favour of graduates of that University, so that the change in the rule was not so outrageous as, according to the information we had then received, it seemed to be. The adoption of the new code having been moved and seconded *pro formâ*, an amendment was moved by Mr. Alderman Curtis, for the omission from the rule in question of the clause requiring one year's residence at the university where the medical degree of a candidate has been obtained, making the qualification part of the rule run thus: "Every candidate for the office of Physician shall be a Fellow or Member of the Royal College of Physicians in London, and shall have a diploma from some university requiring examination for its degrees." In proposing his amendment, Mr. Curtis pertinently pointed out that had the proposed new rule been in existence when the present staff were appointed, very few of them would have been eligible for the offices they now hold. The amendment was strongly supported, and in the course of the discussion it was stated that the Board of Management had been so much divided on the question that the new rule had been carried only by the casting-vote of the chairman. In the end the amendment was carried by a very large majority on show of hands, and the Board of Management accepted that verdict at once, and did not demand a poll. "All's well that ends well." We by no means underrate the educational value of university training and residence; but nominal residence for one year at a university may mean very little, and certainly would not insure that a candidate possesses teaching power, though one of the supporters of the new requirement defended it on the ground that it is desirable that a candidate should possess the art of conveying his knowledge to others, so that it should not die with him. The electors will thus retain the power of selecting, or not, as they may please, a candidate who has obtained his degree after residence. It is quite possible that the proposed requirement might have shut out some exceptionally good men. It is not given to every man, however gifted, to be able to afford university training and education.

THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

AT the ordinary meeting of the Royal College of Physicians on Thursday, April 25, the following Members of the College, having been nominated by the Council, were elected by the College to the Fellowship, viz.:—John Sykes, M.D. Edin., of *Doncaster*; Thomas Grey, M.D. Heidelberg, of *London*; John Louis William Thudichum, M.D. Giessen, of *London*; Arthur Ernest Sansom, M.D. Lond., of *London*; William Orange, M.D. Heidelberg, of *Broadmoor*; Alfred Wiltshire, M.D. St. Andrews, of *London*; David Lloyd Roberts, M.D. St. Andrews, of *Manchester*; Charles Henry Ralfe, M.D. Camb., of *London*; John Mitchell Bruce, M.D. Lond., of *London*; William Henry Allchin, M.B. Lond., of *London*; John Curnow, M.D. Lond., of *London*; and Alfred Lewis Galabin, M.D. Camb., of *London*. Six gentlemen, whose names we published last week, having passed the required examinations, were elected to the Membership of the College. The College also received, from Miss Latham, a present of a very perfect proof of Richmond's beautiful portrait of her father, the late Dr. P. M. Latham. As only a certain number of impressions of Holt's fine engraving of this portrait were struck off for private distribution, it is not possible to obtain one by purchase. Miss Latham's present is therefore especially valuable and acceptable.

THE RECENT MEDICAL EXAMINATIONS AT ABERDEEN.

IN another column we publish the names of the gentlemen who received degrees in Medicine after the recent examinations at Aberdeen. In connexion with these examinations we understand that considerable dissatisfaction has been expressed in regard to the department of Clinical Surgery. From the local press we learn that there has been lodged with the Senatus of the University a protest signed by all the gentlemen who have just passed and received their degrees, in which they complain of the character of the trials in clinical surgery, "and, in particular, that the questions put to the different candidates differed in degree, and were unsatisfactory as a test," etc. It is also alleged that among those who failed to pass in the clinical examinations were several admittedly good students. What solid grounds there may be for such a protest on this particular occasion we have of course no means of knowing, but it is to be hoped that, for its own sake, the University may not sanction any regulations calculated to lower the standard of proficiency in the clinical departments. Our own wonder is, how it is possible for the University, offering such paltry salaries as it does to the Examiners in Medicine, to secure suitable men to act along with the professors in the important work of examination.

"A LOCAL BRAVO CASE."

THE town of Derby has lately been the scene of considerable excitement regarding what promised, at one time, to turn out a local "Bravo" case. It appears that a medical man of that town had been attending for some time a female patient without being able to account satisfactorily

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 9.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

MYXŒDEMA.

DR. ORD showed two cases illustrative of the condition to which he had given the name myxœdema. The main points relative to it were, that it was met with in adult women (both the patients shown were females); they had very much of the aspect of persons in an advanced stage of renal disease, with a flush on the cheek and pallor round the eyes; their speech and gait were slow and uncertain, and their thoughts were slow. They had scarcely any trace of thyroid gland. There was a collection of fat about the clavicles; and the connective tissue was infiltrated with a soft solid œdema containing much mucin, very little of which was found in ordinary œdema or in healthy skin. The mucous œdema was found also on the heart and other internal organs. It agreed with what Sir William Gull had termed cretinoid disease in adult women.

ON SOME MINUTE POINTS IN THE ANATOMY OF THE KIDNEYS, AND THEIR RELATION TO THE PATHOLOGICAL FEATURE OF URINARY CASTS.

Dr. REGINALD SOUTHEY read this paper. The continuous system of the urinary tubules was first described by the author, and the tubules were traced from their commencement in the papillæ renales up to the Malpighian bodies. The tubuli uriniferi thus commence in primary excretory oral orifices in the medullary cones, which measure from 0·3 to 0·19 millimetres in diameter. The short trunks these open into have no membrana propria, but are set in and bounded by fibrous connective tissue; they each split up into rectangular running branches or gathering mains, and from them perpendicular mounting branches are distributed, which quickly split up again into ascending stems or collecting branches of the third order. These collecting tubes are —first, branches which can be made out to possess a delicate membrana propria, and to be distinctly lined with a low sessile columnar epithelium, and to present lumina. They measure from 0·0501 to 0·0510 in diameter, and, while bifurcating at the margino-medullary level into a number of branches, these are all of nearly the same calibre, 0·01‴. The collecting tubes curl over into the tortuous tube districts, and become the tortuous tubes, enlarging in size considerably, measuring, on an average, 0·0201‴ or 0·033‴, while the epithelium lining their membrana propria nearly fills up their bores. The tubes, however, do not retain their tortuous or glandular characters for long, but turn back into the straight tube-columns from which they started, and drop as Henle's down-loopers in juxtaposition with the collecting tubes. These down-loopers are the narrowest tubes of all—0·008‴ to 0·009‴; they are transparent-looking, and lined with a flattened pavement-epithelium, surmounted by slightly projecting nuclei; they retrace their passage into the convoluted columns, and once again gradually enlarge in diameter, and acquire the attributes of tortuous or secreting tubes proper. If these diameters, and the relation of the secreting system of tubes to the collecting system—the former being directly united to the latter by very narrow midway canals—be considered, it will be obvious that anything like a desquamative shedding of epithelium from the secreting tubes could not pass into the collecting tubes. Further, the size and shapes of all casts are found to correspond with the excretory system of renal tubuli. Their most fertile source Dr. Southey believed to be the collecting tubes or ascending straight tubes of the third sub-division—in these are found the ordinary urate infarcta of new-borns, and the granular and fibrinous casts of chronic renal degeneration. The fine fatty streakings and lime deposits of old persons are seen more strictly limited to the transparent midway channels or down-loopers. The largest old fatty granular casts, which consist of cellular *débris*, leucocytes, fat dottings, and urinary salts, are doubtless cast or moulded in the gathering mains close to the orifices of the papillæ, but cannot be held to be secretions from the tortuous secreting tubes, deprived, as has been by some supposed, of their epithelial linings. The value of casts in deciding the diagnosis and estimating the advancement of renal diseases has been much overrated; their different forms and appearances are derived in part from the materials of which they are composed, but in greater part are due to the length of time during which the gelatinised plugs of fibrinous material derived from the blood-serum have resided in the passages whose mould they take, the degree in which they have been soaked with urinary salts and stained with urinary pigments, and become degenerated. After many years' vain search for them, nothing like a desquamative shedding of the epithelium lining a tortuous tube has ever been observed by the author. And although red and white blood-cells, leucocytes, and escaped nuclei have been constantly observed in acute nephritis entangled in fibrinous plugs, the actual linings of the straight collecting tubes, with their low sessile columnar epithelium, have as such never been recognised by him. To form any clinical inference as to the nature and extent of renal diseases from the sediment of the urine and tubal casts is about as unsafe as forecasting the issue of bronchitis or pneumonia by the expectoration: it is not that the casts or the character of the expectorated matters has no clinical value, but they have a relative value only. In renal disease the casts should be appraised side by side with the diurnal urea excretion, and considered in reference to the quantity of albumen excreted at different periods of the complaint.

Dr. GEORGE JOHNSON said that he differed from Dr. Southey in regard to much—indeed, nearly all—that he had said in his paper. He understood that Dr. Southey held that casts formed in the convoluted tubes could not escape through the excretory tubes. If it were so the study of casts in the urine would be practically useless. Dr. Southey assumed that all convoluted tubes passed through the narrow loops; but this had not been shown, and Dr. Johnson very much doubted that it was so. The statement must be founded on imperfect observation. It was quite certain that casts formed in the convoluted tubes did escape with the urine. The evidence that many urinary casts were formed in the convoluted tubes was indisputable; for instance, in the case of blood-casts, the result of hæmorrhage following the use of turpentine, etc. Here it was tolerably certain that the hæmorrhage was from rupture of the Malpighian capillaries allowing the blood to escape into the convoluted tubes. Again, many casts, especially those of the pure hyaline variety, were more or less convoluted when first passed, proving that they had been moulded in tortuous and not in straight tubes. The white cell-casts were also sometimes very numerous; now the leucocytes must have escaped from the Malpighian capillaries into the ends of the convoluted tubes; for, on examination after death, the epithelium of the convoluted tubes was found entire, and not displaced by the leucocytes, as it would be if the leucocytes passed through the basement membrane and epithelium of the tubes. Again, fatty disease of the kidney was limited to the cortical portion; and here the urine contained hyaline casts and cells filled with oil-globules, with enlarged and altered cells of the convoluted tubes. The cells of the excretory tubes were rarely, if ever, found to contain oil-globules, while those of the cortex were full of them. Dr. Southey said that he had never seen an epithelial cast of the convoluted tubes; and denied that there was any process in the kidney analogous to desquamation. But cases were constantly met with in which a desquamative process was going on in the kidney, as in cases of scarlet fever and in cases of jaundice when bile was passing off by the urine. The fact that so many casts of different kinds which must have been formed in the convoluted tubes were found in the urine seemed to show some defect in Dr. Southey's notions regarding the minute anatomy of the kidney. If all the convoluted tubes passed into Henle's loops, every case of inflammation of the kidney must soon be fatal from blocking of the tubes and suppression of urine. Dr. Southey had said that the tubes were not denuded of their epithelium in acute (desquamative) nephritis. Of course they were not; nor was the skin denuded of epidermis in the desquamation following scarlet fever. The old cells of epithelium or of epidermis are pushed off by newly formed cells beneath. As regarded the size of the casts, there was no doubt that large hyaline casts were moulded in the convoluted tubes; and they were of very uniform size. The small

hyaline casts corresponded with the diameter of the free canals of the convoluted tubes retaining their cell-lining; and they varied in size with the condition of the epithelium. The condition of the epithelium of the tubes varied in different cases, being sometimes swollen and sometimes shrunk and flattened; and small hyaline casts being moulded in the free canals of the tubes, naturally assumed the size of the canals in which they were formed. All this afforded evidence that casts formed in the convoluted tubes escaped and appeared in the urine, and, therefore, was opposed to the idea that all convoluted tubes passed through Henle's loops. Dr. Southey had said that large hyaline casts were most common in acute disease; Dr. Johnson found them most often in advanced cases attended with atrophic changes in the kidney. The presence of an abundance of them in the urine indicated that atrophy was making rapid progress, and that suppression of urine was not far off. It was quite true that they did appear in acute cases, but much less frequently, and in smaller numbers.

Dr. Andrew believed that Dr. Johnson's view as to the formation of casts was correct.

Dr. R. D. Powell asked if it were necessary that all the casts formed should escape from the kidney. Might not some remain and be absorbed, as occurred with the deposits in pneumonia?

Mr. Howse had seen, in cases of acute desquamative nephritis from scarlatina, whole tubes filled with perfectly clear cells. They contained no nuclei, and very probably might break down and become absorbed.

Dr. Southey said that a great deal of matter was probably removed by absorption in acute nephritis, just as in pneumonia. Dr. Johnson had surely seen the excretory tubes blocked with granular casts. It was not correct to assume that the casts were formed in the upper parts of the tube. As to the swollen epithelium producing small casts, the casts being moulded in the tubes, it was a hypothesis not in accordance with experience. Clear transparent casts were found in Henle's down-looping tubes. Much had yet to be made out in regard to disease of the kidney.

On a Group of Symptoms (Ophthalmoplegia Interna) indicative of Disease of the Lenticular Ganglion.

Mr. J. Hutchinson read a paper as above. After briefly alluding to the anatomy of the lenticular ganglion, the author stated that its destruction by disease might be expected to be followed by paralysis of three distinct muscular structures—the dilator of the pupil, the constrictor of the pupil, and the ciliary muscle. Under such circumstances, the pupil would become motionless, and the patient, losing the power of accommodation, would be unable to read with spectacles. For this condition, involving paralysis of all the muscular structures within the eyeball, the term ophthalmoplegia interna was suggested, whilst that of ophthalmoplegia externa was proposed in contradistinction for cases in which all or most of the muscles moving the eyeball were involved. The author expressed his belief that examples of both these conditions were met with occasionally in practice, and that the features of each were peculiar, and of great interest to neuro-pathologists. His conjecture was that when ophthalmoplegia interna existed alone—that is, unattended by paralysis or defect of any of the external muscles of the eyeball—that the disease was in all probability in the lenticular ganglion itself. In venturing upon this diagnosis no great importance was to be attached to the absence of some symptoms or to the presence of others. If disease existed implicating the nucleus or any part of the trunk of the third nerve, and this paralysing the constrictor of the pupil, there must necessarily be defect of some of the external muscles of the eyeball. The paper next proceeded to narrate the details of eight cases in which the condition referred to was present. None had offered an opportunity for dissection, and the diagnosis for the present must therefore be held to be conjectural only. It was observed, however, that the cases bore a very close resemblance to each other. In none of them was the patient seriously ill, and in but two were there definite indications of implication of other parts of the nervous system. In none did the disease of the nervous system, whilst the patient was under observation, extend—a fact which might, it was suggested, be in part accounted for by the fact that specifics were used in all. Of the eight cases, in five both eyes were affected. It appeared highly probable that syphilis was in most the remote cause. In three out of the eight there was no history of syphilis, but in none of these were the facts conclusive as to the negative. All the patients were of an age at which syphilitic affections of the nervous system are common: the oldest was forty-four, the youngest twenty-seven. In one case the author had himself attended the patient for severe syphilis four years before the eye-symptoms began. Attention was especially asked to the fact that in many cases the paralysis of the iris preceded that of the ciliary muscle, and was almost always in excess of it; and further, that under treatment the ciliary muscle might regain its power, whilst the iridoplegia persisted. In no single case was the failure of accommodation the first symptom. A suggestion was made as to the possible association of this group of symptoms with the early stage of locomotor ataxy, especially with that form of it which appears to be connected with syphilis.

CLINICAL SOCIETY OF LONDON.

Friday, April 12.

George W. Callender, F.R.S., President, in the Chair.

Bilateral Paralysis of the Posterior Crico-Arytenoid Muscles.

Dr. Felix Semon read a paper on this disease. He began with a few physiological remarks, explaining its pathogenesis. The size of the glottis seen in the living was larger than the same seen in the dead subject. This difference was due to the expanding force of the posterior crico-arytenoid muscles. In cases of bilateral paralysis of these muscles, the glottis was reduced at first to the size found after death, the so-called "cadaveric" position of the vocal cords; later on, however, the narrowing was still more developed in consequence of the secondary "paralytic contraction" of the antagonists of the paralysed muscles. Finally, the glottis was reduced to a mere linear slit, the vocal cords nearly touching each other. The consequence of this grave change was dyspnœa in so characteristic a form that, even without the laryngoscope, one could diagnosticate with a great amount of probability bilateral paralysis of the posterior crico-arytenoids, if this dyspnœa were present. Its peculiarity consisted in the fact that it was exclusively an inspiratory one, while expiration was effected without difficulty, and the voice remained quite unimpaired. Dr. Semon remarked that the complete freedom of expiration which existed, even when the inspiratory dyspnœa had led to very grave changes in the circulation and other secondary symptoms, was most remarkable, and wanted some better explanation than could be given at the present time. He then proceeded to the communication of the case. The patient, an inspector of the District Railway, aged thirty-two, had enjoyed good health until two years ago. Having been subject to several severe colds, he was one day attacked by a violent cough, followed by slight dyspnœa. Although this symptom disappeared quickly at that time, it had from that date appeared more and more frequently. At the present time the breathing was permanently somewhat impaired. Cough, with consequent deep inspiration, was sure to bring on a more or less severe attack of dyspnœa. Lately some other symptoms had appeared. The patient was drowsy; he complained of weakness, itching, numbness, and fibrillar convulsions in both legs, especially in the left, and sometimes of slight incontinence of urine. He was then introduced; and Dr. Semon showed that there was slight ptosis of the left eyelid; that the left pupil was smaller than the right; the left naso-labial fold more distinctly visible than the right, and the left oral angulus a little lower than the right. Further, the uncertainty in the patient's gait was shown. Dr. Semon then demonstrated the laryngeal symptoms—permanent slight inspiratory dyspnœa, which was much increased when the patient was told to cough, easy expiration, and unimpaired voice—and described the laryngoscopic appearance of the glottis: the rima glottidis much smaller than normal; complete approximation of the vocal cords during phonation; if deep inspiration were intended, the cords separated only a very little from each other, and returned at once to their former close approximation. The act of separation was effected not by a continuous movement, but by several oscillations. This condition was illustrated by drawings; and, after the meeting, was shown

laryngoscopically to members of the Society. This case was the sixth observed within the past two years by Dr. Semon in the Hospital for Diseases of the Throat and Chest, Golden-square. As the disease was a very rare one, he briefly communicated his experiences relating to the age and sex of the patients, the duration of the disease, the differential diagnosis, the etiology, prognosis, and treatment. All the patients were men between thirty and sixty; and, with one exception, they had suffered between eight months and two years before they came to the hospital. The exception occurred in a case which proved without doubt that there exists a functional paralysis of the posterior crico-arytenoids, similar to the functional paralysis of the adductors of the vocal cords so often seen in hysterical women. Dr. Semon then said that there was generally no serious difficulty in distinguishing between the disease under consideration and spasm of the glottis, but that it was in some cases quite impossible to make during life a differential diagnosis between paralysis of the posterior crico-arytenoids and anchylosis of both arytenoid cartilages. This was proved by examples. With regard to the etiology, he said that one of his six cases resulted from functional disorder, one from compression of both recurrent nerves by firm connective tissue (proved by the post-mortem examination), two from catarrhal influences, and one from perichondritis (proved by the post-mortem examination). The last case shown to-night was of special interest in this respect. He had looked upon the other nervous symptoms mentioned before as a very interesting, but merely accidental, coincidence with the paralysis, for the long time which had elapsed between the beginning of the latter and that of the other symptoms, as well as the integrity of the other organs supplied by the pneumogastric nerve, seemed to prove to him that there was no organic connexion between the two groups of symptoms. But Dr. Hughlings-Jackson, who had seen the case with him, thought that there was no doubt that the paralysis was due to central disorder, probably to a wasting process in the medulla oblongata. One case of this kind had of late been described by Penzolat. The prognosis seemed to be favourable in cases of functional paralysis; in all others, at least, very doubtful. With regard to the treatment, Dr. Semon thought that functional paralysis did not require other than constitutional treatment. Owing to the complete failure of all other remedies experienced here and abroad, in recent cases of purely neuropathic character, the direct application of electricity to the paralysed muscles might be tried, although all observers agreed that it did not prove itself so useful as in other paralyses. No percutaneous application should be instituted, inasmuch as the irritation of the healthy fibres of the vagus supplying the antagonists would lead simply to stronger contraction of those, and still more marked narrowing of the glottis. In accordance with all other observers, Dr. Semon urgently recommended in all the more developed cases the early performance of tracheotomy. Even the small number of observations at present showed that, owing to the gradual poisoning of the blood by carbonic acid, the chances of recovery after the operation were the worse the longer it was postponed. If performed in time, it not only saved the patient's life, but also restored him to health with the only disagreeable modification that in all probability he had to wear his tube for ever. Dr. Semon concluded by returning thanks to Mr. Callender, Dr. Hughlings-Jackson, Dr. Morell Mackenzie, and Dr. De Havilland Hall for their valuable assistance in making up his reports.

The President said that, having been permitted to read Dr. Semon's communication, he might say of it that it was one honestly worked out in the direction encouraged by the Clinical Society, showing how, by precise observation, facts of detail might be, and should be, carefully recorded. There were many points of interest in the paper; but he might perhaps select one of great importance—namely, the question as to the local or general nature of the affection. It was, of course, easiest to refer the truth to some one of the local causes named by the author; but it was at the same time evident that the general ataxic condition of the patient required attention. With reference to a central origin for the paralysis, it had been suggested that the affection—which, by the way, was bilateral—might be due to some change in the medulla, affecting the origin of the pneumogastrics; but, granting the origin of the nerves in the portion of the brain named, it seemed difficult so to differentiate as to justify the assumption that, whilst the nerves in their greater distribution retained their normal functions, a few of their fibres, supplied to the muscles affected, had lost all that which one recognised as nerve-force. This was but one point suggested for consideration, but, lying as it did at the root of the explanation of the cause of the malady, it seemed to him one of great interest for discussion.

Dr. Douglas Powell thought that one point of interest in Dr. Semon's case was the evidence it gave in favour of the view that, in some cases of mediastinal tumour, the dyspnœa arose from paralysis of the vocal cord rather than from spasm. Here was a case in which the dyspnœa was solely due to the paralysed cords being sucked together, by atmospheric pressure, during any strong inspiratory effort. He was rather surprised that, with such frequent paroxysms of dyspnœa, the lungs had not become congested and œdematous; and he could not but think that even a slight attack of catarrh might prove dangerous. He wished to know whether, in view of the very hazardous present state of the patient, Dr. Semon did not contemplate the necessity of laryngotomy.

Dr. Semon, in reply, said that he quite agreed with Dr. Powell that, theoretically, one would expect serious changes in the lungs in consequence of the gravely altered conditions of respiration. Practically, however, this did not appear to be the case. He had made two post-mortem examinations in such cases; in one of them, it was true, chronic pneumonia was present, but this was without doubt due to primary pulmonary affection; in the other there was only slight hyperæmia and uncommonly dark colour of the blood, the lungs being healthy in all other respects. In the case of the patient shown to-night, there was certainly no lung-disease. With regard to Dr. Powell's remarks on the treatment, Dr. Semon was very glad that they agreed so fully as to the necessity for tracheotomy being performed early in the case.

Electrolytic Treatment of Epulis.

Mr. Nunn read a paper on this subject, giving particulars of four cases, one of which had been under the care of Dr. MacOscar, of Argyll-street. A series of casts showed the progress made from time to time in the shrinking of the growth in that instance. Of the first case, that of a middle-aged lady, the following details were mentioned:—1. The number of sittings was large (about twenty). 2. The number of cells used was seldom more than six, often only three. 3. The tumour bled freely at first, on puncture with the electrodes. 4. The tendency to bleed diminished in a remarkable manner as the tumour diminished. 5. The pain caused by the electrolytic current was in proportion to the number of cells employed. 6. The pain was unbearable when the electrodes touched the periosteum of the jaw. 7. Pain ceased immediately on withdrawal of the needles. 8. As the tumour shrunk, the expanded alveolus resumed its normal shape and size. 9. An injection of chloride of zinc into the tumour, at one of the sittings, produced such subsequent pain that the experiment of such injection was not repeated. The patient was now wearing artificial teeth with comfort, and was free from all inconvenience. In the second case, casts were taken to show the appearance of the alveolar border after electrolytic treatment, compared with the result of removal by the ordinary operation. The patient had been operated on by the late Mr. De Morgan, in the Middlesex Hospital, for epulis of the lower jaw, and by Mr. Nunn for epulis of the upper jaw. In the latter instance the patient was not incapacitated from attending to her duties even for a day, while the loss of normal tissue was considerably less. In Dr. MacOscar's case the diminution of the growth was followed by great improvement in the patient's general health, and by the disappearance of swelling and tenderness at the angle of the jaw and down the side of the neck. The fourth case was still under treatment. Mr. Nunn referred to a clinical lecture of Mr. Cæsar Hawkins, delivered at St. George's Hospital, for a description of the difficulties of the ordinary operation. As regarded the apparatus employed in the electrolytic treatment of tumours, "Laclanché" cells, with platinum electrodes, had been found most convenient, as gold itself was too soft, and steel electrodes were seldom sufficiently well gilded to escape oxidation at one pole. Mr. Nunn begged to express his indebtedness to Dr. Julius Althaus for his first lesson in the electrolytic treatment of morbid growths.

Mr. Maunder said that the subject of Mr. Nunn's communication, electrolysis of tumours, was well worthy of consideration. Unfortunately the process appeared to be both painful and very tedious; and he thought the choice of the method of operation, whether as above described, or by the

knife and bone-forceps, must be left to the determination of the patient. His experience in the surgery of the jaws (somewhat extensive) had taught him that hæmorrhage in operations for epulis need not be considered in the decision, supposing the tumour to be cut out, as it ought to be, and not cut into.

Mr. H. Marsh's experience of the treatment of nævi by electrolysis was disappointing; so that such method of treatment had now fallen out of use at the Children's Hospital.

Mr. Pugin Thornton had treated nasal polypi by electrolysis; but the method was extremely tedious.

Mr. Golding-Bird had not tried electrolysis upon epulis, but on subcutaneous nævi he had been as unsuccessful as Mr. Marsh. Cutaneous nævi of small area he had destroyed, but thought that the mere laceration of the bloodvessels by the needles had very much to do with the subsequent disappearance of the growth. There were two ways of employing the electrolytic process: one in which "indifferent" electrodes, as platinum or gilt steel, were thrust into the tumour; another in which the positive electrode was of a metal, as zinc, that was itself altered by the electric current, and so a further electro-chemical change was introduced. In the former plan, the only electro-chemical action was that produced upon the salts in the tumour, bringing about an alteration in nutrition; in the latter, the chlorine from the decomposition of the chloride of sodium in the serum of the blood was attracted to the positive or zinc electrode, and chloride of zinc was formed. Thus was added to the electrolytic action proper that of a powerful caustic; and, used in this way, it was scarcely, if at all, more painful than the simple passage of the electric current with "indifferent" electrodes. He recommended this method to Mr. Nunn as a more expeditious one for destroying epulis. He had employed it extensively, and with great success, in the destruction of scrofulous lymphatic glands.

Dr. Althaus said he was surprised to hear that there had been so much disappointment experienced with regard to the effects of electrolysis in tumours. He had no personal experience concerning the electrolytic treatment of epulis, but in many other tumours the result had been most satisfactory, and not nearly so tedious as had been said. He thought that the mode of application must have had a good deal to do with the different results obtained, as the different action of the positive and negative pole was not yet generally understood. In nævus, more particularly, he had had very good results, where other surgical operations, such as the ligature, nitric acid, and vaccination, had failed. In naso-pharyngeal polypus, several Continental surgeons, such as Professor von Bruns of Tübingen, had been very successful. In bronchocele, the ablest and boldest surgeons sometimes refused to operate; and he instanced a case in which the late Sir William Fergusson had sent a patient, who was in imminent danger of suffocation from pressure of the tumour on the pneumogastric nerve, home to die, without attempting any operation. This patient was subjected to electrolysis when nearly moribund; he was out of danger within a few days, and in a few months the tumour was entirely gone, and had not at present returned. In the presence of such results, to which a good many others could be added, he felt sure that electrolysis would always retain a footing in operative surgery.

Mr. Golding-Bird appreciated the advantage of both poles being inserted into the growth; but thought that the caustic effect of the chloride of lime produced at the positive pole should not be neglected.

Mr. H. Marsh had introduced both needles into the nævi treated by him.

Mr. Nunn, in reply, said that he had had large experience in the treatment of nævi by electrolysis, and had found great benefit result. The injection of chloride of zinc itself produced great pain in a case of epulis. The disease in this case could not have been eradicated with the knife without much trouble and possible loss of blood.

Psoriasis treated by Chrysophanic Acid.

The President said that Mr. Hutchinson had sent to the meeting a patient for the inspection of the members. He was the subject of psoriasis. The disease on one half of the body had been treated with chrysophanic acid ointment, and was cured; the other half had been treated with tar ointment, and that portion of the eruption still persisted.

Hammer-Toes and Plantar Bunion.

Mr. Nunn read a paper on these subjects. The first case reported was that of a stoutly-built man, aged thirty-nine, who was admitted into the Middlesex Hospital with a suppurating bursa over the head of the metatarsal bones of the third and fourth toes. Accompanying this condition was a retraction of the phalanges on to the dorsum of the foot (extreme extension of the proximal, with flexion of the distal phalanges). There had been, some six years previously, a severe contusion of the foot, which had, however, disabled the patient only for one week. It was suggested that the retraction of the phalanges had existed prior to the receipt of the injury, although the suppuration of the bursa might have been directly caused by it. A cast of the foot was exhibited to show that, in persons who had the phalanges retracted in the manner described, the rolling action of the foot in walking, spoken of by the physiologist, must come to an untimely end, ceasing at the head of the metatarsal bones, instead of continuing, as it ought normally, to the tips of the toes. Thus undue pressure and friction fell on the heads of the metatarsal bones. The second case was that of a lady, who, after a severe gastro-enteric attack in 1872, became the subject of very marked lordosis in 1873, the spine having curved forwards to such a degree that the patient's height was lessened by four inches. She was seen by Mr. Nunn in 1874 on account of the condition of her feet. The whole of the right inferior extremity was found imperfectly nourished, and the four outer toes had become retracted on to the dorsum of the foot. Great inconvenience was experienced by the patient from the contact of the flexed toe-joint against the upper-leather of her shoe. Mechanical support was provided for the spine; and shampooing, baths, and faradisation had been diligently persevered in with satisfactory result. Instead of being quite crippled, the patient could now take fairly long walks; but there remained, nevertheless, to some extent, the retraction of the toes. The question was: Of what nature was the retraction of the toes in such cases? Reference was made to the position of the fingers in cases where the interossei had been paralysed by the section of the ulnar nerve near the wrist, and to the views of M. Duchenne as to the function of the interossei muscles. The author expressed his opinion that at least one factor in the deformity under consideration was a disturbance in the innervation, or of the nutrition of the interossei of the foot; and that the source of such mischief was frequently spinal—either from interference with the function of the spinal cord by curvature of the vertebral column itself, or from some morbid condition of the cord, or of the nerves. The author submitted that the existence of the retraction of the phalanges—*i.e.*, the condition known as hammer-toes—constituted a symptom which should direct the attention of the surgeon to the spine. The same might be said of valgus, or flat-foot. Dr. Little, in his admirable contribution on Orthopædic Surgery, in vol. iii. of "Holmes's System of Surgery," first edition, writes at page 610: "A slight degree of flat foot is common in girls, especially of the upper and middle classes." It is precisely in the sex and in the classes specified by Dr. Little that spinal curvature is so common; it was therefore suggested that the flat foot was the result of spinal disorder, and not simply a local weakness. The author indicated examples of the faulty nutrition and innervation of single muscles, *e.g.*, strabismus and writers' cramp; and he stated that faulty nutrition of single muscles of the leg very frequently took place, that ordinary bunion of the great toe was due more to an atrophic state of the extensor longus pollicis than to any dislocating action exerted by a badly made shoe. As a directly practical suggestion, the inspection of the shoes of the patient should be made; and, in the event of it being found that the sole was unduly worn across the middle of the foot, the condition of the spine should be inquired into. And the paper concluded by saying that, if the spinal curve were not the origin of the deformity of the limb, if neglected, it would certainly exaggerate the mischief, and would give rise to symptoms that would be unintelligible, and that, consequently, treatment would fail from the want of a rational basis.

The President said that, as regarded the atrophy of muscles in talipes, however much one might operate and use mechanical appliances, the old position of parts was subsequently very apt to be resumed.

Mr. Maunder said that Mr. Nunn's paper was highly suggestive, but somewhat alarming; and he trusted that in a very large majority of cases of hammer-toe, Mr. Nunn's pathology would prove to be incorrect, especially as he (Mr. Maunder) had operated upon four contracted toes in the persons of three relatives with the happiest results, dividing

the flexor tendons. These children's aptitude for play was remarkable. If Mr. Nunn meant to imply, by speaking of the toes as extended, that the extensor tendons should be divided to remedy the deformity, Mr. Maunder was sure that such an operation would be a failure. The explanation of plantar hunion offered is certainly reasonable.

Mr. W. H. Bennett thought one of the most interesting points in the paper was that concerning the condition of the nervous system, and of sensation in the affected limb. In some cases of suppurating bursæ, the sensation in the leg was nearly lost. In one instance, after amputation at the ankle, the patient subsequently returned with considerable anæsthesia in the limb. But there was in that case no idea of disease of the spinal cord.

The President suggested that cases of "perforating ulcer of the foot," described by French authors, seemed to be somewhat similar in their conditions to these cases of suppurating bunion of Mr. Nunn.

Mr. G. Brown had had a case in which bunions on each foot had suppurated and led to ulceration and necrosis. That patient had had syphilis and eczema of each leg.

Mr. B. Roth had treated such cases of "hammer-toes" with stockings having toes, like the fingers of gloves.

Mr. Nunn, in reply, said that he thought the "perforating ulcer of the foot" of French authors was more of the nature of elephantiasis. Tenotomy would probably be of much use in the case he had brought forward. The position of the toes was due to paralysis of the interossei, which were extensor muscles of the toes; therefore, the proper course of treatment would be to divide the flexor tendons. Did not that condition of hammer-toes which began at puberty indicate something amiss with the nervous system, either in the cord or the nerves?

THE PATHOLOGICAL SOCIETY.

Tuesday, April 16.

Charles Murchison, M.D., LL.D., F.R.S., President, in the Chair.

Adjourned Exhibition of Specimens of Disease of the Lymphatic System.

Dr. Hoggan exhibited microscopical specimens and drawings illustrating the relation of cancer to the lymphatic system. They had been taken from a case of cancer of the skin of a malignant type, starting from the ligature of a mole five inches below the nipple; and proving fatal after eight months of suffering. The histological characters of the growth were very mixed: for example, it appeared as medullary cancer in the sweat-glands; then infiltrated the fibrous tissues of the skin, constituting scirrhus; while under the epidermis pigmented cells were developed. The conclusions arrived at by Dr. Hoggan were:—1. That as soon as lymphatic glands become affected by cancer a plug fills the lymphatic vessels between the glands and the original seat of disease. This plug is usually left behind in ordinary operations for extirpation. 2. That the lymphatics beyond the growth get filled up for some distance; probably from, first, plugging by leucocytes, and secondly, infection of these. At the same time the lymph-current is diverted. 3. That the walls of the lymphatics remain as walls until a late stage in the process, the endothelium being healthy; but that the endothelial cells of the wall cannot be differentiated by the silver-method, from alteration either of their protoplasm or of the cement; and, after prolonged exposure to the contents, become themselves cancerous, swelling and softening. 4. That groups of wandering cells cause extension of the cancerous growth in and around the lymphatics; but that the lymphatics present no leucocytes in their vicinity, except where the bloodvessels cross them; and there the nodules grow. 5. That most of the cells that undergo cancerous change are wandering cells originally. 6. That secondary tumours do not infect the lymphatics, which are all affected before. 7. That there is no evidence that the lymphatics influence the comparative malignancy of cancerous growths. With respect to lymphatic glands, Dr. Hoggan said that the endothelial covering of the adenoid tissue swells, and its nuclei proliferate, while the wandering cells in the meshes enlarge.

The Medical Secretary showed, for Mr. Porter, of Netley Hospital, two photographs of cases of lymphadenoma. The first case was in a man of thirty-five in the Royal Artillery. There was no family predisposition; but the man had drunk hard for a time, and soon after had had syphilis on two occasions. Soon after the second attack a swelling appeared in the left supra-clavicular region, whence the disease spread to the neighbouring glands. There was also intense thirst, with dryness of the throat and spasmodic cough. On admission the man presented a syphilide on the trunk and limbs, loss of the hair generally, and great enlargement and hardness of many lymphatic glands. The limbs were œdematous; there was paroxysmal cough and orthopnœa; the liver and spleen were not enlarged. The blood showed great increase of white corpuscles of various sizes, with abundant granules, but no affection of the red corpuscles; there was no albumen, and no pyrexia. The disease progressed to death, but no post-mortem examination was made. The second case occurred in a corporal of twenty-three, who was still alive. There was no family predisposition, and no previous illness. The disease began in the glands of the left groin, which enlarged probably from the pulling off of a wart on the penis; this, however, subsided in twenty-one days. Thereafter the man had gonorrhœa in India, and later still had a doubtfully syphilitic eruption. Twelve months ago the glands under the jaw enlarged, and thence the disease spread downwards, until the characteristic appearance was produced. The man was now greatly emaciated; the skin was dusky brown, and wrinkled over the cranium; and most of the hair had disappeared from the body. The spleen was beginning to enlarge, and there was slight œdema. Constant hunger and excessive thirst were prominent symptoms; the urine was alkaline and phosphatic, 1023, with a trace of sugar. Recently spasmodic cough and orthopnœa had come on. No treatment was of avail. The proportion of red to white corpuscles in the blood exceeded 100 to 1, that is, there was a decided excess of white corpuscles. A third specimen was also shown from Mr. Porter, of the spleen from a case of lymphadenoma. A private soldier, aged twenty-six, had had ague and diarrhœa in India, but no syphilis; and died suddenly. Post-mortem, the lymphatic glands were found enlarged; opaque patches of the size of a pea were disposed universally in the calvaria; there was double pleural effusion; and a miliary growth within and without the pericardium. The abdominal glands were universally enlarged; and the spleen was enlarged, containing numerous growths.

The President said that the relation of lymphadenoma to syphilis in these cases was of interest.

Dr. Turner exhibited for Dr. Sutton microscopical specimens and drawings from cases of lymphadenoma. The drawings exhibited the appearance of the glands in the early stage of Hodgkin's disease; the enlarged spleen of the same disease, containing opaque masses like porcelain; the sago-like spleen weighing four pounds and a half, from a case associated with malaria; and the kidneys in the same cases, greatly enlarged. The microscopical specimens were from the kidneys and intestine. Of the twelve cases brought forward by Dr. Turner, seven were cases of Hodgkin's disease, two were cases of enormous enlargement of the spleen (six pounds and four pounds respectively) without enlargement of the glands, and three were exceptional cases, other organs suffering more than the spleen and glands. The interest of the first nine cases lay in the distinction between splenic and glandular disease. In none of the cases was there distinct leukæmia, but there were evidently stages towards it; and leukæmia might arise from a combination of causes of leucocytosis, so that perhaps at the last leukæmia might have existed, inasmuch as post-mortem the vessels were found packed with leucocytes. If this were the case, leukæmia would be a secondary and subordinate disease. With respect to the hardness of the glands, this seemed to mark a stage in the disease; and glandular enlargement might sometimes disappear—as in Case 7—a few days before death. A third important point was the nature of the distinction between the glandular and the splenic forms. They might be but varieties; or they might be perfectly different, with widespread affection of the viscera; for the condition of the kidney exhibited was found in both forms of the disease. Out of nine cases, in two cases of splenic enlargement, and in five out of seven of glandular enlargement, the viscera were invaded by lymphoid growth; while in the two other cases of the latter the microscope would probably have revealed the same condition. Dr. Turner therefore

considered that the two forms of the disease are probably but varieties of one morbid process, the form being determined by some accident, such as malaria or a tendency to glandular enlargement. This view was supported by cases of mixed disease, splenic and glandular; in some of which also leucocytosis existed to a marked degree, while in others all the viscera were affected.

The PRESIDENT pointed out that this was a different view of the relation of lymphatic disease to leukæmia.

Dr. DICKINSON gave an account of two cases of lymph-adenoma associated with tuberculosis. A boy of eighteen, with a strongly tuberculous history in himself and in his relations, was a patient in St. George's Hospital with lumps on both sides of the neck, as large as his two fists, deforming his head, and with enlarged glands elsewhere. The evening temperature was 102°; and there were signs of phthisis. Death occurred in eight days, of acute tuberculosis. Post-mortem, the lungs were stuffed with miliary tubercles, as well as the kidneys and brain. The enlarged glands were examined with great care, and presented appearances about which a diagnosis between lymphadenoma and tuberculosis could not be made. In places they were caseated and contained giant-cells. A section of the spleen presented the characteristic masses of lymphadenoma, yellowish, as large as a hazel-nut, and not softened in the centre. The second case almost exactly resembled the first.

Dr. GARLICK exhibited the spleen and glands of a rapidly fatal case of lymphadenoma. A boy of seven was a patient in the Hospital for Sick Children with a mass of enlarged glands on the left side of his neck, and splenic disease. The case ended fatally in two months and a half from the first symptoms. The features of the case clinically were asthenia, pyrexia (from 102° to 104°), diarrhœa, dyspnœa, and dysphagia. The blood contained no excess of leucocytes, but the number of both kinds of corpuscles fell before death. Post-mortem, the glands were enlarged with caseation, and some of them were softened; extensive lymphoid growth was found throughout the body; the spleen presented enlargement of the Malpighian bodies from lymphoid growth; the liver-cells were fatty; and the reticulum of the lymphatic glands was thickened. The remarkable feature in the case was its rapid progress.

Mr. MACNAMARA exhibited a specimen of tibia, the medulla of which presented lymphadenomatous growth. It was taken from a boy of nine, under the care of Dr. Frederick Ward, at the Stepney Sick Asylum. At first the patient suffered only from enlargement of the glands of the neck, coming as he did of a scrofulous family. These increased greatly last summer, and continued to grow until his death. In November last the cervical, axillary, inguinal, and popliteal glands were affected. There was then no spleuic hypertrophy; no albuminuria; no dropsy; and the heart and lungs were healthy. Death was due to acute pleurisy. Post-mortem, all the lymphatic glands were found enlarged; and both the liver and the spleen contained grey nodules, though they were not increased in size; there was no increase of leucocytes in the blood. The arterial system was artificially injected, and on examining the tibia it was found that the injection had not passed beyond the large vessels of the bone, apparently because all the open spaces of the bone were filled with a cellular growth like that in the spleen. One could not say whether the bone was suffering from tubercular affection or from lymphoid disease. The cell-growth and consequent pressure had prevented the blood from passing through much of the bone, but the osseous structure was still unimpaired. The cell-growth had, however, penetrated the cartilage of the epiphyses, as in tuberculosis. The specimen also showed that the deeper layers of the periosteum of bone contained descendants of cartilage-cells, from which the bone grew in thickness, for the deeper layers were found to be affected in the same way as the medulla. Mr. Macnamara said that this was a malignant disease, being rapid and infectious. The elements of the growth were exactly like the elements of lymphatic glands. The disease was a specific one, not at all like ordinary splenic enlargements with increased white corpuscles. It was unknown in India, and could not therefore be associated with malarial splenic disease.

Dr. MORISON related a case of lymphadenoma occurring in twins. The one girl had died of lymphadenoma after an injury to the head which caused some paralysis of the face. Her twin-sister died of very rapid Hodgkin's disease under Dr. Morison's observation. The family was strumous, and one relative had died of cancer. The twins were of the tenth pregnancy, and of the seventh parturition at full time. Their mother was in a debilitated state at the time of their birth, having suckled during the first four months of pregnancy.

Dr. PYE-SMITH said that with respect to leukæmia, the first cases were described as inflammation and suppuration of the blood. Virchow was the first to use the name "leukæmia." As regards the pathology of the disease, one could but fix the points at issue. First, was the great quantity of white corpuscles in the blood relative or absolute? It was more than relative, for an absolute increase had been counted. This excess was probably due both to increased production by the hypertrophied spleen, and to insufficient destruction. But if the blood was kept on the warm stage, the rounded cells were seen to have lost their power of amœboid action. They had suffered in quality, and perhaps had lost their power of passing through vessel-walls, so that they would accumulate in the blood. This might also account for the fact that there was a decided increase of leucocytes in some cases of Hodgkin's disease; which might be explained by the fact that in most cases there was a certain amount of inflammation about the glands, which might obstruct the exit of the leucocytes. Next, with regard to "lymphosis," which he would suggest instead of Dr. Gowers' proposed "lymphadenosis," cases of the disease occurred in which the glands were not affected, but the intestines, or tonsils, or the bones, or the liver, or spleen. All this group belonged to the same genus of lymphosis. Thirdly, with respect to idiopathic anæmia: some had supposed that this disease was but lymphosis with diseased marrow. This view was not tenable; for while in some there was myelogenic disease, in others no disease whatever of the kind was found beyond secondary changes. Idiopathic anæmia was totally distinct from chlorosis and from symptomatic anæmia of every kind. Iron was of no benefit in the treatment of it, nor phosphorus, nor quinine. The disease was distinctly described by Addison in 1855. Microcytes occurred in the blood, but were not peculiar to it in any way.

Dr. MOXON said that the four different diseases which had been brought under discussion would, in his opinion, have been far better kept apart. What had idiopathic anæmia to do with Hodgkin's disease? It was a blank, a senile baldness of the blood; and it was best called idiopathic anæmia. He thought that the discussion would have been a better one if an attempt had been made to seize great clinical features; to keep Hodgkin's disease apart from lymph-adenoma—whatever lymphadenoma might mean—and from leukæmia. He had been thoroughly impressed with the belief that Hodgkin's disease and leukæmia are totally distinct, and have no relation with each other whatsoever. In a typical case of Hodgkin's disease there was no true leukæmia, though there might be a few extra leucocytes, just as there might be in cancer. Again, lymphadenoma might extend into the chest and set up tuberculosis, but this occurrence did not break down the distinction between lymphadenoma and tubercle. Nor did Hodgkin's disease pass into scrofula. As for lymphatic leukæmia, he did not believe in it. He believed that the blood was a flowing tissue, and that it was not dependent on the spleen and glands for its corpuscles. The common view respecting the relation of the blood to the lymph was founded on two kinds of evidence—first, that the lymph had been seen assuming a red colour in the thoracic duct; but were the intermediate stages between white and red corpuscles to be often seen? Secondly, white cells, it was said, were being always poured into the blood; if so, where did they go? The blood, in his opinion, was independent, and capable of its own diseases; and Hughes Bennet, with his "suppuration of the blood," had been as near the truth as Virchow with his "leukæmia." In leukæmia there was nearly always a considerable elevation of temperature. Should we not think of the leucocytes in this disease as pus-cells? Might not four pounds of pus-cells be poured into an inflamed lung in a week; where were these pus-cells formed? Dr. Moxon held, therefore, that we were not in a position to speak of "lymphatic" and "splenic" leukæmia, when the typical disease occurred without affection either of glands or of spleen. With respect to the leucocytes in leukæmia, Mr. Golding-Bird had seen as active amœboid movements of them in

leukæmia as in health. It was possible they might wander out, therefore, and accumulate in the bones, for circulation was difficult in bone, and leucocytes might readily accumulate there. And so in the spleen, where the blood accumulated in any difficulty of the circulation. Returning by the lymphatic glands, the leucocytes did not choke the glands unless they were swollen. Therefore, Dr. Moxon believed there were not varieties of leukæmia, but one leukæmia. Finally, with respect to Hodgkin's disease, Dr. Moxon said that it was but one of the forms of lymphadenoma, and should be kept before the profession as a name by which to recognise a remarkable series of chronic diseased changes, including swelling of the glands (especially the cervical glands) and implication of the spleen. Too much had been made of micro-anatomy in settling the pathology of these diseases. Virchow included under "lymphoma"—leukæmic tumour, tubercle, typhoid intestine, and scarlatinal tonsil. But for a tissue to be lymphoid was much the same as for a crystal to be rhomboid, as far as either fact was *à propos* of the true nature of the respective substance. Hodgkin's disease might prove to be the outcome of a definite pathological condition as yet unknown to us.

OBITUARY.

THOMAS CARR JACKSON, F.R.C.S. Eng.

Mr. Carr Jackson, whose death we had, with sincere regret, to record last week, was born in Yorkshire of a good Yorkshire family, received his general education at Merchant Taylors' School, and then became a pupil (and a favourite one) of Mr. James Garstang, of Lytham, Lancashire, a well-known practitioner, and a magistrate for the county. Mr. Jackson continued his professional studies at St. Thomas's School and Hospital, where he was one of the dressers of Joseph Henry Green, and became a member of the English College of Surgeons in 1845. Not long afterwards he gained the appointment of House-Surgeon to the Royal Free Hospital, which he held for some time, and then was elected to the Assistant-Surgeoncy. This office he, however, resigned not very long afterwards, under circumstances to which there is no need now to refer. In May, 1857, he became a Fellow of the Royal College of Surgeons, in company with a number of well-known men, as Nunn, Sibley, Hulke, Flower, Maunder, Allingham, and Teale. Soon after his withdrawal from the Royal Free Hospital, Mr. Jackson was elected on the surgical staff of the Great Northern Hospital, of which he remained a highly valued member to the day of his death; and he was, moreover, for several years a member of the Executive Committee, rendering very valuable service to the charity in that capacity also. His high qualities as a surgeon were further recognised by his appointment as Consulting Surgeon to the Central Pancras Provident Dispensary, as Surgeon to the National Orthopædic Hospital, and Consulting Surgeon to the Luton Cottage Hospital, and to the Great Northern and the London, Chatham, and Dover Railways, and he was for three-and-twenty years one of the medical officers of the British Equitable Assurance Society. He was not a ready writer, but he published in 1868 a valuable and well-received pamphlet "On Circumscribed Abscess of Bone"; in 1870 he contributed to the *St. Thomas's Hospital Reports* an able and instructive paper entitled "Cursory Observations on Lithotomy," which operation he had performed at least twenty-three times without losing a single patient; and he contributed some very noteworthy papers to the *Transactions of the Pathological Society* and to the *Lancet*.

Mr. Jackson was a born surgeon. He had an enthusiastic love for his profession, and was untiring in his search after experience and knowledge. He was a good anatomist, and a bold and most skilful operator. A close and accurate observer, skilled and careful in diagnosis, he had the courage of his opinions, and when once formed he was ready, and well able from clinical experience and accurate reading, to defend them against all comers. But he was always eager to learn, and was ever ready to test any new or improved means of treatment; and to this, and to his large capacity for taking pains in the conduct and management of his cases, his reputation and success as a surgeon were in no little measure owing. Frank and outspoken in his opinions, he was a most warm-hearted, staunch, and loyal friend and colleague; and his death is deeply regretted by a large circle of friends, lay and professional. Mr. Jackson's health had been failing some time before the death of his wife, some six months ago, and soon after that he was completely laid aside by the long and painful illness that ended in his death, on the 23rd of last month, at the comparatively early age of fifty-five. He has left three daughters and two sons, and one of the latter is, as is pretty well known, already a member of the profession, and worthily following in his father's footsteps.

MEDICAL NEWS.

University of Aberdeen.—At the late Medical Graduation Term, the following candidates, after the usual examinations, received degrees in Medicine and Surgery:—

The Degree of M.D.—Robert Reid Alexander, M.B., C.M., Hanwell Lunatic Asylum; Alexander Baird, M.B., C.M., Perth; Robert Sydenham F. Barnes, M.B., C.M., London; David Bower, M.B., C.M., Murray-field, Edinburgh; Robert William Burnet, M.B., C.M., London; James Cameron, M.B., C.M., Hendon, Middlesex; Charles Creighton, M.B., C.M., Cambridge; James Trigue Crowden, M.B., C.M., Wisbeach, Cambridgeshire; Charles Davidson, M.B., C.M., Coventry; David Peter Duirs, M.B., C.M., Dipton, Newcastle-on-Tyne; Robert Turner Hales, M.B., C.M., Holt, Norfolk; Edward John William Hicks, M.B., C.M., London; Herbert James Hott, M.B., C.M., Bromley, Kent; Frederick William Jackson, M.B., Broadstairs, Kent; Frederick Henry Kyngdon, M.B., C.M., Sydney, New South Wales; Alexander Macpherson, M.B., C.M., Haslingden, near Manchester; Robert James Morice, M.B., C.M., Palmerston, South Australia; William Morrish, M.B., C.M., Peckham, London; David Aikman Patterson, M.B., C.M., Aden; James Miller Gordon Pirrie, M.B., C.M., Aberdeen; Malcolm Poignand, M.B., Islington, London; James Rodger, M.B., C.M., Aberdeen; William Thomas Sheppard, M.B., C.M., Liverpool; James Simpson, M.B., C.M., Aberdeen; James Herbert Simpson, M.B., C.M., Rugby; Henry Barton Liddell Smith, M.B., C.M., London; Henry Watson, M.B., C.M., Norwich; Robert Wharry, M.B., C.M., London; Edward Arthur White, M.B., C.M., Malmesbury, Wilts; Alexander Williams, M.B., C.M., Tarland.

The Degree of M.B.—James Walker Beattie, Huntly; Colin M'Iver Campbell, M.A., Aberdeen; Harry Edward Dixey, Great Malvern; Benjamin Evers, Seoni, C. P. India; Andrew Fowler, Skene; Skene Gordon, Tarland; David Hardie, Elgin; William Henry, Echt; Samuel Patton Impey, Cape Colony; Richard Jansz, Kandy, Ceylon; Alexander Macgregor, Fearn, Ross-shire; John MacMunn, Wolverhampton; Henry Gray M'Robert; Andrew Norrie, Cairnhill, Turriff; James Murray Park, Saint Fergus, Peterhead; Donald Stuart, Kemnay; Augustus Desiré Waller, Paris; William Robert White, London.

The Degree of C.M.—James Walker Beattie, Colin M'Iver Campbell, Harry Edward Dixey, Benjamin Evers, Andrew Fowler, Skene Gordon, David Hardie, William Henry, Samuel Patton Impey, Richard Jansz, Alexander Macgregor, John McMunn, Alexander Gray M'Robert, Andrew Norrie, James Murray Park, Donald Stuart, Augustus D. Walker, Wm. Robert White.

Of the above-mentioned candidates, William Henry, Samuel P. Impey, Alexander Macgregor, and Andrew Norrie received their degrees in Medicine and Surgery, with Honourable Distinction. The John Murray Medal and Scholarship was awarded to Alexander Milne Henderson as the most distinguished graduate of his year.

At the same time William Barron was certified as having passed all the examinations, but did not graduate; and the following were declared to have passed part of their examinations:—

Alexander Vass Anderson, James Aymer, William J. F. Bannerman, William Beddie, William C. Brown, Alfred Burton, Henry Augustus Cæsar, Algernon Aaron Cohen, William Cooper, George Coutts, Heber Dowling Ellis, Edward Evans, John Andrew Fehrsen, James Grant Fleming, Donald Manson Fraser, James Thomson Fraser, Peter Galloway, Francis C. Gaytou, Heneage Gibbes, John Glaister, Charles Glass, Alex. H. Griffith, John Gasson Harwood, James Hitchcock, William Hoskins, Alfred Ireland, John Bamford Kerr, Joshua Law Kerr, Alex. W. Knox, Charles Low, Peter William Macdonald, William Mackie, Douglas Dent Malpas, John F. T. Melvill, William Adam Michie, Adam J. F. Mickle, James Thomas Mitchell, Bonner Harris Mumby, Forbes Robertson Mutch, Alexander Nicol, Henry Tolver Preston, George Rae, Charles Reid, Thos. Alexander Sellar, John Rusby Seymour, Charles Carter Shepherd, David Skinner, William Tawse, George Taylor, Henry Thomson, Lewis Haywood Truefitt, James Hutchison Walker, John Coatsworth Watson, Percy R. Wilde, Samuel John Willett, George Alexander Wilson, Christopher St. J. Wright.

The next professional examination for degrees in Medicine commences on Saturday, July 27.

University of St. Andrews.—The following gentlemen having passed the required examination, obtained the degree of Doctor of Medicine on April 18:—

Codrington, Oliver, M.R.C.S., L.S.A., Fort Pitt, Chatham.
Colby, William Taylor, M.R.C.S.L., L.S.A., Malton, Yorkshire.
Etesou, Alfred, M.R.C.S., Watford, Herts.
Grose, Samuel, F.R.C.S., Staff-Surgeon R.N., Melksham, Wilts.
Hall, Frederick, M.R.C.S.E., L.S.A., Leeds, Yorkshire.
Hicks, Henry, M.R.C.S., L.S.A., Hendon, Middlesex.
Macgowan, Alexander Thorburn, M.R.C.S., L.R.C.P., L.S.A., Clifton, Bristol.

Whalley, William, M.R.C.S., L.S.A., L.M., Bradford, Yorkshire.
Wotton, Henry, F.R.C.S., L.S.A., Kensington, London.
Wynter, Hugh Bold, M.R.C.S., L.S.A., Wandsworth-common.

At the same time the degrees of M.B. and C.M. were obtained by—

Mackay, John Sutherland, M.A., Edinburgh.
Rea, John Henry, L.R.C.P. and S. Edin., L.M. Belfast.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen, having passed the required examination, were admitted Members on April 25:—

Bird, William Valentine, M.D. Aberd., L.R.C.P., Sydenham, S.E.
Bogg, Thomas Wemyss, M.B. Lond., St. Leonards.
Boulton, Percy, M.D. Edin., 6, Seymour-street, W.
Gill, Stanley Augustine, Royal Lunatic Asylum, Liverpool.
Saundby, Robert, M.D. Edin., Birmingham.
Savage, George Henry, M.D. Lond., L.R.C.P., Bethlem Hospital, S.E.
Thorburn, John, M.D. Edin., Manchester.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examination meetings of the College, held on Tuesday, Wednesday, and Thursday, April 9, 10, and 11, the following candidates were successful:—

For the licence to practise Medicine:—

Previous Examination.

O'Meara, John Brett Johnston | Shove, Edith.

Final Examination.

Cameron, James Chalmers. | O'Neill, Edward Daniel.
Gruggen, William. | Young, Alfred Naason.

For the licence to practise Midwifery:—

Cameron, James Chalmers. | Moullin, James Alfred Mansell.
Gruggen, William. | Weiss, Hubert Foveaux.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 17th ult., viz.:—

Andrew, John Edward, L.S.A., Victoria, Australia, student of the Manchester School.
Armand, George, M.D. Mel., Melbourne, Australia, of Melbourne School.
Atkinson, John Mitford, L.S.A., Winchester, of the London Hospital.
Berry, Frederic Haycraft, Amwell-street, E.C., of Guy's Hospital.
Colenso, Robert John, M.A. Oxon, Phillimore-gardens, of St. Bartholomew's Hospital.
Evans, Edward Pritchard, Llanfalon, Glamorganshire, of the Middlesex Hospital.
Fardon, Edward Ashby, Droitwich, Worcestershire, of the Middlesex Hospital.
Giles, Bernard Faraday, L.S.A., Canonbury, of Guy's Hospital.
Higgs, Alfred, Leicester, of the London Hospital.
Lavis, Henry James Johnston, Stalbridge, Dorset, of University College Hospital.
Lockwood, Charles Barrett, L.S.A., Stockton-on-Tees, of St. Bartholomew's Hospital.
Nicholson, James Edward, Tours, France, of St. Bartholomew's Hospital.
Sylvester, George Holden, Tonbridge, of St. Bartholomew's Hospital.

Four gentlemen were approved in Surgery, and when qualified in Medicine will be admitted Members of the College; and five candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months.

The following gentlemen, having undergone their Primary Examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 25th ult., will be admitted to the Pass Examination when qualified, viz.:—

Davidson, Alexander, student of the London Hospital.
Grindon, Francis J., of the Charing-cross Hospital.
Jackson, Edward S., of the Edinburgh School.
Jennings, William M., of the Newcastle School.
Kingsland, Arthur T., of the Birmingham School.
Knott, William, of the Manchester School.
Pemberton, Thomas P., of the Birmingham School.
Rubie, Ignatius J., of the Dublin School.
Sellers, William, of the Edinburgh School.
Whiting, John, of St. Bartholomew's Hospital.
Winskell, William E., of the London Hospital.

Twelve candidates were rejected. The following gentlemen passed on the 26th ult., viz.:—

Alldridge, William E., student of the Birmingham School.
Bradshaw, Oswald G. D., of the Bristol School.
Harbord, Edward A., of the Birmingham School.
Jones, Robert, of the Dublin School.
Knowles, Robert B., of the Edinburgh School.
Lee, Alfred, of the Birmingham School.
Loynd, William, of the Manchester School.
Mackenzie, John F., of the Newcastle School.
Martin, Frederick W., of the Liverpool and Charing-cross Hospitals.
Peck, Edward G., of the Cambridge School.
Richardson, James N., of the Leeds School.
Thomson, James, of the Edinburgh School.

Twelve candidates were rejected. The following gentlemen passed on the 29th ult., viz.:—

Anderson, Daniel E., student of University College Hospital.
Barbour, Alexander H., of the Edinburgh School.
Boswell, John J., of Guy's Hospital.
Burroughs, Leopold, of Guy's Hospital.
Harris, David, of the Leeds School.
Henty, Sydney H., of University College Hospital.
Hill, Hugh G., of St. Mary's Hospital.
Husband, John C. R., of the Leeds School.
Loveridge, Arthur W., of the Middlesex Hospital.
Morris, Edgar F. G., of University College Hospital.
Norie, James, of University College Hospital.
Sanders, Charles, of St. Bartholomew's Hospital.
Sharples, William H., of the Manchester School.
Street, Alfred F., of the Cambridge School.
Tooth, Howard H., of St. Bartholomew's Hospital.
Thomas, David J., of the Glasgow School.
Watson, Frank S., of the Charing-cross Hospital.
Wood, Arthur G., of King's College Hospital.

Six candidates were rejected. The following gentlemen passed on the 30th ult., viz.:—

Beck, Johannes H. M., student of the Edinburgh School.
Cook, Jonathan N., of St. Bartholomew's Hospital.
Frampton, Tom H. T., of St. Mary's Hospital.
Gwillim, Richard D. H., of St. Mary's Hospital.
Kenny, Alfred S., of King's College Hospital.
Little, Ernest M., of St. George's Hospital.
Martin, Edward F., of the Edinburgh School.
Milligan, Robert A., of Guy's Hospital.
Pope, Frank M., B.A. Cantab., of the Cambridge School.
Rowlands, Hugh P., of Guy's Hospital.
Silke, George B., of the Edinburgh School.
Vores, Arthur, of St. Thomas's Hospital.

Twelve candidates were rejected. The following gentlemen passed on the 1st inst., viz.:—

Allen, Thomas W. J., student of University College Hospital.
Barratt, Herbert J., of St. Bartholomew's Hospital.
Bassett, William F. B., of University College Hospital.
Benson, Alfred, of St. Mary's Hospital.
Berry, Harry P., of Guy's Hospital.
Browne, Oswald A., of St. Bartholomew's Hospital.
Bull, George C. R., of St. Mary's Hospital.
Clark, William, of University College Hospital.
Flugg, William, of the Edinburgh School.
Puddicombe, Francis M., of St. George's Hospital.
Rhodes, James H. A., of the Liverpool School.
Rice, Edward, of St. Bartholomew's Hospital.
Sanders, Francis E. S., of St. George's Hospital.
Smith, Wm. A., of St. Mary's Hospital.
Udale, Joseph J., of Guy's Hospital.

Nine candidates were rejected on this day. The following were the questions in Anatomy and Physiology submitted to the candidates for the diploma of membership of the College of Surgeons on the 23rd ult., when 167 candidates presented themselves, viz.:—1. Mention the forces concerned in the venous circulation, and describe their action. 2. Give the minute anatomy of the nasal mucous membrane. 3. Describe the attachment of muscles to the tibia, and mention the nerve-supply of each. 4. Describe the anastomoses of the scapular arteries, and the dissection required to expose them. 5. Give the relations and distribution of the portio dura nerve outside the stylomastoid foramen. 6. The pharynx being opened from behind, describe the parts brought into view without further dissection.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, April 25:—

Barnes, James John Frederick, 83, Caversham-road, N.W.
Coombs, Samuel Wellesley, Worcester.
Morton, Augustus Charles, Aylsham, Norfolk.
Shepherd, Thomas William, Ilminster.

The following gentlemen also on the same day passed their Primary Professioual examination:—

Davies, Evan Naunton, Guy's Hospital.
Greensill, Joseph Moore, Middlesex Hospital.
Greensill, James Haynes, Middlesex Hospital.
Ladell, William John Simpson, St. Bartholomew's Hospital.
Leadbeater, Thomas Edward, London Hospital.
Womersley, Joshua King, Guy's Hospital.

At the Preliminary Examination in Arts, held at the Hall on April 26 and 27, seventy-six candidates presented themselves, of whom twenty-four were rejected, and the following fifty-two passed and received certificates of proficiency in general education, viz.:—

In the first class, in order of merit—

First, H. C. E. Cooper; second, W. W. Floyer; third, Rowland Hill, A. Mitten, and W. H. Moore; sixth, H. E. Bateman and Annie McCall.

In the second class, in alphabetical order:—

S. Aspinall, J. C. Bates, H. S. Baumgartner, J. B. Berry, B Blackmore, R. E. Bowen, J. F. Bowring, L. H. Brown, H. M. Bullock, T. E. Butler, F. G. Carnell, F. M. Coppin, C. Conlan, C. E. Day, F. H. Douglas, J. H. Drury, C. H. East, A. J. Gardner, W. E. Gardiner, A. E. Garrett, W. H. Gimblett, A. J. Grant, H. S. Greenwood, G. F. Hentsch, W. Hern, H. T. Herring, G. Hessenauer, A. E. Marsack, F. B. Norris, H. S. Parkinson, A. Sales, P. M. Scatliff, J. S. W. E. Sharman, A. Shearman, A. F. Smith, E. T. Smith, F. W. S. Stone, R. W. Statham, A. E. Taylor, H. H. Taylor, S. R. Thomas, A. G. Webster, G. D. Wenham, A. E. Woodforde, and G. A. H. Woodforde.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Tiaard, Nestor I. C., M.B. Lond., M.R.C.S.E.—Medical Tutor and Sub-Dean to King's College, *vice* — Cross, resigned.

Wintebottom, Augustus, F.R.C.S. Eng. (Exam.)—Lecturer on Dental Surgery, and Dental Surgeon to St. George's Hospital.

NAVAL, MILITARY, &c., APPOINTMENTS.

War Office.—Medical Department.—Surgeon-Major Edwin Granville Ley, M.D., retires upontemporary half-pay; Surgeon-Major Francis Henry Preston retires upon temporary half-pay. To be Surgeons-Major—Surgeons James Lane Notter, M.D., Henry Comerford, M.D., Henry Thomas Brown, M.D., John Harrington Wright, Ulick Albert Jennings, M.D., James Shaw M'Cutchan, M.B., Edward M'Crystal, M.D., Henry Theodore Chapman, Robert Francis Buchanan, James Patrick Rooney, James Henry Hannagan, Thomas William Patterson, Frederic William Lloyd Hodder, M.B., Wm. Flack Stevenson, M.B., Robert Nasmyth M'Pherson, Robert Coleman Eaton, Wm. Francis Burnett, and Edmund Farrington Boult.

BIRTHS.

Allen.—On April 2, at Sihor, the wife of Surgeon-Major W. E. Allen F.R.C.S., Bhopal Battalion, of a son.

Chetwood.—On April 29, at 10, King-street, Finsbury-square, the wife of William Chetwood, M.R.C.S. Eng., of a daughter.

Harris.—On April 27, at Penleae House, Falmouth, the wife of Arthur P. Harris, M.D., of a son.

Hibberd.—On April 22, at Campfield Lodge, St. Peter's-park, W., the wife of Edward Hibberd, M.D., of a daughter.

Hill.—On April 17, at Oak House, Tufnell-place, Holloway, N., the wife of J. R. Hill, L.R.C.P., of a daughter.

Lloyd.—On April 24, at Tynycoed, Barmouth, the wife of H. J. Lloyd L.R.C.P. Edin., of a son.

Orton.—On April 29, at 30, Phillimore-place, Kensington, W., the wife of George Hunt Orton, M.B., F.R.C.S., of a son.

Theobalds.—On April 6, at Kamptee, C.P., the wife of Deputy Surgeon-General J. R. Theobalds, M.R.C.S. Eng., of a son.

MARRIAGES.

Adams—Lowry.—On April 27, at All Saints' Church, Surrey-square, James Adams, M.D., of Ashburton, Devon, to Eliza Ann, younger daughter of the late R. Lowry, Esq., of St. John's-wood, N.W.

Bindley—Jacques.—On April 12, at Remenham, Henley-on-Thames, Philip Bindley, M.B. Lond., of Birmingham, to Sarah Bessie, only daughter of the late William Jacques, of Chiton.

Darbishire—Eckersley.—On April 27, at Little Portland-street, S. Dukinfield Darbishire, M.A., M.B. Oxon., of 63, Addison-road, Kensington, to Florence, younger daughter of William Eckersley, C.E., of Westminster.

Davis—Sharpe.—On April 27, at the parish church, Falmouth, Arthur Percy Davis, M.R.C.S. Eng., of Fowey, Cornwall, to Maria Anne Scott, eldest daughter of Robert Sharpe, of Falmouth.

Eliot—Jamieson.—On April 24, at St. Peter's Church, Peterhead, N.B., Whately Eliot, Esq., C.E., youngest son of William Eliot, Esq., of Weymouth, to Jessy, eldest daughter of P. Jamieson, M.D., of Peterhead.

Griffith—Heale.—On April 27, at Christchurch, Winchester, Charles Griffith, M.A., Assistant Master at Winchester College, to Eliza, second daughter of J. Newton Heale, M.D., of Winchester.

Stewart—Bathe.—On April 30, at All Souls', Langham-place, William R. H. Stewart, F.R.C.S., etc., of 34, Welbeck-street, W., to Louisa Mary, eldest daughter of William P. Bathe, of 25, Sussex-place, Regent's-park.

Ward—Blake.—On April 24, at St. Anne's, Moseley, Joseph Ward, M.R.C.S. Eng., of 204, Stratford-road, Sparkbrook, to Annie, the younger daughter of V. W. Blake, F.R.C.S., of the Five Lands, Moseley.

DEATHS.

Collingwood, William Percy, M.R.C.S., at Percy House, Gauden-road, Clapham, on April 20.

Humble, William, M.D., F.G.S., at Cliff Lodge, Ramsgate, on April 23, aged 81.

Lacy, Margaret, infant daughter of Charles de Lacy Lacy, M.B., at Leckhampton Court, Cheltenham, on April 24.

Macnab, Kate Isabel, daughter of Robert Macnab, M.D., at Bury St. Edmunds, on April 28, aged 5 years and 3 months.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

Bristol Royal Infirmary.—House-Surgeon. Candidates must be Fellows or Members of the Royal College of Surgeons of London, Edinburgh, or Dublin, or Masters in Surgery of one of the universities of the United Kingdom, and also possess a registered medical qualification. Applications, with testimonials, to the Secretary, on or before May 11.

Evelina Hospital for Sick Children, Southwark-bridge-road, S.E.—Registrar and Chloroformist. Candidates must be duly qualified. Applications to the Secretary at the Hospital.

Great Northern Hospital, Caledonian-road, N.—Ophthalmic Surgeon. Candidates must be Fellows of the Royal College of Surgeons of England. Applications, with testimonials, to the Secretary, on or before May 6.

Hospital for Sick Children, 49, Great Ormond-street, Bloomsbury.—Assistant-Surgeon. Candidates must be Fellows of the Royal College of Surgeons of England. Applications, with testimonials, to the Secretary, on or before May 9.

Kent and Canterbury Hospital.—Physician. Candidates must have been practising as physicians for the space of two years previous to election, and be registered as regular graduates in medicine of some University of Great Britain or Ireland, or Fellows or Members of the Royal College of Physicians of London. Qualifications and testimonials to be sent to the Board of Management on or before June 28.

Manchester Royal Infirmary.—General Superintendent and Secretary. Candidates must be not less than thirty years of age. Applications, with testimonials, to the Chairman of the Board, on or before May 18.

Metropolitan Free Hospital.—Two House-Surgeons. Candidates must be Members of the Royal College of Surgeons. Further particulars may be obtained of the Secretary, George Croxton, 81, Commercial-street, Spitalfields, E.

Royal Hants County Hospital, Winchester.—House-Surgeon and Secretary. Candidates must possess the diploma of the Royal College of Surgeons of England, or surgical diploma of a Royal College or University in Scotland or Ireland; also a licence from the Royal College of Physicians of London, or from the Apothecaries' Society. Applications, with testimonials as to moral character, to the Committee, under cover to the Secretary, before May 27.

Royal Hospital at Bethlehem.—Resident Physician and Medical Superintendent. Candidates for the above appointment must be Doctors of Medicine of an University in the United Kingdom, and Fellows or Members of the College of Physicians in London, Edinburgh, or Dublin, qualified to practise as physicians. Applications and testimonials must be accompanied by answers to a printed form, which, with a copy of the duties of the office, may be obtained from A. M. Jeaffreson, Clerk, etc., Bridewell Hospital, Bridge-street, Blackfriars. Applications must be forwarded to the same on or before May 16.

Saint Pancras, Middlesex.—Medical Officer of Health and Examiner of Gas. Candidates must possess legal registered medical qualifications. Applications, upon forms to be had from T. E. Gibb, Vestry Clerk, accompanied by testimonials of recent date, not exceeding six in number, to be sent in on or before May 10.

University College Hospital, London.—Surgical Registrar. Applications and testimonials to Talfourd Ely, M.A., Secretary, on or before May 6.

Wilts County Lunatic Asylum.—Assistant Medical Officer. Candidates must be duly qualified and registered medical practitioners. Applications, state age, with not more than six recent testimonials, to "The Clerk to the Committee of Visitors, Wilts County Lunatic Asylum," Devizes, on or before May 15.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Mitford and Launditch Union.—Mr. J. Hazard has resigned the Fransham District; area 17,051; population 3693; salary £65 per annum.

APPOINTMENTS.

Bedminster Union.—George E. d'Arcy Adams, M.D., M.C. Aber., to the Workhouse.

Bradford (Wilts) Union.—Wm. D. Lovell, M.R.C.S. Eng., L.R.C.P. Edin., to the Third District.

Dartford Union.—Hugh H. McNaul, B.M. Glasg., L.R.C.S. Edin., to the Workhouse.

Gravesend and Milton Union.—Onslow R. Richmond, L.R.C.P., M.R.C.S., to the Milton District.

Kettering Union.—Edward Greaves, M.R.C.S. Eng., L.R.C.P. Edin., to the Corby District.

Peterborough Union.—Wm. R. Sergeant, L.R.C.P. Edin., L.R.C.S. Edin., to the Crowland District. F. M. Brown, L.R.C.P. Edin., L.F.P. & S. Glasg., to the Castor District.

Royal Leamington Spa.—Edward H. W. Swete, M.D., F.C.S., as Analyst for the Borough until October next.

Toxteth-park Township.—Charles R. Woods, B.M. and L.R.C.S. Dub., as Assistant Medical Officer at the Workhouse.

Harvey Tercentary Memorial Fund.—The contributions to this Fund announced during the present week amount to almost £100, and include the following subscriptions:—The Town Council of Folkestone, £52 10s.; the Obstetrical Society of London, £26 5s.; and the North of England Branch of the British Medical Association, £5 5s. Further donations are required, and will be thankfully received by the Treasurers or the Honorary Secretaries.

The President and Council of the Pharmaceutical Society of Great Britain have issued cards of invitation for a *conversazione* to be held at the South Kensington Museum on the evening of Wednesday, May 15.

Instruction in Public Health.—The course of lectures on the above subject at University College will commence on Tuesday, May 7, at 4 p.m.. It will be well suited for those who wish to obtain certificates in sanitary science, for whom also the practical work in the hygienic laboratory is essential. Two of Professor Corfield's laboratory pupils have recently taken such certificates.

Retention of Placenta by Atmospheric Pressure.—In an article copied into the *Revue Méd.* (April 15) from the *Union Méd. du Nord-Est*, a case is related in proof that sometimes when the retention of the placenta is supposed to be due to adhesions it is really caused by the action of atmospheric pressure. The efforts of removal when there is delay should not be made perpendicularly from the centre of the placenta, but in an oblique direction, while at the same time the finger is applied at the edge of the organ as if to raise and detach it, just as one would detach a cupping-glass.

Re-establishment of the Concours at Bicetre and Salpétrière.—The Préfet of the Seine, on the proposition of the new Director of the Assistance Publique, has just decided on the re-establishmeut of the *concours* for the posts of physicians of Salpétrière and Bicêtre. He has for this purpose appointed a commission, consisting of MM. Baillarger, Vulpian, and others, for the purpose of determining the conditions of this *concours*. All those who have the progress of medical science at heart cannot but be grateful to the Préfet for having re-established that which one of his predecessors—Baron Hausmann—had destroyed. —*Rev. Scientifique*, April 17.

Epidemic of Diseases of the Heart.—In the *Recueil de Méd. Militaire*, 1878, No. 1, M. Julié furnishes an account of an epidemic of diseases of the heart which has prevailed in the garrison of Lunel during 1877, in the course of which forty-three soldiers became attacked. The affection exhibited itself in different degrees, from that of intermittent palpitation to contiuued palpitation symptomatic of organic disease of the heart, hypertrophy or valvular disease having been observed in eleven or twelve of the cases. The mildest cases were unable to resume service under three weeks, and oftener after a longer period, while the others are still under treatment at the Montpellier Hospital. No cause could be made out for the occurrence, as the garrison was in very good condition. The most probable hypothesis was that it was due to a malarial origin.

The Ferro-cyanide of Potassium.—In the *Bulletin de Thérapeutique* for March 30, Prof. Regnauld and Dr. Hayem furnish an elaborate account of the trials which they have made of the ferro-cyanide of potassium (the yellow prussiate of potash) in two cases of marked chlorotic anæmia. Tabular views are given of the enumerations of the blood globules as observed under the action of this and other preparations of iron. The conclusions they arrive at are: —1. The ferro-cyanide is inactive as a ferruginous medicament, and contributes nowise to the regeneration of the coloured elements of the blood. 2. The organo-metallic radical undergoes no modification in our organs, for the iron remains inert; and the cyanogen proves inoffensive, since we may administer several grammes daily for weeks without any ill effect upon the health. 3. This salt exerts no appreciable effect upon diuresis or the production of urea. Dr. Rabuteau, as the result of numerous trials made upon himself (*Gaz. Hebdom.*, April 19)—four grammes of the ferro-cyanide being taken per diem—comes to the conclusion that it possesses no diuretic power whatever.

Post-partum Hæmorrhage.—In a lecture delivered by Prof. Penrose at the University of Pennsylvania (*Boston Med. Journal*, March 7), he observed that, in reference to the prevention of the occurrence of post-partum hæmorrhage, we must bear in mind its predisposing and exciting causes. If the woman is plethoric and has bled profusely after former labours, saline purgatives and diuretics should be employed, and her diet kept low for some time previous to confinement. If there is marked anæmia, advise the liberal use of iron, bitters, stimulants, and plenty of good nourishing food. With regard to exciting causes, when the labour is long and tedious, hasten it by the careful and skilful use of the forceps; if, however, it be too rapid, and the uterus is emptying itself too soon, try to render it slower by anæsthetics, etc. As soon as the child is born, in order to secure contraction, ergot should be freely given, and all external means for this purpose resorted to. When hæmorrhage does occur, and the placenta has been entirely removed, large doses of ergot (as a drachm of the fluid extract every fifteen minutes) should be given; and when the stomach will not bear it in such doses, it should be employed hypodermically. After recommending the employment of cold by introducing ice into the cavity of the womb, and reprobating Marshall Hall's plan of pouring cold water on to the abdomen, Prof. Penrose observes that when the bleeding still continues he has found unfailing benefit from vinegar—dipping a handkerchief or a rag into this, carrying it up into the uterus, and squeezing it out there. When vinegar cannot be got, a peeled lemon into which deep gashes have been made may be squeezed within the inert womb. When the hæmorrhage still goes on, he recommends, instead of the injection of iron or other substances, the employment of compression of the aorta and vena cava at the posterior part of the cavity of the abdomen, giving at the same time fifty drops of laudanum or a hypodermic injection of from one-quarter to one-eighth of a grain of morphia. The administration of oil of turpentine on sugar (one or two tablespoonfuls every fifteen or twenty minutes) or of a hot infusion of capsicum (℥ij. to ℥x.) has in some bad cases succeeded remarkably. Transfusion is rather indicated when the hæmorrhage has been checked, the patient being bloodless and exhausted.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

A Candidate for the "Dental Register."—The following impudent circular has been issued to the professinn by an individual calling himself a "Surgeon Dentist," and carrying on his trade in the West-end of London. He has, we may suppose, met with some of the black sheep of the profession, or with some whose poverty, bnt not their will, consents to such a mode of helping their "necessity" of living; and the "Surgeon Dentist" therefrom concludes that the profession at large will be ready to take his pay! It is well to note that men like this circular-issuer will, by Sir John Lubbock's Bill, not only be admitted to the Dental Register, bnt be legally entitled to call themselves surgeon dentists:—

"Dear Sir,—For a considerable period it has been my practice to remunerate medical men for the honour they do me in recommending me to their patients. Finding that this system begot a feeling of mutual confidence, I have determined, in every case of recommendation by medical men, to present them with a fourth part of the sum received. I estimate my profits at 50 per cent., and in every case I shall allow 25 per cent. to the medical man recommending me. I need scarcely add that my system is one combining nature with utility, and renders mastication an easy and comfortable performance. I may here state that my attention has been very much directed to the regulation of children's teeth, by means of invisible gold plates, thus arresting the deformities of the mouth which would otherwise take place. I may add that in consequence of the attention bestowed I invariably give perfect satisfaction. This is a subject well worthy your consideration, as it is astonishing the sums I pay even to men in comparatively small practice. It is desirable that in every case you will instruct your patient to hand me your card or name and address.

"I am, yours very truly, ———, Surgeon Dentist.

"P.S.—On completion of a case or operation, I will immediately forward you a cheque for the percentage due."

Adulteration: a Novel Point.—A point was raised at the hearing of a case of adulterating gin, before the Bath magistrates, recently, which is worthy of attention. A licensed victualler of that city was fined £10 and costs for selling gin adulterated with 45 per cent. of water. But the Bench granted a case for the superior court, on the ground that the gin, having been purchased by the inspector of the sanitary authority for the purpose of analysis, was not sold by the defendant as an article of food to the prejudice of the inspector.

Pauper "Outings."—It is worthy of notice that out of fifty women, inmates of the General Hospital, Jersey (*Anglicè*, workhouse), who one day recently took their "outing" to see their friends, which they are allowed to do once a month, only twelve returned to the establishment in the evening sober. No fewer than thirty of the others were helplessly intoxicated. On the following day about thirty of the men had their "day out," and though no precise record is given of how many of them returned to their quarters, five had drunk to such an excess that their refractory conduct necessitated the calling in of the police to secure order. They were taken before the stipendiary magistrate the following day, and each of them sent to prison for fourteen days.

Women and the London Factories.—In the reports of the Inspectors of Factories for the half-year ending in October last, Mr. Henderson adduces much evidence respecting the employment of adult women, to show that the Factory Acts are very popular amongst these women working in the factories and workshops of London, and refutes the charge brought against the Acts, that they encourage vice and immorality by imposing a disability upon such employment of them. The Factory Acts, he maintains, have encouraged the employment of women rather than the reverse.

Malcolm.—It is no doubt true that America has furnished a greater number of medical women than any other country, and female medical education is there further advanced than elsewhere. It is, however, a mistake to suppose that even in America the question is perfectly satisfactory. Women have been successful in establishing themselves in the profession, but the position of equality with medical men they have not succeeded in obtaining. The mere possession of a degree does not imply so much in America as in England, and consequently the American medical degrees which women have procured do not confer upon them a similar status in the profession. The remark referred to, in Madame de Genlis' "Estimate of the Intellect of Women," is to the following effect:—"They (women) are born to give life, and to live among the beings they give birth to. All ethical writers of any worth have agreed in assigning these offices to them, and many have prescribed these alone. Certain it is, however, that so soon as any other kinds of employment have weaned a woman's regard from the performance of domestic duties, a departure has been made from propriety, and, as usual, with a certain loss of enjoyment."

Drunkenness in Dublin.—In opening the Commission for the County and City of Dublin, recently, Mr. Justice Lawson said his own experience as a judge led him to say that intemperance was a fruitful parent of crime; and, seeing that within the past two months there had been in Dublin 2669 convictions for drunkenness, reasonable men might doubt whether Dublin required exceptional facilities for getting drunk.

O. C. N., Fulham.—"The Coffee Taverns Company," London, has now five coffee taverns open, and two other houses in course of adaptation. The Company was incorporated in November, 1876.

Diseased Milk.—A cowkeeper has been fined £11 and costs by the Greenwich magistrate for having mixed with the milk of healthy cows some milk taken from one suffering from pleuro-pneumonia.

Density of Population.—The density of population in Middlesex is 680 per mile; in London it is 25,666, or as many in the denser parts of the metropolis as forty souls per acre. London doubles its population in forty years.

The Brockwood Asylum.—The Surrey magistrates have agreed to grant £10,000 for the purpose of constructing a deep well, which would supply the Asylum with an ample quantity of pure water.

A Useful and Sanitary Exercise.—From the recent annual report of the London Schools Swimming Club, it appears that 1577 children (boys and girls, exclusive of 100 adults) had been under instruction during the past season of 1877, making a total of 7577 children instructed since the commencement of the Club in 1875.

A Student Years ago, Warwickshire.—From the recent annual report of the University College Hospital, it appears the balance at the end of the financial year was £1175, and the outstanding debt was £3555. The total receipts for the year, including a loan of £1000 from the bankers, were £18,158. It was intended to make some alterations in the Hospital, the estimate for which was about £4000.

Temperance Hotels, Liverpool.—Temperance hotels are not, it appears, exempt from the machinations of the profligate to make them places of resort for immoral purposes. The Liverpool police have lately found many improper persons and young girls in some houses called "temperance hotels," located in respectable neighbourhoods, the latter enticed into them (unsuspecting the character of the places) by men. The profits, it was stated, of these houses were as much as £20 a day. The magistrate remanded four of the proprietors, on the understanding that if the houses were not given up immediately they would be indicted at the next sessions.

Battersea Cemetery.—Mr. P. W. Holland, Medical Inspector for the Home Office under the Burials Act, has held an inquiry as to the condition of this cemetery. Complaints had been made to the Home Secretary that although the area of the cemetery is eight acres only, there are 16,000 bodies already buried—12,000 in a space of less than four acres,—and the number of funerals is annually increasing. The cemetery is entirely surrounded by houses. It appears that it was customary to bury four bodies of adults, or five of children, in the same grave, with a foot of earth between each coffin. This was declared by the inspector to be contrary to law, as the same grave should not be opened again for fourteen years. Evidence for and against the closing of the Cemetery was heard: thereupon Mr. Holland observed that it was quite clear the cemetery could not be closed at present, but for the future only one body must be buried in a grave. This, it was stated, would practically close the cemetery in about a year or eighteen months temporarily. It may be asked, In how many more places for interment of human remains *may it not be "customary" to open the same graves contrary to the law?*

Hippophagy and its Dangers.—A butcher of Broad-street, Pendleton, has been fined £10 and costs for having in his possession the carcase of a horse which was prepared for human food, and which was unfit for that purpose.

A Coroner's Account.—At the recent Salford Hundred Sessions, the coroner's account in connexion with the Kearsley explosion was considered. It contained charges for forty-four inquests—a separate inquest for each death. The Court allowed only sixteen, deeming that £5 per day, which it would amount to, sufficient payment. The coroner, however, contended that he was entitled to payment for forty-four inquests, but the Court refused to allow more than sixteen.

Testimonial.—At an influential meeting of the subscribers and friends of the Bridgwater Infirmary, Somerset, it was unanimously resolved that a substantial testimonial should be presented to Mr. John Parsons, the senior medical officer, in token of appreciation of his valuable and gratuitous services, extending over a period of more than thirty-two years, and a committee was appointed to obtain subscriptions. The form of the testimonial will be a matter for future consideration.

A Requisite.—The Town Council, as the Urban and Rural Sanitary Authority, are erecting a commodious fever hospital at Taunton.

John Barleycorn.—Authentic records show that, although we are a beer-drinking people, we do not in the reign of Queen Victoria consume one-half as much beer as we did in that of Queen Anne. The average consumption of malt per head of the population was considerably more than twice as great in the middle of the eighteenth century as in that of the nineteenth. In the time of the Tudors beer was drunk at every meal; there was a steady drinking from breakfast to supper. From Edward VI. to the present period the control of the liquor trade has never been relaxed: it has *always* been regarded as one which must be carefully limited; and this control of the trade has had reference to the presumed hurtfulness of it to the social well-being of the people.

Irregularities of Vaccination Officers.—It appears from a report of Dr. Stevens, the Local Government Board Inspector, made after his recent inspection of public vaccination in the South Stoneham Union, that there has been considerable irregularity on the part of the vaccination officers of the South Stoneham and Millbrook districts in performing their duties, and the Board have in consequence requested that the Guardians will call upon the vaccination officers for a written explanation of these irregularities; and a copy of their explanation is to be forwarded to the Board. The attention of the Guardians is also directed to Article 12 of the Board's order of October 31, 1874, that it is important that the Guardians should see that the books and certificates of the vaccination officers are duly submitted to them and examined at the end of each quarter, and they should reserve the payment of any salary or remuneration which may be due to the vaccination officers until the Guardians are satisfied that the work of these officers has been satisfactorily performed.

F.R.C.S., Southampton.—We have not heard of any other candidate at present but Mr. Lund, of Manchester, although considerable flirtation is going on. Professor Lowne has succeeded Mr. Allingham as Hon. Secretary of the Fellows' Festival. The following Fellows have filled this post:—1847, Mr. C. Hawkins; 1850, Mr. H. White Cooper; 1852, Mr. I. N. Tomkins; 1853, Mr. W. Adams; 1862, Mr. Callender; 1864, Mr. E. C. Hulme; 1869, Mr. T. C. Jackson; 1874, Mr. Allingham; and for the present year, Mr. B. T. Lowne.

Hippophagy in London.—Application has been made by MM. Valletta and Meulmeester to the Metropolitan Board of Works for the Board's sanction to establish anew the business of a slaughterer of horses intended for human food, at Nelson-row, High-street, Clapham. This application arose out of the success of the movement in Paris, and is introduced into the metropolis by M. Decroix, founder of the Paris Society. A shop for the sale of the beef has been secured at 58, Castle-street Leicester-square, and it will be opened immediately the sanction of the Board has been obtained. The matter was referred to the Special Purposes and Sanitary Committee.

COMMUNICATIONS have been received from—

Mr. JOHN CHATTO, London; Mr. GEORGE GASKOIN, London; Dr. THOMAS BARLOW, London; Mr. B. R. WHEATLEY, London; Dr. STORGE, London; Dr. J. M. BRUCE, London; Mr. T. M. STONE, London; Dr. FREDERICK CHURCHILL, London; Mr. R. W. PARSSA, London; Dr. SQUIRE, London; Dr. GOODSON, London; THE REGISTRAR OF THE CATHOLIC UNIVERSITY SCHOOL OF MEDICINE, Dublin; THE REGISTRAR OF THE UNIVERSITY OF ABERDEEN; THE SECRETARY OF THE SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN; THE REGISTRAR OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON; THE SECRETARY OF THE COMMITTEE OF THE RUSSELL CLUB; THE PRESIDENT OF THE PHARMACEUTICAL SOCIETY OF GREAT BRITAIN; THE STAFF OF THE NATIONAL DENTAL HOSPITAL AND COLLEGE, London; Mr. EUGENE RIMMEL, London; THE SANITARY COMMISSIONER OF THE PUNJAUR; Dr. CORFIELD, London; Mr. J. LAWRENCE-HAMILTON, London; THE SECRETARY OF THE ROYAL INSTITUTION, London; THE HON. SECRETARY OF THE MEDICAL SOCIETY OF LONDON; Mr. J. ASTLEY BLOXAM, London; Dr. J. W. MOORE, Dublin; Mr. C. J. CULLINGWORTH, Manchester; THE SECRETARY OF THE SAMARITAN FREE HOSPITAL FOR WOMEN, London; Dr. BALSIANIE, Sheffield; Dr. J. D. MILLER, Edinburgh; THE SECRETARY OF ST. JOHN'S HOSPITAL, Leicester-square; THE SECRETARY OF THE CLINICAL SOCIETY, London; COMMISSIONERS OF SEWERS, Whitehall.

BOOKS AND PAMPHLETS RECEIVED—

Reginald Harrison, F.R.C.S., Clinical Lectures on Stricture of the Urethra and other Disorders of the Urinary Organs—Lennox Browne, F.R.C.S. Edin. The Throat and its Diseases—C. H. May and Co.'s Press Manual—Prof. Arthur Henfrey, F.R.S., L.S., etc., An Elementary Course of Botany: Structural, Physiological, and Systematic—Archibald Cameron, An Invalid's Pastime—Austin Flint, jun., M.D., On the Source of Muscular Power—Dr. Henry Fripp, The Doctrine of Contagium Vivum in its Relation to Parasitic Disease—John Gray M'Kendrick, M.D., F.R.S.E., Outlines of Physiology in its Relations to Man—Dr. Prosper de Pietra Santra, Consumption and Climate—Annual Report for the Year 1877 of the Samaritan Free Hospital for Women and Children.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Magazine of Art—Brain—American Journal of the Medical Sciences—Burlington House—Sunday at Home—Leisure Hour—American Practitioner—Hardwicke's Science Gossip—Monthly Homœopathic Review—American Journal of Obstetrics—Students' Journal and Hospital Gazette—Edinburgh Medical Journal—National Anti-Compulsory Vaccination Reporter—Veterinarian—Obstetrical Journal of Great Britain and Ireland.

APPOINTMENTS FOR THE WEEK.

May 4. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Henry Morley, "On Richard Steele."

6. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Medical Society of London, 8½ p.m. Dr. Alfred Carpenter (of Croydon) will deliver the Annual Oration, "On Alcoholic Drinks: as Diet, as Medicine, and as Poisons." After which the usual *Conversazione* will be held.

Royal Institution, 2 p.m. General Monthly Meeting.

Society of Arts, 8 p.m. Dr. B. W. Richardson, "Some Researches on Putrefactive Changes, and their Results in Relation to the Preservation of Animal Substances." (Cantor Lectures—III.)

7. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Pathological Society, 8½ p.m. Dr. Dickinson—Ulceration of the Bowel in connexion with Granular Kidney. Dr. Ord—1. Renal Calculus of Mixed Carbonate and Phosphate; 2. Two Specimens showing the Spontaneous Disintegration of Calculi. Mr. Nunn—Sections of Tumour from Pectoral Region of man aged eighty-one. Dr. Braidwood—The Microscopical Characters found in Tissues affected by Measles. Dr. Thin—1. Epithelioma of the Female Lip; 2. Cancerous Ulcer of the Skin, forty-three years' duration. Mr. Nettleship—Carcinoma of Orbit recurring after fourteen years. Dr. Peacock—French Millstone-maker's Lung. Dr. Irvine—Specimens of Cerebral Aneurisms. Dr. Cayley—Embolism of the Left Inferior Parietal Convolutions. Dr. Tilbury Fox—1. Specimens showing the Minute Anatomy of Dysidrosis; 2. Favus. Dr. F. Taylor—Cavity in Spinal Cord.

Royal Institution, 3 p.m. Mr. W. T. Thiselton Dyer, "On some Points in Vegetable Morphology."

8. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern; 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Epidemiological Society, 8 p.m. Dr. Thorne, "On the Origin of Infection."

9. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Royal Institution, 3 p.m. The Lord Rayleigh, "On Colour."

10. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Clinical Society, 8½ p.m. Mr. Leggatt, "Case of Yellow Fever, with Notes of the Post-mortem Examination by Dr. Greenfield." Mr. Spencer Watson, "Two Cases of Lupus Exedens." Dr. Buzzard, "Case of Double Optic Neuritis, with Obstruction of the Right Brachial Artery." Mr. Cripps, "A Case of Gastrotomy for Intestinal Obstruction."

Royal Institution (Weekly Meeting, 8 p.m.), 9 p.m. Sir William Thomson, "Effects of Stress on Magnetisation of Iron, Nickel, and Cobalt."

VITAL STATISTICS OF LONDON.

Week ending Saturday, April 27, 1878.

BIRTHS.

Births of Boys, 1320; Girls, 1320; Total, 2640.
Average of 10 corresponding years 1868-77, 2365·4.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	877	784	1661
Average of the ten years 1868-77	725·3	681·2	1406·5
Average corrected to increased population ...	...	...	1505
Deaths of people aged 80 and upwards ...	...	...	49

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	10	6	2	1	18	...	3	2	4
North ...	751729	31	7	8	3	24	...	4	...	2
Central ...	334369	1	5	...	2	12	...	3	...	2
East	639111	5	7	1	1	34	1	2	...	...
South	967692	16	13	11	4	48	2	3	4	3
Total	3254260	63	38	22	11	136	3	15	6	11

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·655 in.
Mean temperature	51·2°
Highest point of thermometer	65·5°
Lowest point of thermometer	39·1°
Mean dew-point temperature	45·0°
General direction of wind	NNE. & E.
Whole amount of rain in the week	0·20 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, April 27, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending April 27.	Deaths Registered during the week ending April 27.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2640	1661	65·5	39·1	51·2	10·67	0·10	0·51
Brighton	103923	44·1	46	39	61·0	38·8	49·2	9·55	0·18	0·46
Portsmouth ...	129461	28·9	85	43	61·5	41·0	50·4	10·22	0·17	0·43
Norwich	84620	11·3	39	33	62·5	41·8	49·5	9·72	0·12	0·30
Plymouth	73599	52·8	51	47	63·5	40·0	48·5	9·17	0·79	2·01
Bristol	206419	46·4	145	84	63·7	35·7	49·1	9·50	0·18	0·46
Wolverhampton ..	74240	21·9	58	35	60·8	35·2	47·6	8·67	0·36	0·91
Birmingham ..	383117	45·6	353	192	...	...	...	...	..	..
Leicester	121473	38·0	93	41	64·0	39·5	49·5	9·75	0·25	0·63
Nottingham ...	165267	16·6	119	58	59·4	38·6	48·2	9·00	0·85	2·16
Liverpool	532681	102·2	411	300	61·4	38·1	48·8	9·34	0·07	0·18
Manchester ...	360514	84·0	305	191	...	...	...	...	...	...
Salford	170251	32·9	151	99	65·5	32·1	47·6	8·67	0·01	0·03
Oldham	107366	23·0	71	63	...	...	...	...	...	...
Bradford	185088	25·6	138	83	60·0	38·0	46·5	8·06	0·88	2·24
Leeds	304948	14·1	282	141	59·0	38·0	47·3	8·50	1·33	3·38
Sheffield	289537	14·7	237	124	61·5	39·0	47·0	8·33	0·11	0·28
Hull	143139	39·4	128	59	60·0	37·0	46·6	8·12	0·03	0·08
Sunderland ...	112459	34·0	103	55	56·0	40·0	46·4	8·00	0·71	1·80
Newcastle-on-Tyne	144570	26·9	129	58	...	...	...	...	...	...
Edinburgh	222371	53·1	128	99	62·5	39·0	46·5	8·06	0·02	0·05
Glasgow	566940	94·0	484	277	59·2	36·2	47·9	8·83	0·59	1·50
Dublin	314666	31·2	198	206	60·2	32·7	47·9	8·83	0·15	0·38
Total of 23 Towns in United Kingdom	6373953	37·9	6391	3956	65·5	32·1	48·2	9·00	0·37	0·94

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·66 in. The lowest reading was 29·35 in. at the beginning of the week, and the highest 30·05 in. at the end of the week.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

ABSTRACT OF

THE GOULSTONIAN LECTURES

ON THE

LOCALISATION OF CEREBRAL DISEASE.

DELIVERED AT THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

By DAVID FERRIER, M.D., F.R.S., F.R.C.P.,
Professor of Forsenic Medicine in King's College; Assistant-Physician to King's College Hospital, etc.

LECTURE III.

(*Concluded from page* 474.)

Lesions of the Parieto-Temporal Region.—There remains, therefore, a region situated between the motor area and the occipital lobes, in which it is natural to look for a central differentiation of these tracts. This region includes the supramarginal lobule and angular gyrus or inferior parietal lobe, the convolutions of the temporo-sphenoidal lobe on its external and internal aspect, viz., the superior, middle, and inferior temporo-sphenoidal convolutions, the occipito-temporal convolutions (lingual lobule, fusiform lobule), the uncinate gyrus, and hippocampus major or cornu Ammonis. We may call the whole of this the parieto-temporal region. It has, I think, been shown conclusively that experimental lesions of the cortex in this region in the lower animals—a region in which I claim to have demonstrated the existence of individually differentiated centres of special sense—are capable of producing impairment or paralysis of sensation on the opposite side of the body.

This has been shown more particularly as regards vision (which seems specially to have been investigated), by the experiments of M'Kendrick on pigeons, and by those of Hitzig, Goltz, etc., on dogs. Without precisely defining the regions, lesion of which causes sensory disturbances, we may take it as firmly established that unilateral lesions of the cortex are capable of causing such effects in the lower animals. And here it will be convenient to consider the views advanced by Goltz, with respect to the effects of cortical lesions.(a)

According to Goltz, it is not so much the position as the extent of the injury on which the phenomena of cortical lesions depend. These he finds to be a conjunction of motor paralysis or paresis, tactile anæsthesia, and blindness or impairment of vision on the opposite side. I need scarcely say, from what I have already brought before you, that if that is the type of cortical lesions in the dog, then we must look upon canine and human pathology as having no resemblance to each other. But it requires very little examination of Goltz's facts to discover that his views are equally at variance with the facts themselves, as with those of clinical medicine and pathology. Instead of laying bare a distinct region in the brain, and accurately limiting his destructive lesion to the part the functions of which he is desirous to investigate, he merely trephines a hole or holes in the temporal region and destroys the cerebral substance by squirting it out with a strong stream of water. This method he adopts in order to avoid risk of hæmorrhage or subsequent meningitis; and, therefore, to keep the animal alive as long as possible. While we may credit it with securing the latter object more or less, it is clearly impossible to say what extent of brain-substance may thus be rendered functionless; and that it produces profound derangement of the whole cerebro-spinal system is evident from the frequently fatal consequences resulting from this procedure. The extent of grey matter destroyed or rendered functionless, Goltz himself admits, it is impossible to estimate, and he nowhere attempts it in the record he has given of his experiments.

These are fatal objections to Goltz's experiments as bearing on the question of cerebral localisation. They are to be looked upon as experiments only on cerebral lesions. The explanation of his results is, I think, easily afforded by the facts to which I will presently call your attention, as well as by the above-mentioned experiments of Veyssière as to the effect of lesion of the posterior part of the internal capsule. These latter, however, Goltz seems to have altogether ignored, as he makes no allusion to them.

The situation usually chosen by Goltz for his trephine openings and syringing operations is such as to, almost without fail, insure damage of the sensory fibres of the internal capsule; and he has, in a rude way, practically produced the same results as Veyssière obtained by careful limitation of his experimental lesion.

While Goltz's description of the phenomena themselves resulting from this procedure may be accepted without question, his theory that the effects of cortical lesions depend more on their extent than on their position, must, I think, be unhesitatingly rejected.

The facts I am about to quote, however, seem to point to a remarkable, and apparently irreconcilable, discrepancy between human pathology and experimental physiology. Cases are on record in which lesion or some form of degeneration has been found in one or other of all the so-called sensory areas, and in which no affection of sensation has been observed. Lesions here are usually said to be latent.

First, as to the cases: MM. Charcot and Pitres(b) report a case, latent as regards symptoms, in which there was found a yellow softening of the cortex of the right hemisphere, occupying the posterior half of the island of Reil, the posterior two-thirds of the inferior parietal lobule, comprising the angular gyrus, and the upper or posterior half of the second and third temporo-sphenoidal convolutions. There was no secondary degeneration of the spinal cord.

M. Pitres(c) records a case of extensive hæmorrhage into the medullary substance of the left temporo-sphenoidal lobe, in which, though consciousness was deeply affected, there was no real paralysis and no lateral distortion or conjugate deviation of the eyes. He quotes a case reported by Thibault,(d) also latent as regards sensory or motor symptoms, in which, in addition to a layer of extravasation on the posterior three-quarters of the left hemisphere, there was found, in the sphenoidal lobe, a large extravasation extending from its anterior extremity to within three centimetres of the posterior extremity of the hemisphere.

Sabourin(e) has recorded a case of extensive lesion of the sphenoidal and occipital convolutions in which there was no paralysis.

MM. Charcot and Pitres(f) also give a case in which the chief symptoms were a state of dementia and very marked itching of the chest and abdomen without apparent cause. After death, a yellow softening was found in the left hemisphere, occupying the first and second occipito-temporal convolutions, commencing about one centimetre behind the anterior extremity of the temporo-sphenoidal lobe, and extending backwards to within about three centimetres from the tip of the occipital lobe.

M. Sabourin communicated to MM. Charcot and Pitres a case exactly similar to the above, and another in which a yellow softening existed in the cuneus and posterior two-thirds of the quadrilateral lobule of the left hemisphere, likewise latent as regards symptoms.

A case is reported by Humbert(g) of abscess in the anterior and inferior part of the right temporo-sphenoidal lobe, resulting from suppuration of the ear, in which there were no special symptoms indicative of such a grave cerebral lesion.

Of similar affections of this part of the brain in connexion with otitis, and with nothing but the general symptoms of cerebral abscess, I might quote a multitude.

Of lesions specially confined to the hippocampus, I have not been able to find any on record, except those of Bouchut, Meynert, etc., in respect to degeneration or sclerosis of the hippocampus in chronic epileptics. Bouchut,(h) in twelve out of forty-three cases which he examined, noted the existence of sclerosis in one or both hippocampi, but he did not attach any special importance to this; as induration of the brain in chronic epilepsy he looked upon as a general affection, of which this was only a local manifestation. In 1868, Meynert(i) called special attention to this degeneration of the hippocampus in epileptics, giving nineteen cases

(a) Pflüger's *Archiv für Physiologie*, Band xiii., Heft i.; 1876.

(b) *Revue Mensuelle*, No. 1, page 10.
(c) "Lesions du Centre Ovale," page 54.
(d) *Bulletin de la Société Anatomique*, 1844, page 93.
(e) *Ibid*, October 21, 1876. (f) *Op. cit.*, page 11.
(g) *Bulletin de la Société Anatomique*, 1870, page 367.
(h) "Sur l'Epilepsie," *Annales Médico-Psychologique*, 1853, tome v., page 209. Quoted by Lepine, *op. cit.*, page 130.
(i) *Vierteljahrschrift für Psychiatrie*, page 381.

in which one or other hippocampus was indurated or atrophied. Meynert, without looking upon this as *the* cause of epilepsy, thought that there was some special relation between this degeneration and the lesion on which epilepsy depended. In a recent paper, Hemkes(k) states that he has seen atrophy of the hippocampus in only six out of thirty-four cases. Beyond the fact of the existence of such degeneration in epileptics, we have no record of the exact symptoms in the cases in which it was found. Meynert(l) believed that the optic tracts had special relations with this region; and he gives four cases of disease situated in or near the hippocampus and fusiform lobule, in which disorders of vision were observed. The cases, however, are altogether deficient as regards ophthalmoscopic appearances, on which it would be necessary to have some information before coming to a conclusion as to whether the disorders of vision were the direct or indirect results of the cerebral disease.

I have quoted a number of cases of unilateral lesion of the sensory regions, mostly of a chronic form, in which no special symptoms were noted. It may be said that the absence of symptoms in all these cases may be accounted for by functional compensation by the same or the opposite hemisphere. Yet there are on record cases of traumatic lesion, also apparently latent, which would militate against this idea, supposing them in every respect carefully investigated.

M. Herpin(m) has recorded a case of fracture of the skull and injury of the brain in the region of the squamous portion of the temporal and greater wing of the sphenoid. The man did not lose consciousness, and, from the time of the accident till death, four days afterwards, nothing was observable, either as regards motility or sensibility. After death, a contusion of the third degree was found in the inferior aspect of the temporo-sphenoidal lobe (which side not stated), extending five centimetres in an antero-posterior direction, three centimetres in breadth, and affecting more particularly the middle and external (inferior) temporo-sphenoidal convolutions; a situation corresponding exactly to the cranial injury. A clot, of the size of a bean, existed at the anterior extremity of the lesion. A case in some respects similar has been put on record by Alcock.(n) This was a case of cranial injury, followed by restlessness and sleeplessness; and only on the third day after the accident did the patient seem to hear when spoken to. He gradually got worse, and died on the thirty-third day after the accident, without being affected by paralysis. Wilfulness and obstinacy were his most prominent mental symptoms. On the right hemisphere there was a patch of ecchymosis, of the size of a florin, in the pia mater, over the upper extremity of the superior temporo-sphenoidal convolution, but the brain-substance underneath was not injured. On the left side, "the portion of brain corresponding to the lower part of the squamous portion of the temporal bone was soft and pulpy, being easily washed away by a stream of water, leaving a cavity with ragged walls, the area of which equalled that of half-a-crown, and about a quarter of an inch in depth. The ventricles contained an excess of serum." The only indication as regards sensory affection in this case was the apparent want of auditory perception at first; but whether this was a part merely of the general dazed condition of the man, or as the result of affection of the auditory centres, it is impossible to say definitely, though the position of the lesions might be taken in favour of the latter.

I have not been able to find any cases of bilateral lesions of the hemispheres in corresponding parts of the sensory area without such profound mental disturbance as to render the determination of the existence or absence of sensory impairment a matter of impossibility. This is greatly to be regretted, as on these the question of special sensory localisation in man to a large extent depends.

But if we confine our attention to the cases of unilateral lesion of the sensory area which I have mentioned, and compare the negative results as regards sensation, whether with chronic or sudden lesions of the sensory regions in man, with the affections of sensation, carefully observed and confirmed by many physiologists, which result from similar cortical lesions in the lower animals, we cannot but be struck by the discrepancies which exist. To account for these we must adopt one or other of two suppositions: either, taking the facts as equally well established, that the parallel which has hitherto been shown to exist between the brain of man and that of the monkey and the lower animals now suddenly ceases to hold, and that, in respect to sensory localisation, the brain of man is constituted on a totally different type from that of the lower animals; or, if this be regarded as improbable, that the latency which is said to characterise lesions of the sensory area in man is a latency not so much of actual symptoms as of observation.

M. Pitres(o) is of opinion that the sensory fibres which are gathered together in the posterior third of the internal capsule, instead of distributing themselves like the motor fibres to individually differentiated areas in the cortex, spread themselves indifferently over the whole occipito-sphenoidal region. But this does not remove the difficulty; for we should then expect that extensive lesions of this region should cause general impairment of all the sensory powers on the opposite side together—a hypothesis which the clinical records no more support than that of special localisation. And it would seem strange if there should be a distinct differentiation of centres of motion, and a general *confusion* in the centres of organs so highly specialised as the organs of sense. This is a supposition which I cannot entertain, and for which I see no substantial grounds. That the organs of sense may be more bilaterally represented in each hemisphere in man than in the lower animals, is not impossible. That bilateral representation does exist to a large extent, and particularly as regards sight and hearing, is in accordance with the facts of experiment, and is sufficient to account for the absence of any very obvious impairment of these faculties in cases of unilateral lesion of a slowly progressive character. But that there is no impairment at all of sensory perception or discrimination in *sudden* unilateral lesions, or even in *chronic* lesions, is a fact which I do not admit as proved; and I adopt the alternative supposition that the latency has been in observation rather than in symptoms.

This may seem a sweeping charge, and a very summary method of disposing of difficulties; but I cannot help expressing the frequent disappointment I have experienced in reading through multitudes of cases of cerebral lesion, which might have served to throw light on this subject, and finding no indication of any attempt having been made to investigate the conditions of special sense. Considering the perfunctory manner in which this is so commonly carried out, if investigation be made at all, and the frequent omissions in this respect which are to be found in the records of even our most accurate and competent clinical observers, I cannot take mere absence of remark as proof of negation of symptoms, unless there be clear evidence that the various points had been fully and fairly investigated, and the negation of symptoms positively established. For the clinical facts are not all of the same negative order as those I have brought before you, and many of them are, in my opinion, capable of satisfactory explanation only on the views I have advanced.

Let us take first the question of affections of slight directly dependent on cerebral lesion. Here, of course, we must eliminate all those cases in which impairment or abolition of vision is caused by changes in the optic nerve and retina, secondary to intracranial disease wherever situated. Hence most of the records of cerebral disease, before the invention of the ophthalmoscope, and, I may add, very many since, are for the most part worthless in this relation. But the following case, which is recorded by Abercrombie,(p) and which I give in his own words, has a special value:—"The effect of superficial inflammation of the brain or its membranes is well illustrated by another case related by Dr. Anderson, in which the disease took place under his own eye. A boy suffered from an injury of the head, the depression of a considerable portion of the *right parietal bone*, the depressed portion being forced through the dura mater and driven inwards upon the brain. *He had paralysis of the left side, and the left eye was insensible.* The depressed portion being removed, the paralysis was greatly diminished, and the eye recovered a considerable degree of vision. On the third day after the operation the wound in the dura

(k) *Allgemeine Zeitschrift für Psychiatrie*, Band. xxxiv., Heft vi.
(l) *Op. cit.*, page 400.
(m) *Bulletin de la Société Anatomique*, May, 1876.
(n) *Lancet*, March 10, 1877.

(o) "Lesions du Centre Ovale," page 53.
(p) "Diseases of the Brain and Spinal Cord," second edition; 1829.

mater was inflamed, with considerable tumefaction; and immediately the left leg and arm became paralysed, the paralysis being accompanied by convulsion; and *the left eye also became again insensible*. He had frequent convulsion of these parts for several days, the right side not being in the least affected, when, suppuration having taken place, all the symptoms subsided" (pages 121-22). Now, though recovery took place, and therefore the case is incomplete in an anatomical point of view, it is clearly a case of cortical lesion, and possesses all the typical features of such; and that the affection of the opposite eye, which proceeded *pari passu* with the motor symptoms, had a similar cause—viz., lesion of the cortex—is, I think, unquestionable. Though the exact extent and position of the depressed fracture is not stated, yet, as it was in the parietal region, we may conclude that the lesion involved not only the cortical *motor* area, but also the *visual* centre, which is in close proximity to it under the parietal eminence. This case, in my opinion, distinctly confirms the sensory localisation which I have arrived at by experiment, or at least is explicable only in this way.

The same author also quotes another case related by John Bell, in which, from injury to the head, extravasation of blood occurred onthe surface of the brain, for which the patient was repeatedly trephined. Local inflammatory attacks with suppuration occurred from time to time on the left hemisphere after the trephining. These local attacks, when they occurred towards the anterior part, were accompanied by double vision; but, "when they were towards the posterior part, there was not double vision, but a state of vision in which a candle was seen with a halo around it" (page 112).

I mention this case chiefly because it harmonises with the observations of Hughlings-Jackson, already referred to, in respect to the frequent association of optical illusions, coloured vision, etc., with disease of the posterior lobes. These spectra are the counterpart of the motor discharges caused by irritative lésions of the motor centres. That they should occur more particularly with lesions situated towards the posterior aspect of the hemispheres is quite in accordance with the localisation of the visual centre in the angular gyrus. These sensory discharges in connexion with epilepsy of cortical origin, whether in the domain of sight, hearing, smell, taste, or tactile sensation, are without doubt to be looked upon as indications of irritative lesion of the sensory centres, though we have not yet sufficient material to enable us, from a purely clinical point of view, to connect any particular form of sensory discharge with a specially localisable lesion, unless we regard it as established in respect to optical illusions. Not unfrequently the sensory centres are discharged together, as in a general unilateral convulsion, and there is no clear discrimination of one form of sensation from another. This was well exemplified and graphically described to me by a highly intelligent patient, who told me that his epileptic attacks (*petit mal*) were ushered in by a "horrible smell of green thunder," or by some equally strange compound of smells, colours, and sounds, inextricably intermingled.

Reverting to the impairment of sight in connexion with destructive lesions, it has been remarked by Dr. Bastian that not unfrequently, in cases of thrombosis of the posterior cerebral artery, vision is impaired on the side of motor paralysis.(q) This he attributes to affection of the opposite optic tract, or to the opposite side of the corpora quadrigemina. But, as lesion of the optic tract would seem to be associated rather with bilateral hemiopia than with unilateral amblyopia, and as lesion of the corpora quadrigemina is generally accompanied by more complex symptoms than mere motor hemiplegia, it seems to me that the impairment of vision may be attributed to sudden interference with the visual centre. I advance this only as a suggestion, without pretending to pronounce definitively on the subject.

Apart from the evidence of auditory discharges and subjective auditory spectra of various kinds in connexion with epilepsy and other cerebral affections, I cannot find any altogether satisfactory evidence of impairment or abolition of hearing in connexion with destructive lesions of the cortex. Hughlings-Jackson repeatedly emphasises the statement that he has never met with deafness as the result of disease of the cerebral hemispheres directly.

But, though we may admit, in accordance with the results of experimental physiology, that unilateral destruction of the centres of hearing and sight need not cause actual blindness or deafness of a complete or enduring character, there are certain facts which tend to show that unilateral lesions of these centres may produce what we may call *subjective* deafness and blindness. Such conditions are not unfrequently classed with aphasia, and may occur with it; but they may occur *without* true aphasia or speechlessness. They have been termed by Kussmaul "word-blindness" and "word-deafness" (*cæcitas et surditas verbalis*). These two conditions may occur separately or in association. In the one case, though a man may be able to speak and write, he cannot translate written symbols into ideas, though he may understand articulate sounds; in the other, he may be able to read, though he cannot understand spoken words, or he may be unable to do either. In neither case is there actual objective blindness or deafness. In a case of word-deafness of this kind reported by Wernicke,(r) there was, besides a general atrophy of the convolutions, a thrombotic softening of the *first and a large portion of the second temporo-sphenoidal convolution of the left* hemisphere. The auditory centre was thus destroyed. A very interesting case of subjective or word-blindness has been recorded by Dr. Broadbent.(s) The essential points are thus summed up by him:—"After an acute cerebral attack, absolnte inability to read printed or written words (except his own name), while the patient wrote correctly from dictation, and composed and wrote letters with a little prompting. Inability to recall the name of the most familiar object presented to his sight, while he conversed intelligently, employing an extensive and varied vocabulary, making few mistakes, but occasionally forgetting names of streets, persons, and objects. Death from apoplexy; extensive atheroma of cerebral vessels; old clots in substance of left hemisphere, with softening of adjacent substance to outer side of lateral ventricle, at junction of descending cornu. Recent hæmorrhage in same situation." The primary lesions on which the softening and subsequent fatal hæmorrhage appeared to depend were two old clots. The first, the size and shape of an almond, was loosely embedded in the infra-marginal gyrus or superior temporo-sphenoidal convolution, about opposite the junction of the upper third with the lower two-thirds of the descending cornu. The other, which Dr. Broadbent regards as the more important, and the cause of the softening which led to the fatal hæmorrhage, was a clot the size of a bean, surrounded by softening, situated at the upper extremity of the fissure of Sylvius externally, and at the junction of the descending cornu with the body of the ventricle internally. This is in the region of the angular gyrus and supra-marginal lobule, the homologue of the visual centre in the monkey. These cases I take to be in harmony with the views I have elsewhere expressed, that the sensory centres are also the substrata of corresponding sensory memory and sensory ideation. In the one of these cases (Wernicke's), in which the *auditory* centre was the seat of lesion, there was paralysis of auditory ideation; in the other (Broadbent's), in which the *visual* centre was the seat of disease, there was paralysis of visual ideation, more particularly in connexion with articulate symbols of their visible equivalents.

The paralysis of visual and auditory ideation in special reference to words in these cases is accounted for by the fact that in both the disease was situated in the visual and auditory centres of the left hemisphere, between which and the speech-centre we may reasonably suppose there exists a more intimate organic or functional connexion than between this and the sensory centres of the right hemisphere. But, as regards sensory discrimination and sensory ideation in general, we have not the same grounds for regarding the right hemisphere as subordinate to the left, as is the rule in respect to voluntary movements and motor ideation; for, with equally acute sensibility on both sides, we find that, for delicate sensory discrimination, some invariably use one eye or one ear in preference to the other, and therefore the opposite cerebral hemisphere. Thus the same individual will use his *right* eye for microscopic work, and his *left* ear for auscultation; which we may take to mean that his left visual and right auditory centres are more especially cultivated and developed.

(q) "Paralysis from Brain Disease," page 113.

(r) "Der Aphatische Symptomen Complex," 1874, Case II.

(s) "Cerebral Mechanism of Thought and Speech," *Medico-Chirurgical Transactions*, lv., 1872.

Hence we may conclude that unilateral lesions of the sensory centres will vary considerably in respect to their effects on sensory ideation, according as the lesion is on the side of the more or less developed centre. It is not impossible, therefore, that what Hughlings-Jackson terms "defective perception" may be more common with lesions of the sensory regions of the right hemisphere, if these be more commonly cultivated and developed.

Before passing from this subject, I would refer to an interesting case related by Dr. Banks,(t) of Dublin, in which, though unfortunately no post-mortem examination could be made, there are certain facts bearing on the question as to whether actual deafness may occur from cerebral disease. In this case, after a sudden cerebral seizure, but without coma or paralysis, the patient was found to be incapable of understanding either speech or writing, though he could both speak and write. He was found to be completely deaf, taking no notice of what was said to him, or even of the loudest noises; and, indeed, he used to allude to his deafness himself. One day he said he could neither hear nor read; "only a little could read the words, but not take in the meaning." This patient died ultimately of coma and right hemiplegia; but no post-mortem examination was allowed. Unless we suppose, in this case, that the patient had a separate lesion in both auditory nerves or both ears, occurring simultaneously with his cerebral lesion, we may take it as a case of deafness depending directly on cerebral disease; but whether the lesion was unilateral or bilateral, the absence of a post-mortem examination unfortunately renders it impossible to decide.

Affections of smell and of taste, we have seen, occur with affections of the other senses in cerebral hemianæsthesia; but affections of smell alone, or of taste and smell combined, may occur without other sensory impairment in connexion with certain forms of cerebral lesion. As regards smell, there seems to be some discrepancy between my localisation of the olfactory centre and the facts of cerebral hemianæsthesia. I find that destruction of the subicular region causes loss of smell on the *same* side; while in hemianæsthesia the impairment of smell is on the side *opposite* the cerebral lesion. I have endeavoured to account for this by the fact, discovered by Magendie, that abolition of the *common* sensibility of the nostril by section of the sensory branches of the fifth nerve causes loss of smell; and, as in hemianæsthesia the sensibility of the mucous membrane of the nostril is lost, so we may consider this to be a sufficient cause of the unilateral anosmia. I see no reason to doubt the validity of this explanation; but I would supplement it by another consideration. Though the outer root of the olfactory tract can be directly traced to the subiculum of the same side, it is not unlikely that the inner root passes on to the opposite hemisphere with the other sensory tracts; and hence each hemisphere may maintain a bilateral relation with the organ of smell. If this were so, then the partial impairment of smell, which would result from lesion of the special sensory paths of the opposite hemisphere, would be rendered more complete by the simultaneous abolition of common sensation in the nostril. I cannot give anatomical evidence of this arrangement, for the inner root of the olfactory tract has not been traced by Meynert beyond the corpus striatum; but that it ends here is, I think, more than improbable.

Unilateral anosmia has been observed in many cases of cerebral lesion, and on the same side as the lesion, but without a necropsy it is of course difficult to decide whether this was due to direct lesion of the olfactory tract, or of its centre. Several such cases have been reported in connexion with aphasia, the anosmia being on the left side.(u) A good many cases are now on record of loss of smell, or combined loss of smell and taste, as the result of blows on the head, more particularly of the vertex or occiput.(v)

As regards the anosmia, the mode of causation suggested by Ogle(x)—viz., injury by counterstroke to the olfactory nerves, bulbs, or tracts—seems in every way satisfactory. To the loss of smell Ogle further ascribes such affections of taste as may be combined with it—viz., the impairment or abolition of the perception of flavours, which are a compound of smell and taste. And, indeed, in many of the so-called cases of loss of taste and smell, taste proper does not appear to have been affected. Hence they may be accounted for in the manner indicated by Ogle. But even when there is absolute loss of smell, we find cases in which taste is but little interfered with. A patient of mine who had suffered from complete anosmia for six years, dating from a fall on his head which had rendered him temporarily unconscious, made no complaint as regarded his power of taste, as he could distinguish all the ordinary articles of food from each other, and could clearly perceive the flavour of onions. Yet, though there was no obstruction of the nasal passages, anteriorly or posteriorly, he could recognise no smell in assafœtida or musk; acetic acid, he said, caused some sensation about two-thirds up the nostril, but no real odour. I have no doubt that in this case there had been rupture of the olfactory nerves or tracts. But the mere loss of smell is incapable of accounting for the symptoms in another case which I have seen. This patient had lost both smell and taste in consequence of a fall on his head into the street six years before. I was not aware until lately that my colleague, Dr. Burney Yeo, had already brought the particulars of the same case before the Clinical Society,(y) and therefore the subsequent history of the patient will be all the more interesting. This man had not merely total loss of smell, but also total loss of taste proper, such as for bitter, sweet, salt, sour, etc. One day, in fact, when suffering from pain in the stomach, he swallowed a glass of what he took to be brandy, and was not aware it was vinegar until the aggravation of his pain made him ask his wife what was in the bottle. While under Dr. Yeo's care, and taking iodide of potassium, he recovered taste to some extent, but he did not, as he told me, recover smell, though he once or twice had something like a subjective sensation of camphor or burnt wood. When he left off the iodide, he became as bad as before. This was in 1872. In 1875, when he came under my care for another affection, he had absolute loss of taste and smell, had given up all thoughts of recovery, and had tried to accommodate himself to circumstances. Again, on the administration of iodide of potassium, taste returned to some extent, but there was no improvement as regards smell, with the exception of an occasional subjective sensation; and a relapse again occurred on leaving off the medicine. I lost sight of him till the end of 1876, and found him in his original condition. In January, 1877, I began to treat him with the constant current (ten cells, gradually increasing) directed transversely through the head in the zygomatic fossæ, varied occasionally by the application of one pole here, and the other on the bridge of the nose. After one or two applications, while he felt somewhat giddy, various subjective smells were experienced during the passage of the current, which he described as "gassy," "rank," etc. At the end of a week of daily treatment with the current he began to smell strong odours, subjective sensations also occurring at intervals, and taste became more acute. He gradually and steadily improved, and, after a few weeks' treatment, the power of smell returned, so that he could recognise such things as assafœtida, musk, coffee, tobacco. He could readily distinguish between one smell and another, but continued to have some difficulty as to identification of the substance. There has been no relapse, and now (February 28, 1878), at the end of a year, he continues to enjoy perfect taste; and his powers of smell, which were never very acute, he thinks are as good as ever.

I will not attempt to decide what was the exact *modus operandi* of the galvanic current—whether it acted by stimulation of the olfactory nerve direct, or by stimulation of the cerebral centres of taste and smell,—but, as a therapeutic experiment, it may be regarded as worthy of repetition in similar cases. But, as regards the pathology of this case, I think it is evident that both smell and taste were abolished independently of each other, and that we cannot account for the loss of taste by the loss of smell; nor can we say that the olfactory nerves were ruptured. It is also in the highest degree improbable that the loss of taste and smell could have resulted from simultaneous affection of the various nerves concerned in these functions, situated as they are so widely apart from each other, and bound up

(t) *Dublin Quarterly Journal*, February, 1865, vol. xxxix, page 62.
(u) Ogle, *Medico-Chirurgical Transactions*, 1870; Fletcher and Ransome, *British Medical Journal*, April, 1864; Hughlings-Jackson, *London Hospital Reports*, vol. i. 1864; Cases II., V., XV., XXII.
(v) See "Collected Cases" by Knight, *Boston Medical and Surgical Journal*, September 13, 1877.
(x) *Medico-Chirurgical Transactions*, 1870.
(y) *British Medical Journal*, May 25, 1872.

more or less with others not conjointly affected. But it might well happen that such a blow on the vertex as this man received would cause such injury to the subicular regions, by what is usually termed counterstroke, or by what Duret terms the *cône de soulèvement*, as to cause impairment or temporary abolition of the functional activity of the cerebral centres of taste and smell, which, as experiments on monkeys indicate, are here localised. Hence I would take this, and similar instances in which smell and taste proper are abolished by cranial injuries, as clinical corroboration of physiological experiment.

In respect to tactile sensation, though this form of sensibility is more frequently affected than any of the others by cerebral disease, it is yet extremely difficult, from a clinical standpoint only, to establish a distinct relation between this and certain cortical lesions, or to localise the centres of tactile sensation. Motor paralysis and tactile anæsthesia are frequently associated with each other. But that the cerebral centres of motion and tactile sensation are distinct from each other is evident from the fact that we may have the most complete motor paralysis without impairment of tactile sensation, as is the case with cortical lesions. And though motion is more or less impaired by the abolition of tactile sensation (by which motion is mainly guided), yet we have many instances in which the power of voluntary motion is retained notwithstanding the complete annihilation of tactile sensation, cutaneous or deep. There is, therefore, no organic fusion of the motor and tactile centres with each other, seeing that each may be affected independently of the other, and the two do not vary quantitatively with each other when they are conjointly affected.

The facts of cerebral disease in general, and of cerebral hemianæsthesia in particular, would seem to show that in respect to tactile sensation there is less bilateral representation in each hemisphere than as regards the other forms of sensibility. For in central hemianæsthesia tactile sensation is always most deeply affected, and may still remain greatly impaired after all the other forms of sensory impairment have disappeared. Hence, in the slighter forms of affection of the posterior third of the internal capsule, tactile sensation only may be impaired. Hence, also, with motor paralysis due to lesion of the anterior division of the internal capsule, we frequently get partial or temporary impairment of tactile sensation, owing to pressure on, or slight organic or functional derangement of, the posterior or sensory fibres.

If, therefore, tactile sensibility be more unilaterally represented in each hemisphere—and this we might conclude from the remarkable power we possess of localising the seat of tactile impressions on any part of the body—we should naturally expect to find that lesions of the cortical centres of tactile sensation should be accompanied by symptoms of impairment or abolition of this sense. These centres, as I have already indicated, are situated in the hippocampal region. Lesions of this region are not, however, common; and I have not been able to find any cases of localised lesion of the hippocampus, except those I have already alluded to in connexion with chronic epilepsy and insanity. But, as we have no record of the facts relating to the condition of tactile sensation in these cases, I must leave this question to be settled by future clinical investigation.

There are, however, some facts which would seem to indicate that lesions in the neighbourhood of the hippocampus do cause affection of tactile sensation, though doubt may be entertained as to whether the phenomena are dependent on direct affection of the hippocampus, or affection of the posterior front of the internal capsule, directly or indirectly.

Mr. Jonathan Hutchinson(z) concludes, from his observations on cranial injuries, that contusion of the sphenoidal lobe, more particularly, causes, along with partial motor paralysis, paralysis of tactile sensation on the opposite side of the body. As I have said, these effects may be attributed to injury of the sensory fibres of the internal capsule; but contusion of the sphenoidal lobe might also be interpreted as injury of the hippocampal region; and if the impairment of sensation in the cases described by Hutchinson were to be proved absolutely restricted to *tactile* sensation, we should have good grounds for considering the phenomena dependent on lesion of the cortical centres here situated. The definitive settlement, however, of these various points must be left to future research.

(z) *Medical Times and Gazette*, 1875, page 165.

I have now brought under your notice a considerable number of facts, both positive and negative, in reference to the localisation of special sensory regions in the human brain; and though the positive clinical evidence is as yet comparatively scanty, and leaves much to be desired, I entertain the hope and belief that it will not long remain so. And I trust that those who rely more on the evidence of human pathology and the phenomena of disease than on the facts of experiment, even on the most human of the lower animals, and do not, therefore, share my own very decided convictions as to the localisation of special sensory regions, will take the facts I have adduced into careful consideration, and, when opportunities occur, investigate the conditions as to sensation in cerebral disease, with the accuracy and thoroughness which are much needed in order to clear up the doubts and obscurities which still surround this important question.

ORIGINAL COMMUNICATIONS.

PRACTICE OF PHYSIC IN SMYRNA: LITHOTOMY.

By JAMES McCRAITH, M.D., F.R.S.,
Surgeon to the British Seamen's Hospital, Smyrna.

I BEG to forward you reports of six more lithotomy cases operated on since my last communication, which you were kind enough to publish in No. 1365, August 26, 1876, of your valuable journal—making in all sixty-eight cases, of which sixty were operated on by myself; the other cases were operated on by the late Dr. Wood of this city, and one by another practitioner here. I have now had thirty-one successful cases in succession. I shall make some remarks on one or two of my last six cases, which I think may be of interest to the profession. The last case, No. 68, is one of "union by first intention"—the third which has happened in my lithotomy practice. I will define what I call "union by first intention" (which has taken place in those three cases) by giving the details of this last case.

The patient, brought from Carsaba, a town some forty miles from Smyrna, was stated by the father as having this stone "ever since he was born." Is there any instance of calculus existing in the bladder of a child at its birth? I operated on him, and extracted a stone formed of three distinct round longish ones, soldered together, as it were, by their ends—the end lying anteriorly formed of two completely united (and this by all their thickness), but the one lying towards the fundus of the bladder only partially united, say by half its thickness. The entire mass may be compared to the finger slightly bent, and with a deep furrow between the last joint and one next it. It lay lengthwise in the bladder, hooked, as it were, round the os pubis. The operation was performed at 4 p.m., Dr. P. McCraith giving chloroform, and Dr. Kidder, Surgeon of the *Alliance*, United States Navy, at present stationed here, holding the staff. There was a little delay in getting a good hold of the stone, as it got crushed on the first attempt. The after-treatment was followed out by Dr. P. McCraith, who reported to me on the following morning "that all the urine had passed through the natural passage"; that the sponge placed to receive the urine at the wound was perfectly dry. This often happened, all the urine passing by the urethra the first twenty-four hours, from the swelling of the cut parts, and their being glued together by the effused blood and clot collecting in the wound. The swelling abating, the blood-clots are generally, after some twenty-four hours, washed away, and the urine all flows through the wound, until, after a fortnight or three weeks, the wound is healed by the usual process. But on the third day, no urine having passed by the wound, and the little patient complaining of pain when passing water, I went and examined him. I found the superficial wound not limited, but on separating the lips of skin I found the deep parts firmly and thoroughly united. On mentioning this to Dr. Kidder, he arranged to come with me on the following day to witness this, but, being detained on board by some duty, he did not come; and the parents, finding the child well, left on the day after for their home.

The case of lithotripsy in a youth aged nineteen is, I

conceive, an interesting one, showing what patience and perseverance can effect. The child had the appearance of delicate health; had suffered from all the symptoms of stone for a year and a half; was disturbed frequently at night; had pain after micturition, etc. I was so sure of the existence of stone that I went to the patient's home with two of my *confrères* to operate, not having previously sounded him, as I had always done on former occasions. We put the youth under chloroform, tying him up in the usual position; but on attempting to pass a catheter to sound and inject the bladder, I found I could not do so; the instrument would not pass. Both my friends tried, but were equally foiled. No instrument would pass, though urine came away, as patient declared, in a pretty free stream. I had, of course, to defer all proceedings, and study the case. Upon examining closely into the youth's history, I found that when a child, at six years of age, he had suffered from some chronic disease of the hip-joint and cavity of pelvis at the right side, which had left a certain "limp" in his gait; and his family reported that "for a considerable time he passed much blood and matter with his urine. This most probably was some form of hip-joint disease, resulting in the formation of an abscess, which opened internally into the bladder, and was so discharged; which abscess on healing, by the contraction of the parts, drew the neck of the bladder and membranous part of urethra to the right side, fixing the parts in this position. This was proved by the end of the catheter being always turned to the right side on reaching these parts, during all attempts to pass it, in the subsequent treatment. As the general health was delicate, and the urine neutral or slightly alkaline, I put him on mineral acids and tonics, and proceeded to make way into the bladder by passing instruments. A catheter or sound (No. 7 or 8) passed freely on to the membranous portion, and there was arrested, diverging to the right. I continued regularly every three or four days to pass instruments and try to get to the bladder, but could not succeed, though evidently I made some progress; the urine still coming in a stream, though "diminished" or smaller than natural. My son, Dr. J. P. McCraith, also followed out the attempts. This continued for six months. Under the medical treatment, mineral acids, etc., the patient began to pass particles of stone—irregular small masses—which on examination proved to be phosphatic. This, of course, made me more anxious to make way into the bladder, as I anticipated (what eventually happened) the complete obstruction of urine by the arrest in the passage of one of those pieces of apparently disintegrating phosphatic calculus. The general health was much improved. At length a piece of calculus got fixed in the neck of the bladder, posterior to the angle forming the impediment to the passage of a sound, and which angle was evidently an acute one and close to the neck of the bladder, and also firmly bound to the adjacent parts. All means—warm baths, mild diuretics, saline purgatives, opium, etc.—were tried for two days, but in vain. On the third day the bladder could be felt above the pubes. I determined on puncturing the bladder, or, as on a former occasion in which I assisted the late Dr. Wood, on endeavouring to cut into the bladder without a director. I invited one of my *confrères*, Dr. Von Eichtorff, to give his very valuable advice and assistance. Dr. J. P. McCraith was also present. Upon examining the patient, and hearing all the history of the case, Dr. Von Eichtorff remarked, that as neither Dr. J. P. McCraith nor I myself could succeed, after such reiterated attempts, and for such a length of time, most certainly he should not succeed either; still as a point of duty—*pour l'acquit de conscience*—he must try. I insisted that he should try. He then attempted with various sized catheters, but did not succeed. I must remark that in all our attempts no bleeding was produced on any occasion. I remarked that I had most certainly made progress by my numerous trials, that I was certainly very close to the entrance, and that I would make a last attempt; so taking a silver catheter, No. 3, I was astonished and much pleased by passing it with comparative ease into the bladder. The bladder by its extreme distension had drawn the urethra into a comparatively straight condition, thereby removing the difficulty. The small piece of calculous matter was pushed back into the bladder. I tied the catheter in position, and on the following day with ease passed a larger one, and in a few days passed a No. 8, withdrawing them immediately. But now came the question, what was to be done to get rid of the calculus? I could easily see that it was very small, and of irregular shape; I could rub the instrument against it when the bladder was empty. Its size and composition (phosphatic) would be an encouragement to endeavour to get rid of it by lithotripsy. The youth was also very tolerant of instruments and manipulation in the parts. His age, as a general rule, was against lithotripsy. Still, I determined on attempting this latter. Neither of the instruments contained in the French case at my disposal would pass: there were two regular lithotripsy instruments, both too large to pass; but a third instrument, very slightly turned up (and intended most probably for the crushing of the *débris* remaining after the employment of the other instruments), fortunately, just passed; and with it, in three sittings, I completely succeeded in pulverising the calculus, and curing my patient. The case is No. 65 in accompanying list.

No.	Weight.	Dimensions (inches).	Age	Composition.	General appearances.	Duration of disease.	Result.
63...	℥ij.	$\frac{5}{8} \times \frac{5}{8}$	3	Phosphates	Glistening surface, like a rasp; round, flattish	1½ years	Cure.
64...	ʒij. gr. x.	$1\frac{1}{4} \times \frac{3}{4}$	3	Urates	Egg-shaped, flattish	2 years	Cure.
65...	...	...	19	Phosphates	Case of lithotripsy	1½ years	Cure.
66...	gr. xv.	$\frac{5}{8} \times \frac{1}{2} \times \frac{5}{8}$	20	Urates and oxalates	Irregular surface	6 months	Cure.
67...	...	$1\frac{1}{2} \times 1 \times \frac{1}{2}$	30	Urates	Flat, oval	15 years	Cure.
68...	ʒv. ℥j.	$2\frac{1}{4} \times \frac{3}{4}$	5	Urates	Formed of 3 calculi, united, like slightly bent index-finger	4½ yrs.(a)	Cure.

Smyrna.

THE ACTION OF MALARIA AND ITS INFLUENCE ON THE SPLEEN.

By JOHN SULLIVAN, M.D., M.R.C.P. Lond.

Malaria, an element derived from marsh infection, whether it exist under a gaseous form, or as an emanation evolving special diseased germs, which paralyses that system of nerves that regulates and controls the arteries and the circulation of the blood, which creates a condition of hyperæmia and congestion opposed to all plastic and true inflammation, becomes a source of great danger when complicated with some local affection of any organ essential to life, as of the liver, the lungs, kidneys, etc. And this malarial fever (a compound of a local and general disease, which mutually react and aggravate each other) is called pernicious, or dangerous to life.

The action of malaria varies with the individual exposed to its influence; and this difference of action will depend on the degree of its intensity, the constitution of the individual, and upon that condition of body created by past disease, or the predisposition to future disease. When malaria exists in a latent or masked form in the human body, it will excite and complicate any disease to which the body, from some peculiar temperament—be it nervous or sanguineous—may be disposed. Thus, if the constitution be disposed to asthma or to hysteria, the patient under the influence of malaria may be seized with a pernicious asthmatic or a pernicious hysterical fever. Should he be disposed to rheumatism or to liver disease, there may be a complication of pernicious icteric or pernicious endocarditis. The form of malarial disease will always be characterised by some prominent symptom of the special diathesis.

Professor Baccelli, of the University of Rome, mentions the case of a young midwife in whom malaria existed in a masked state; who became so deeply affected by the dreadful sufferings of a patient in her first confinement, together with the sight of the inhuman conduct of a brutal husband on the occasion, that on returning to her home she was seized with a violent "lumbo-abdominal neuralgic pernicious fever"—that is to say, that the malarial poison excited and directed certain pains to parts already impressed from previous associations; pains exactly resembling those from which her patient had so severely suffered.

This peculiar paroxysm of malarial fever repeated itself

(a) The father says five years, or ever since the child's birth.

three times, and finally yielded to the administration of quinine in large doses. The germs of malaria, when absorbed in the human body, act as ferments. The poison accumulates, and at certain regular intervals of time of intermittence it will explode, discharge, and finally exhaust itself, until a fresh charge is generated by causes from without or by causes within the body, attended by phenomena transitory as are the paroxysms of marsh fever, not constant as may be observed in the course of those remittent or continued fevers which do not owe their origin to the poison of malaria. These special disease-germs, when absorbed, act on the ganglionic nervous system and on the blood corpuscles, causing vaso-motor irritation, followed by vaso-motor paralysis.

Of poisons which act on the nerves, and through these on the muscular fibres, some will cause continued nerve-irritation and muscular spasm; and if this effect be too long continued, and not followed by relaxation or nerve-paralysis, death must result from spasm and suffocation. Other poisons may cause immediate nerve-paralysis, and death may result from exhaustion; but marsh malarial poison always produces nerve-irritation, followed by nerve-paralysis.

In a paroxysm of malarial fever there is an abnormal production of heat, from the effect of the poison on the nerve-centres and the heat-producing powers; there is nerve-paralysis, and consequent increase of temperature and congestion. This increase of temperature in marsh fever is supposed by many Italian writers to be more the effect of nerve-paralysis than of any other cause of increased combustion and tissue-metamorphosis, since this abnormal heat is not followed in the early stages of malarial fever by any profound modification in the process of nutrition. Neither do they consider that it depends on the amount of urea excreted, although in marsh cachexia and latent malaria this excretion is often a more delicate test of the degree of tissue-metamorphosis, and of the consequent amount of heat produced, than is the thermometer.

The deposit of urates during a paroxysm of fever and ague varies greatly. It may be altogether absent, or not at all in proportion to the violence of the fever.

We detect by means of the thermometer, even before and during the cold stage, great elevation of temperature; while that of the periphery is lowered from a contraction of the smaller arteries through primary nerve-irritation and a diminished tissue-metamorphosis. The body-temperature cools down during the hot and sweating stages, and by the relaxation of the peripheral vessels heat is given off.

The action of the poison of malaria upon a particular system of nerves produces an effect similar to that which would result from their division—such phenomena as actually occur when a branch of the great sympathetic going to any particular part of the body is divided and consequently paralysed,—and the parts supplied by it would become hot, swollen, and congested, the subject of hyperæmia and of serous exudations, not of inflammation, in the absence of the controlling power of the vaso-motor nerves over the arteries.

It is related in the *Archives* of Virchow that in a case where the nerves (the splenic plexus of the great sympathetic) which go to the spleen had been divided, there ensued excessive hyperæmia and degeneration of tissue. These changes may, therefore, be regarded as the expression of a morbid nervous influence. Marsh fever is the declared reaction of the living organism against the cause of infection; it is based on the principle of anæmic congestion, not of true inflammation. As in pneumonia there exists a stasis or paralysed condition of the red corpuscles of the blood, as they cannot convey oxygen to the tissues, so the action of marsh malaria, although more slow, is not less injurious to the red corpuscles. They shrink, from the want of their natural supply of oxygen, and a serious injury is inflicted on the respiratory portion of the medulla spinalis through the action of this altered blood when the function of the red corpuscles is arrested. We may find an explanation for the dyspnœa in pneumonia in the exudation poured into the parenchyma of the lungs, or in the attendant fever; but in marsh cachexia there may be no fever, and although there may exist no cause capable of encroaching upon the area of the lungs, dyspnœa will be observed, from a deficiency of the red corpuscles, the carriers which supply the oxygen necessary for combustion.

The spleen is the organ which suffers most frequently from the influence of the poison of malaria: a reservoir of nutritive blood-materials, to be drawn upon or utilised when required. An organ void of ducts, not intended for secretion, but for the elaboration and assimilation of germ-cells, the materials of which are derived from the blood, must necessarily suffer in an especial manner from the action of a poison like malaria, which directly tends to decompose this blood, from which it derives the materials for the performance of its function.

Under the influence of malaria the spleen will pass from a slight transient hyperæmia to a permanent condition of hypertrophy, to alteration of texture, degeneration, and atrophy. If the poisonous action be not continued, the swelling may disappear, whether through the spontaneous interruption of the febrile process, or under the administration of quinine. If the action be continued, as in marsh cachexia, the swelling of the spleen will be constant, its texture will abound in white corpuscles shrunk and altered, or the gland may be atrophied. The sensation of cold alternating with heats, the livid hue of the skin, and the exudations of serum, afford evidence of cerebro-spinal and pulmonary anæmia. The black pigment so often detected after death from marsh cachexia and pernicious fevers, in the brain, lungs, liver, blood, etc., the product of the ultimate disintegration of the plasma and corpuscles of the blood, is supposed to have its origin in the spleen, whence it is conveyed through the abdominal veins.

(*To be continued.*)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CASES OF CHOREA.

THE LEEDS GENERAL INFIRMARY.

(Under the care of Dr. CLIFFORD ALLBUTT.)

[Reported by Dr. E. H. JACOB, Resident Physician.]

Case I.—*Chorea complicated by Acute Rheumatism and Transient Paralysis of Soft Palate.*

A. C., aged fourteen, admitted to the Infirmary on January 2. She has never been strong, but was fairly well six weeks ago. She never had any previous severe illness, nor is there any history of accident or fright, or of rheumatism. Six weeks ago she had some pain and redness (described as "erysipelas") in the left foot, which lasted a week, preventing her from walking. After this she began to have choreic movements of the left arm and leg, which have since increased. Soon after the right side also became affected.

On admission, January 3, she is fairly nourished, fresh complexion. Choreic movements constant but not very violent, affecting both sides. There is a systolic murmur at the heart's apex. Her voice is affected, but she can answer questions with difficulty. She sleeps badly at night. Appetite poor; bowels confined. She was ordered two minims and a half of liq. arsenicalis three times a day; this was increased to six minims on January 7. She was then about the same.

January 10.—She has been about the same, but sleeping fairly. This evening about 6 p.m. she began to be very restless, and did not sleep all night, talking unintelligibly and frequently shouting. She was ordered fifteen grains of chloral hydrate with twenty-five of bromide of potassium three times a day.

12th.—Tolerably quiet last night, and better this morning.

15th.—She complains of some pain in the right hand.

16th.—Right wrist, knee, and ankle swollen and tender. Temperature in the morning 100°. She was ordered twenty grains of salicylate of soda three times daily.

17th.—Temperature in the morning, 99·5°; but still some pain.

18th.—Still some pain. To continue the medicine every four hours.

20th.—She has pain in the right shoulder.

23rd.—There is some paralysis of the soft palate, and fluids come through her nose when she drinks. To leave off the medicine.

26th.—There is now no difficulty in swallowing. Choreic movements very slight.

27th.—She is very nearly steady, but cannot keep her tongue protruded.

February 5.—Rather better. From this time she steadily but slowly improved, and left the hospital on February 23.

Case 2.—Acute Chorea, followed by state of General Paralysis.

E. R., aged seven, admitted December 5. She has never been very strong, having always had some difficulty of speech. Is said to have had some fright at school. For the last fortnight she has had constant choreic movements of both sides, and has slept very badly.

On admission, December 6, she is badly nourished, fair complexion, dark hair. The choreic movements are constant and violent. She speaks with difficulty, and can say little more than "Yes." There is no cardiac murmur. She slept well last night, takes food well, and complains of no pain. Urine, 1025 acid, urates, but no albumen. She was ordered two drachms of succus conii twice a day. This having no apparent effect it was raised to half an ounce on the 7th, to an ounce on the 8th, also with no effect. She had a draught of chloral (ten grains) at night.

9th.—She has taken two ounces of the succus conii with no effect but a slight sleepiness for about half an hour.

10th.—She was ordered eight grains of chloral hydrate three times a day, to which on the next day five minims of liquor arsenicalis were added. Movements still constant and violent. Chloral raised to ten grains to the dose.

12th.—Rather worse; is hardly affected by the draughts, but slept fairly last night. Ordered potass. bromid. gr. xxx., chloral hyd. gr. x., aquæ ℥j. ter die, with morph. acet. gr. ¼, subcutaneously.

28th.—She is about the same, but sleeps not so well; to have an ounce and a half of her medicine (fifteen grains of chloral) at night.

January 10.—Is quieter; to omit medicine.

20th.—She is now thoroughly quiet, but lies in a state of partial general paralysis. She does not appear to feel a touch or prick; can just move arms very slightly, but not grasp anything. There is no reflex action obtainable. She will not speak; takes food and swallows well.

22nd.—She seems rather brighter; can say her name with some difficulty. Looks better.

23rd.—She can speak well and readily.

24th.—There is some reflex action in the left leg, not in the right. She can extend but not flex her legs.

31st.—She can now stand with assistance.

February 3.—Improving. She has gained five pounds in weight in the last week.

10th.—Has gained eight pounds and a half. Can walk with assistance. From this time she continued to improve, and was sent to Meanwood Convalescent Home on February 25, having gained eleven pounds during convalescence.

Remarks by Dr. Jacob.—The first case illustrates well the frequent co-existence of chorea and rheumatism in the same individual. The cardiac murmur was noted before the rheumatic symptoms supervened, unless the previous attack of pain in the foot six weeks before were rheumatic in its nature. In that case it would illustrate the development of chorea in acute rheumatism, as well as that of rheumatism in chorea. The rheumatic pain did not yield to sodium salicylate so rapidly as usual. The transient paralysis of the soft palate establishes a connexion between this case and the second. In the latter we have an instance of severe nervous exhaustion, not frequently seen in such cases. The case is interesting also in a therapeutic point of view, as showing the failure of tolerably large doses of a good sample of conium juice, and the great benefit of large doses of chloral and potassium bromide in obtaining sleep. After the disease was once arrested the improvement was most rapid and satisfactory.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

Case 3.—Chorea (Second Attack), leaving General Paresis of Limbs.

(Under the care of Dr. GEE.)

Annie F., aged nine years and five months, was admitted November 9, 1874.

Family History.—Father in good health; mother never had St. Vitus's dance, but is very "nervous." Other three children healthy. This child is said to have had twenty-one fits from when she was six to nine months old; none since. Mother says that at the time above referred to the child had a discharge from the left ear, which has continued off and on, and has frequently "smelled bad." She had scarlet fever at five years old; measles and whooping-cough at six years; but got over these diseases without any trouble. Mother quite sure the child has not had rheumatic fever. Two years ago, after having been shut up in a cupboard at school, she came home crying. Three weeks after this she was noticed to twitch—mouth, hands, and one leg. She was in St. Bartholomew's and the Children's Hospitals altogether for nine months, and was not quite well till the end of twelve months. In this attack she seems to have become quite helpless. After that she was well until her present trouble. She was able to run upstairs, but would pant a little sometimes. Was able to lie flat in bed. At school she said the noise made her head ache. She cried to go home. "Children called her a dunce, and this made her grieve." This was about three weeks ago. She then began to twitch, first the mouth, then the hands, then the shoulders, then the legs; mother thinks the two sides equally. Up to two days ago speech good; sleep good; no trouble with bowels or urine.

On Admission, the child walked into the ward in a zig-zag fashion. As she sat down she moved the right foot about now and then, twitched the fingers of the right hand constantly, and those of the left hand occasionally. The grasp of the left hand was stronger and steadier than that of the right. Protrudes tongue pretty well; speech nearly natural. Heart—upper limit, third space; right limit, left margin of sternum; left limit, one finger's breadth to the left of the left nipple-line. Heart's impulse felt a quarter of an inch outside nipple-line, but most marked within nipple-line in fourth space; impulse not heaving, and no thrill to be felt. The first sound at the apex sometimes reduplicate; pulmonary second accentuated; over and above the reduplication there is irregularity in rhythm. The child was put to bed, and ordered for the first fortnight three drops of liquor strychniæ thrice daily; and for the next three weeks three drops of liquor arsenicalis thrice daily. Afterwards she was ordered strychnia again, with occasional purgatives. The movements were never severe; her temperature was generally sub-normal.

No further note was taken until December 29: she was then lying on the couch; there were slight twitchings of mouth, neck, both upper limbs, at all the principal joints, and a little of the right ankle; articulation imperfect—frequently began to speak in a whisper, and was a long time in utterance; protruded tongue straight, but could not keep it out. The movements of the right side in excess over those of the left; not violent. Voluntary motor power certainly less on the right side than on the left; able to hold up the left arm erect, and for a longer time than the right; grasp of left hand steadier than that of the right. When told to raise her knees she was sometimes unable to raise the right; walk worse than on admission; somewhat ataxic; danced legs about before bringing feet to the ground—right worse than left; some inversion of the right ankle.

January 1.—It was found that there was no increase of irritability to galvanism, but irritability to faradism was distinctly diminished in the lower limbs. Ordered to be faradised three times a week.

February 1.—More helpless. Unable to raise herself from the couch or to stand. Shower-bath to be given every morning.

February 9.—After the shower-bath the child seems able to move her limbs a little more vigorously.

March 4.—The choreic movements are nearly gone, there being only very occasional slight twitches of the hands, but the general paresis is greater than it was. She still lies quite helpless on the couch. She can take a piece of bread in her hands, but cannot lift it to the mouth. This is from weakness rather than incoördination. There is still some inversion of the right foot; quite unable to stand; no wasting; no trouble with sphincters. There is no cardiac murmur, but still occasional irregularity. Speech continued as at last note. Giggled now and then, and seemed rather dull; otherwise nothing special about intelligence. She was now sent to the Convalescent Hospital at Highgate, where for some time, in spite of shower-baths and Griffiths' mixture, she continued quite helpless; but by May 20 (*i.e.*, more than six months after the onset) was quite well, and able to go about in the garden, when she was discharged.

Case 4.—Chorea—Movements Slight in Amount—Subsequent Slight Joint-Pains—Pericarditis and Endocarditis.

(Under the care of Dr. GEE.)

Ellen G., aged five years, was admitted February 5, 1878.

Family History.—No chorea and no rheumatism on either side. No nervous diseases. The other five children healthy. This child had measles when three years, and whooping-cough when two years old. No history of acute rheumatism or of previous attack of chorea can be obtained. Always a nervous child. Said to have had a "nervous way" since Christmas, but on the night of January 31 she began to twitch to a marked extent, especially on right side. Is getting worse. Now unable to feed herself with the right hand. Sometimes falls when she walks. Appetite not good. Bowels rather confined. Has had a slight cough during the last three days.

When admitted the child had chorea—not very severe; a little in the face, unsteadiness of the tongue, slight movements of hands and arms. She walked rather precipitately and swayed about. There was a good bit of trunk movement. The heart sounds were regular; no murmur, but the first sound was prolonged. The chorea had almost subsided, but the child continued very weak and depressed. Liq. arsenicalis ℥ij., aquæ ʒj., t.d.s.

On March 17 the following note was made:—Heart's apex beat in nipple line, fifth space. Right limit, right edge of sternum; upper limit, third space. There is a cardiac murmur (? friction) over left ventricle—the rhythm cannot be determined because of the rapidity of action. Pulse 150. The child is very pale and short-breathed. She has very little chorea.

March 18.—Has slept badly. The murmur is pericardial. Tinct. digitalis ℥iij., aq. ʒj., 6tis horis.

20th.—Sleeps badly still. Breathing very hurried and gasping. Lips dry. Tongue furred. Takes food badly; has vomited several times. Is very pale, and looks blue round mouth and eyes. Pulse small. There is now a well-marked double rub heard all over the cardiac region; best heard below and inside the nipple. There is a faint thrill. Respirations 74; pulse 132; temperature 100·6°.

21st.—There is increased cardiac dulness, of pyramidal shape, reaching as high as the first costal cartilage. Pulse regular. Very sick.

23rd.—Temperature normal since 21st. Cardiac dulness and friction as before. Vomiting and purging (? due to digitalis). Digitalis replaced by two grains of iodide of potassium thrice daily. Poultice to be applied over region of heart.

25th.—Cardiac dulness now extends to one finger's breadth to the right of the sternum. Tongue clean.

26th.—Not so distressed. Better colour. Temperature natural; pulse 120, small; respirations 40. Complains of pain in both knees; the right is painful on movement. There is no swelling of the joints to be made out. The heart beats most in fourth space nipple-line. The cardiac dulness remains as it was; friction ditto. Urine free from albumen.

28th.—Still urine free from albumen. There is now a little resonance in the first left space. Friction unchanged. Complains of pain in stomach.

30th.—Temperature, morning, 99·5°. Drowsy. Has some cough, and still complains of pain in stomach. At 5 p.m. temperature 101°. She vomited after some tea. Became very distressed; the respiration very shallow, 84; the pulse 168, very compressible. Vomiting continued. Died, syncopal, 5 a.m. next morning.

The temperature for the first seven days was below normal. For three days—February 13, 14, 15—it was raised from 99° to 100·6°; then normal or sub-normal for seventeen days. From March 4 to March 16 there was a little pyrexia—100 in evening, 98° morning.

	Morning.	Evening.		Morning.	Evening.
March 17.	100°	102°	March 24.	99°	97°
„ 18.	100	100	„ 25.	97	96
„ 19.	100	101	„ 26.	98	99
„ 20.	100·8	100	„ 27.	99	98·8
„ 21.	98	99	„ 28.	97·4	97
„ 22.	99·4	98·8	„ 29.	97·8	98
„ 23.	98·2	98	„ 30.	99·6	101

Post-mortem, twenty-nine hours after Death.—Body fairly nourished; weighs thirty-one pounds and a half. Pericardium considerably exposed. Pleura in front of part of pericardium adherent. Pericardium much thickened, and surfaces adherent to some extent by bands of vascular lymph one-eighth of an inch thick. Quite free at the base, where about an ounce and a half of sanious fluid was found reaching up to the level of top of sternum. Heart weighed five ounces; was very much enlarged on both sides; there was slight hypertrophy. There were some small pale vegetations on corpora Arantii of the aortic valves. The mitral was beaded along the margins; auricular surface of the mitral also fringed with a number of pale granulations. A few granulations on the tricuspid; otherwise healthy. A little clear fluid in left pleura. Left lung: Lower lobe quite airless and congested. Right lung: Much collapse of posterior portion, chiefly the upper lobe. Spleen an ounce and three quarters; Malpighian bodies too distinct. Liver and kidneys natural. Stomach bile-stained, containing a great deal of gas. Brain: Nothing abnormal discovered; corpora striata and regions around them carefully examined.

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Medical Times and Gazette.

SATURDAY, MAY 11, 1878.

MEDICAL WOMEN AND THE GOVERNMENT MEDICAL BILL.

On Wednesday last our contemporary the *Times* published a long letter from Mrs. Garrett-Anderson on "The Medical Education of Women and the Medical Acts Amendment Bill,"—so that we have at last what may, we suppose, fairly be considered as an authoritative statement of the medical woman's opinion of the Duke of Richmond and Gordon's Bill; and it is very much what we expected. But Mrs. Garrett-Anderson deals also with the amendments to the Bill, so far as women are concerned, decided on by the General Medical Council; and here again the opinion given is just what might have been anticipated. Both the Bill and the proposed amendments are utterly and mercilessly condemned. The first part of Mrs. Garrett-Anderson's letter is historical. She points to the evils that, admittedly, may possibly attend the existence of "nineteen different and competing examining boards in the United Kingdom, each having its own standard of professional attainment, and each eager to attract to itself the largest possible

number of candidates for its diploma," while a diploma or licence obtained from any one of them equally serves to place its holder on the Medical Register, and entitles him to practise medicine, surgery, and midwifery. She states that the remedy for this state of things is perfectly simple, and patent to all disinterested observers, viz., the creation, in each of the three divisions of the kingdom, of a board, either composed of delegates from the existing examining bodies or independent of them"; the Board examining in medicine, surgery, and midwifery, requiring in the three branches a reasonable minimum of knowledge, and being in each country the only portal to the Medical Register. The existing bodies, the Colleges of Physicians and Surgeons, and the Universities, would then, she observes, "still be of use in conferring honour degrees in their respective departments, while the reasonable minimum of knowledge, which everyone practising as a doctor ought to have, would be secured by the pass examination of the new Board." And if, while creating these three Boards, it had been provided that women should be admitted to their examinations and diplomas upon the same terms as men, the medical woman question, Mrs. Anderson says, "would also have been settled in a way that could have been accepted by the public and by medical women themselves." Medical women would have felt ambitious, no doubt, to obtain admission to those degrees or diplomas which carry with them honour and distinction in medical and social circles, but she believes that "they would have been content to wait some years for this, as admission to the Register on the same terms as men had been frankly conceded." The writer then points out how the Government Bill "is a mere mockery of what is wanted, both as to uniformity of standards and as to the admission of women." The action, or rather want of action, of the Bill in these respects is too well known to need re-stating here, but we may observe that Mrs. Anderson is, naturally, especially severe in her comments on the feebleness of the Bill as regards medical women. If the Bill passes, she points out, they "would be compelled to get a surgical diploma as well as a medical one before they could reach the Medical Register, while all the surgical corporations would be at liberty to continue to refuse them admission to their examinations. If the Government really wanted to help women, could they have devised anything more grotesque as a failure? . . . . The effect of the Bill in its present shape would be to place the future of the medical women movement in the hands of the bodies who are most eager to destroy it, and the practical result would be that probably for many years no more women would be able to place their names on the Medical Register." We are quite ready to agree with Mrs. Anderson in all this, except in one point. The surgical bodies are not "eager to destroy the medical women movement"; but, believing that it is a great mistake, and that "surgery" is especially a subject unfit for and unsuited to women, they refuse their help to the movement.

Mrs. Anderson then proceeds to examine the amendments proposed by the Medical Council to Clause 14, Section 4—the most important part of the Bill, so far as women are concerned. But before that she just alludes to the amendment dealing with Conjoint Boards, etc.; and here she makes a curiously grave mistake, for she says that "in the Medical Council the interests of the competing examining bodies prevailed over the public interest, as indicated by the Council refusing to press upon the Government the adoption of a compulsory conjoint scheme, or of a uniform minimum qualification." The Medical Council has, no doubt, many sins of omission and commission to answer for, but it is not open to the charge here made by Mrs. Anderson, and it is strange that she should have failed to note, or have forgotten, that the first resolution passed by the Council during the late session, and presented to the Duke of Richmond, stated that the Council "is of opinion that no medical legislation relating to examinations will be satisfactory which does not provide for the formation of an examining board in each of the three divisions of the kingdom, and direct that every person who desires to be registered under the Medical Act shall be required to appear before one of these boards, and be examined in the subjects which may be deemed necessary by the Medical Council," the special object of such boards being to secure a uniform minimum qualification; and by another amendment the Council recommended that "none but persons whose qualifications have been tested in medicine, surgery, and in midwifery should in future be admitted to the Medical Register." Mrs. Anderson might also have acknowledged that the English bodies have expressed as strongly as possible to the Duke their disappointment at finding that his Bill does not make the formation of conjoint boards compulsory. With regard to the amendments proposed by the Council in relation to the examination-rules, as affecting women, Mrs. Anderson remarks that "it would be better to exclude women altogether from the Register for some years than to initiate such a scheme as proposed under the guise of friendliness, by which there would be no security whatever for equality of professional attainments or of professional reputation." Our readers have already been made acquainted with the amendments proposed by the Council, and we need not repeat them, their tenor being plainly enough indicated by Mrs. Anderson's comments on them. No one can be surprised to find that she objects—here, at any rate—altogether to any legislation that would differentiate between men and women as medical practitioners. "The examination-rules formulated by any one examining body," she says, "ought to be identical for men and women: otherwise, what security have women that it shall not be enacted that, *e.g.*, one year's study shall be enough for women, while three or four are required for men, or that nothing but minor surgery shall be expected from women? What point can there be in having 'such distinctions as may be judged necessary between men and women' in the rules for examination if the standard for the two sexes is really to be identical? . . . . If women are to be required to know less or more than men, then the rules guiding admission to the examinations may differ for the two sexes, but not otherwise. What women ask is, that they should be required to know as much as men do; and that they should be required to submit to the same course of educational discipline, and not encouraged to cram into one or two years that which in the case of men occupies three or four years?" We do not suppose that there is the slightest probability of such differences being made, but the objection that, according to the proposed amendment, they could be made, is perhaps fair enough; and it was well known that medical women demand equality in every way with medical men. Mrs. Anderson then objects to the proposal that the Council shall have power to create, if necessary, a special board to examine women, and asks, What security would the public, the medical women, or the general body of the profession have that this new board, for women only, "would give a diploma or licence of equivalent value to that given by any one of the existing boards"? The Medical Council, she declares, know that there could be no such security, and that "the fact would be patent to the outside public as well as to the profession, and they admit this by the final suggestion to put women coming in upon this footing "into a separate register." The proposal to require, by Act of Parliament, that the medical education of women shall be conducted "entirely apart from that of males," is, of course, strenuously opposed. It is pointed out that this

would prohibit men and women from sharing, during their medical curriculum, "any instruction in zoology, botany, chemistry, materia medica, or any other subjects of the medical education"; and it is pointed out that this amendment, if it becomes law, will prevent women who have obtained a medical degree in Paris and elsewhere abroad from presenting themselves for examination, and that "the immense advantages of the Paris school would be lost to women who intend to practise in this country." We confess to some little sympathy with Mrs. Anderson here. We think, with her, that our medical schools should be able to take care of themselves, and should not "require the protecting ægis of an Act of Parliament to keep the women out"; and the women have, it must be remembered, a complete medical school of their own, though it can hardly be said to be a flourishing one. We are not much inclined to enforce separate medical education by law; but we hold that mixed professional education may very well be left to professional and public opinion. On the clause requiring that the examination of female candidates "shall be conducted entirely apart from the examination of male candidates," Mrs. Anderson is very satirical in her comments, and she suggests that whether women who may be admitted to any one of the existing examinations "should write their papers at the same table with the male candidates, or at another table in the same room, or in the next room, and whether there should be one door or two, or none, between the rooms, or whether they should even be in separate houses, and in different streets, are matters which could be settled, probably, without the intervention of Parliament"; and she considers the only provision necessary is that the examination-papers should be the same, and the standard for marking the papers, and the conditions under which the answers are given, identical; and then the rest would be trifles. But, to our surprise, she immediately proceeds to say that sex must be considered in the examinations. "As medical women limit their practice," she says, "to women and children, while medical men practise among men, women, and children, there is a numerically small but very important group of subjects on which it would be superfluous to examine women, and important to examine men." This difficulty might, however, be met very simply, she thinks. "Suppose that the subject is surgery, and that ten questions are given in the written paper, perhaps two of these ten (more likely it would be one) ought to relate to departments of surgery which it is quite superfluous for a woman to have studied. Why not bracket with each of these two questions an alternative one, equally difficult, but relating to the female organisation, and desire all candidates to answer one or the other at their option? If a man shirked in writing an important question, he could be taken to it in the *viva voce*, and, on the other hand, the examiners would have no difficulty in avoiding useless questions in the *viva voce* examination of female candidates," and so on.

Now, we are much disposed to think that it would be foolish to *legislate* for separate examination; but, begging Mrs. Anderson's pardon, does she not here not only fully recognise the existence of the difficulty which all the licensing bodies feel, and which induced the Medical Council to suggest these amendments, but also amply justify the separate register for medical women? When Mrs. Anderson comes face to face with this question of examination, the mere medical practitioner is partly silenced, and the woman speaks. Absoluteness of equality for women and men in education, examination, and all else, for a time disappears, and the medical woman is presented to us a practitioner of limited scope, to whom the study and knowledge of "a very important roup of subjects" would be superfluous, and whose examination for a diploma to practise should therefore be limited in area. Nevertheless, Mrs. Anderson rejects with indignation and scorn the proposal to put medical women in a register of their own. Can she logically contend for absolute equality after the admission she has made? Admission on the Medical Register implies, or is intended in the future to imply, thorough and full medical education, and it entitles every person on the Register to practise every branch of the profession, and among all persons—men, women, and children. If medical women are to limit their practice to women and children, and parts of medical education are to be admittedly superfluous for them, that would surely be the best possible reason for putting them in a separate register? If they are not to be fully educated medical practitioners, and are to be limited in practice, what right can they have to demand to be registered along with those who are fully educated, and are not limited in their practice? We are strongly disposed to think that "the two registers cannot imply anything but difference of professional *status*," as Mrs. Anderson says; but we hold that differentiation of education and examination, and limitation of practice, would imply difference of professional *status*, and that it would be necessary and right to acknowledge such difference, should it exist, by separate registers. Mrs. Garrett-Anderson would probably say that public opinion will limit medical women to those fields of practice for which their restricted education and examination have qualified them. It may be so; but the Medical Register recognises no limitation of education, examination, or practice: why falsify it? Mrs. Garrett-Anderson demands, firstly, "the formation of a compulsory conjoint board for each of the three divisions of the kingdom, which shall determine the minimum of knowledge in medicine, surgery, and midwifery, required from all practitioners of medicine"; and, secondly, "that to the examinations of this board women shall be admitted on the same terms as men, that they shall share the same diploma, and be placed upon the same register." We say, *if* they are admitted on the *same* terms, and share the *same* diploma, then admit them also to the same register; but not otherwise.

THE EXHIBITION OF SPECIMENS OF LYMPHATIC DISEASE AT THE PATHOLOGICAL SOCIETY.

The late exhibition of specimens of lymphadenoma and leukæmia at the Pathological Society may have helped to correct certain erroneous opinions of facts that appear to have been prevalent, and to render our knowledge on some other points more accurate; but it cannot be said to have advanced the pathology of lymphatic disease in any important respect. The more modest title of "exhibition" was on this occasion given to the meetings specially devoted to the consideration of the subject, instead of the previous designations of "discussion" or "debate," which were adopted when syphilis, cancer, and tubercle were under the consideration of the Society. It may have been on this account that there was less than the usual attempt at generalisation, and a closer adherence to statements of observation, though a few of the exhibitors indulged considerably in speculation. In attempting to convey a correct impression of the results of the exhibition it will be necessary for us to keep facts and theories as much clear of each other as possible. We shall first mention certain results that may be accepted as settled, and then notice briefly the generalisations that were attempted on some of the leading points.

The number of cases of lymphadenoma brought forward did not, and indeed could not, add to our acquaintance with the general characters of the disease, which are familiar to all. The microscopical anatomy of the glandular enlargement

was carefully described by Dr. Greenfield, Dr. Gowers, and Dr. Coupland; and the exact nature of the splenic change in the same disease was statistically stated by the first of these observers, from an analysis of a large number of cases. The histology of leukæmia was also described by Dr. Gowers and Dr. Greenfield; and Dr. Gowers especially brought forward definite facts with respect to the nature of the hypertrophy of the spleen and the enlargement of the glands occasionally associated with the blood-disease. Another histological point of the greatest importance, and bearing upon the whole pathology of the blood and lymphatic system, is the distinction that was drawn by universal consent between the leucocytosis, or moderate increase of leucocytes in the blood observed in lymphadenoma (as in many other diseases), and true leukæmia or leucocythæmia. There can be no doubt that the desire to discover cases of leukæmia has been one means of confusing in the minds of many English observers these two distinct conditions, and of magnifying many cases of moderate and probably transient leucocytosis into true leukæmia. It is probably but another way of expressing the same erroneous belief to say that a certain proportion of cases of leukæmia are cases of "glandular leukæmia"—that is, cases of leukæmia associated with enlargement of the lymphatic glands more or less general. If leucocytosis be mistaken for leukæmia, it is manifest that cases of "glandular leukæmia" will be reported as not uncommon. Dr. Moxon exposed this error very clearly, and even went so far as to positively deny the existence of glandular leukæmia. There seems, however, to be no doubt that true leukæmia *may* be associated with glandular enlargement, as in Dr. Jones's interesting case; and it is equally certain that there is increase of lymph-glandular tissue in the viscera in some cases of leukæmia. The amœboid movements of the white corpuscles have been watched in leukæmia, but it is a curious and disappointing fact that the two accounts of the observations on this subject given to the Society were exactly opposed to each other, Dr. Pye-Smith stating that amœboid movements are absent in leukæmic leucocytes, and Dr. Moxon declaring that they are still present. Neither of these able pathologists, however, made the statement upon his personal observation. It is almost amusing to remark that Dr. Pye-Smith and Dr. Moxon found upon their respective belief on this point each a theory of his own with respect to leukæmia. Dr. Pye-Smith seems inclined to attribute the enormous increase of leucocytes in the blood in leukæmia, that is the leukæmia, to a retention of the leucocytes in the vessels by paralysis of their movements; while Dr. Moxon finds in the ability of the corpuscles to penetrate the vessel-walls one reason for their accumulation in the medulla of bones! One other histological point was illustrated in the exhibition, namely, the anatomy of invasion of the lymphatics by cancer, by Dr. Hoggan.

The etiology of leukæmia and lymphadenoma was dwelt upon by several of the speakers, and the relation of these to other diseases, as suggested by Dr. Wilks in his opening speech, was abundantly illustrated. Indeed, as Dr. Moxon said in the able critique with which he closed the discussion, too much of an attempt was made to bring different diseases together, instead of keeping them apart. Beyond Dr. Gowers' valuable statistics, little or no information is to be derived from the occasional association that was stated to have been observed between lymphadenoma and leukæmia on the one hand, and scrofula, tubercle, syphilis, and malaria on the other. Even the important statement made by Dr. Gowers—that 25 per cent. of the cases of splenic leukæmia analysed by him (154 in number) had either had ague, or had lived in an ague district—appeared to be questioned by Mr. Macnamara with his extensive tropical experience. Another matter of fact, which was noticed by Sir William Gull and Dr. Turner, seemed to attract less notice than it undoubtedly deserves, namely, the occasional rapid disappearance of the glandular enlargements just before death in lymphadenoma. It would be a matter of the greatest importance to watch during this remarkable event the temperature and the characters of the blood of the patient.

If we turn now from matters of fact to matters of theory we find, first of all, various attempts made to state the relation in which the different lymphatic diseases stand to each other. Dr. Gowers said that it was "certain that between pernicious anæmia with marrow-change, splenic disease with marrow- or gland-growth, primary gland-disease, and visceral lymphatic growth, intermediate and compound forms were met with, and that each might or might not be accompanied by an excess (slight or considerable) of leucocytes in the blood." Probably this was the prevailing opinion of the speakers; but opposed to it very distinctly were Dr. Moxon's views—that the four different diseases that had been brought under discussion would in his opinion have been far better kept apart. Several attempts were made to account for leukæmia, and we have already referred to two speculations upon this point. Dr. Goodhart and Dr. Turner both seemed inclined to deny to the blood what Dr. Moxon so well claimed for it—the capacity of having "diseases of its own"; and regarded leukæmia as a non-essential, occasional, accidental, or late adjunct to lymphadenoma or other real diseases; Dr. Turner even suggesting that leukæmia might be due to a combination of the various causes of leucocytosis.

On the whole, we may say that the result of this exhibition of lymphatic specimens has been chiefly negative; and this result may perhaps be accounted for by the intrinsic difficulty of the subject. Probably no portion of normal histology is much more obscure than that of the spleen, the lymphatic glands, and the history of the blood-corpuscles. Further, the blood and the lymphatic system are peculiarly associated with living processes which cannot well be discussed from the side of post-mortem material. And this suggests the remark that, as Dr. Moxon forcibly put it, there should be some attempt in a discussion on lymphatic diseases to seize great clinical features. The Pathological Society may not be the place for such a discussion; but if it be not, less importance should be attached to an exhibition of morbid specimens than seemed to warrant the expenditure of so much valuable time—equal to more than three meetings of the session—over it. The pathology of lymphatic diseases, as of other complex diseases, will never be settled by the morbid anatomist alone; and any fruitful discussion on the subject must include the whole natural history of the affections, including the results of treatment.

THE WEEK.

TOPICS OF THE DAY.

THE friends of the London Hospital are making vigorous exertions to obtain a maintenance fund of £25,000 a year for five years, to enable the institution to continue its operations on the present scale. With this object an adjourned meeting was held last week in the committee-room of the Hospital, presided over by Mr. J. H. Buxton, who stated that he was glad to be in a position to announce that already, thanks to the press and other mediums, £9000 a year for five years had been promised; but the committee required an additional sum of £16,000 per annum for the same number of years. Sir E. H. Currie remarked that if the money was not forthcoming the committee would be compelled to close 400 beds, which would be a most lamentable circumstance for the

district. The Hospital needed additional assistance until the year 1895, when its ground rents would be coming in, thus raising its permanent income to £24,000 a year; but even then he anticipated that additional income would be required, on account of the possible increase in the population of the district. A large central committee was eventually formed, each gentleman pledging himself to form a local committee to carry on the canvass for funds in his own particular district.

In the Chancery Division of the High Court of Justice, last week, a suit was brought by Sir Richard Brooke, residing at Norton Priory, Chester, claiming an injunction to restrain the owners of some large chemical works in the neighbourhood from allowing noxious fumes to escape from their works, whereby damage was caused to the plaintiff's mansion and the land adjoining it. The plaintiff alleged that his house was rendered unhabitable, and that the lands were so much injured that he could not obtain tenants for his farms. The bill was filed so far back as April, 1875, and in November of that year the parties agreed that the evidence should be taken by affidavit. The plaintiff now desired that the case should be tried in that division upon such affidavits, but the defendants contended that they had a right to a trial before a jury. The Vice-Chancellor said he understood that the defence would be that the injury was not caused by the works of the defendants, but by a number of other chemical works in the neighbourhood. No doubt this was a case which should have been tried before a jury, but as the parties had agreed that evidence should be taken by affidavit, and for two years and a half the proceedings had been carried out on that principle, great expense having been incurred, if the case were now to go before a jury all such expense would have been thrown away. He should therefore decide to try the case himself upon affidavits, with power to cross-examine such witnesses in court as the parties might think fit.

Her Majesty's Office of Works has already gained an unenviable notoriety for showing its capabilities of "how not to do it," and the present state of the Marylebone Police-court affords a striking illustration of its method of proceeding. About two months ago the attention of the authorities was drawn to the defective state of the ventilation of the Marylebone Court, the bad arrangement of the cells, etc. Upon that occasion the First Commissioner and his staff visited the Court, and it was hoped that something would immediately be done to remedy the evils complained of. Up to the present time, however, nothing has been done, and last week the atmosphere of the place was so foul that it was necessary to have all the windows open, and the draught thus caused was stated to be absolutely dangerous to those who had to sit in it.

The Town Council of Birmingham has unanimously resolved to present a petition to the Queen in Council in support of that of the authorities of Owens College, Manchester, to her Majesty, praying for the grant of a charter for the creation of a new University, to be called the University of Manchester, provisions being made that the examinations for the degrees of the said University shall be conducted by the professorial body, in conjunction with a sufficient number of expert assessors appointed by the State.

At a meeting of the Kensington Vestry, held last week, the Medical Officer of Health, Dr. Dudfield, reported that during the past month fifty-seven cases of small-pox had come to his knowledge, two of them proving fatal, and all but seven in the southern portion of the parish. This number was forty-one more than had been reported during the previous month, and nearly all the cases occurred within a few days of each other. Dr. Dudfield attributed the outbreak to the fact of the Local Government Board's having closed the vaccination station in the southern district, in consequence of which persons were compelled to walk about three miles to the nearest vaccination station. He recommended that the Local Government Board be memorialised to re-open the station they had closed, and the recommendation was at once adopted.

The Lower Thames Valley Joint Sewerage Board recently held a meeting at Kingston, at which a letter was read from the Local Government Board, announcing that they proposed to issue a provisional order including in the United District Heston and Isleworth Local Government District, and so much of the southern portion of the parish of Kingston as was within the district of the Rural Sanitary Authority of the Kingston Union. The order would provide that the Local Government District should be represented on the Joint Board by one *ex officio* member and four elected members of the Local Board, but no change to be made in the number of representatives of the Rural Sanitary Authority of Kingston Union. The Joint Board objected to Heston and Isleworth being represented by more than four members, and suggested that, as a contributory place, it ought to pay a share of the preliminary expenses. A rate of 2d. in the pound, it was stated, would suffice to meet a call of £4000, which the Finance Committee had apportioned on the several contributory places in the district.

A meeting of the delegates representing Fulham, Wandsworth, St. Saviour's (Southwark), and Lambeth, was last week held at the Lambeth Vestry Hall, to consider the draft Bill of the Metropolitan Board, which proposes to throw on owners the cost of constructing and maintaining defensive works against Thames floods. The discussion turned on the way the proposed Bill would affect different parishes and districts. It was admitted that the public liability of some would be inconsiderable, as they have little public frontage to the river; but it was different in Wandsworth and Fulham, where there are long public frontages vested in the boards, or where the private property is of such a character that the cost of the protective works will be oppressive to the owners. In such cases it was agreed that the Bill would practically have the same effect as that of last year, which proposed to divide the cost between the riverside owners and the parishes. The introduction of the draft Bill has been stopped under the half-past twelve o'clock rule, on the ground that it does not carry out the recommendation of the Select Committee of last year in favour of metropolitan charge. It was therefore resolved to do no more than petition the House in favour of legislation, in accordance with the report of the Select Committee.

The Managers of the Metropolitan Asylum District resumed their usual fortnightly sittings, after the holidays, on Saturday last, Dr. Brewer presiding. After hearing the returns read from the various small-pox hospitals under the control of the managers, which again showed an increase, a report of the chairmen of the several hospital committees was considered, which stated that on May 1, 1877, the number of small-pox cases was 850; and on the same date in 1878 the number was only four less. It further stated that the returns of the Registrar-General showed that as many deaths resulted from small-pox at the homes of patients as at the hospitals. This was considered matter of regret, and it was therefore recommended that the attention of the Local Government Board should be called to the subject, and that they should be requested to investigate the causes and conditions which protracted the epidemic. This recommendation, after some little discussion, was adopted, and the clerk was ordered to communicate with the Local Government Board accordingly.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

The annual general meeting of the Society was held on Wednesday, April 24, at 5 p.m., by the kind permission of the Royal Medical and Chirurgical Society, in their rooms, 53, Berners-street. The chair was taken by Mr. J. Gregory Forbes, Vice-President. A letter was read from the President, Sir George Burrows, expressing his regret that absence from town would prevent him presiding at the meeting. From the statement read by the Secretary, it appeared that during 1877 a sum of £2949 had been voted to the widows and orphans, £63 10s. in excess of the grants of 1876. The expenses of the year were £187 0s. 11d., £27 15s. less than those of the previous year. The receipts, with the exception of legacies and entrance-fees, all showed an increase. The interest on funded property had been £2570 1s. 1d., subscriptions £519 15s., entrance-fees £10 10s., donations £111 4s. Only one legacy had been received during the year, viz., £250 from the executors of James Graham, Esq. The funded property had been increased by the purchase of £593 19s. Metropolitan Consolidated Stock. The Society had lost twenty-two members by death during 1877, and four members had resigned. Among the deaths were mentioned those of Sir William Fergusson, Vice-President. George Cooper, Esq., Vice-President, and Dr. Carr, a director. Only nine new members were elected. At the end of the year the Society consisted of 385 members. During the year fresh applications had been received from six widows and two orphans, four widows had died or become ineligible, and three orphans had ceased to receive grants. On December 31 there were sixty widows and ten orphans receiving assistance from the Society, and four orphans on the Copeland Fund. The following gentlemen were elected directors in the place of the six senior who retired by rotation, viz.:—Dr. Barnes, Dr. Taylor, A. Willett Esq., George Eastes, Esq., Dr. Andrew, and J. Langton Esq. A vote of thanks to the editors of the medical journals, for their kindness in forwarding in every possible way the objects of the Society, was carried unanimously. A vote of thanks to the chairman closed the proceedings.

THE PREVALENCE OF PHTHISIS IN VICTORIA.

At a meeting of the Medical Society of the colony of Victoria, held on October 3 last, a committee, consisting of Dr. Singleton, Dr. Williams, Mr. Girdlestone, and Dr. Jamieson, was appointed to consider and report upon the whole subject of phthisis in the colony. The report, now rendered, deals very fully with the question, and the conclusions arrived at by the committee are as follows:—That the mortality from phthisis in Victoria is little more than half of that in England. That the rate of mortality from this disease in Victoria has been perceptibly less of late years. That the rate is especially low among persons under fifteen or twenty years of age, and has been very greatly reduced between 1861 and 1871. That the reduction of the mortality among young persons is to be explained by a comparative immunity among those born in the colony. That the apparent increase of mortality among young adults is due to the influx of phthisical persons from abroad; and that the uniformity in the rate of mortality in Victoria over the whole colony (viz., Melbourne 21·46, all Victoria 12·30 per 10,000 persons living), for a great many years, is owing to certain insanitary conditions operating especially in Melbourne, since for the rest of the colony the rate was reduced by about one-third between 1861 and 1871. The report admits that it is doubtful whether there exist at present statistical data sufficient for the final settlement of the question in its different bearings; and in a reply to the report, which has been published by Mr. Thomson, that gentleman remarks that "the report fails to note that phthisis is the most fatal disease in this colony"; while he further asserts "that one death in every three of adults in Melbourne, and one in four in the colony, is due to it."

THE NAVY MEDICAL DEPARTMENT AND THE WAR.

It is an undoubted fact that the exigencies of the service have compelled the Admiralty to announce an immediate examination for candidates for appointments in the Naval Medical Service, and so pressing are their wants, consequent upon the number of vessels recently put into commission, that it has been decided to forego the probationary term of service at Netley, so that those gentlemen who pass the required examination will at once take up appointments on active service. In every other respect the terms of appointment remain the same. In the crisis through which this country is now passing there can be no question that the authorities have adopted a wise and vigorous policy with regard to general politics, and it is much to be regretted that such important branches as the Naval and Military Medical Services are, at the present moment, in such an unsatisfactory condition. If anything were needed to convince the heads of these two great departments that radical reforms are absolutely necessary, it surely should be the prospect of having to undertake a great war with a lamentable deficiency of medical officers. An appeal to the profession would, no doubt, secure a supply of volunteers; but no one will for one instant dispute that, at least at the commencement of hostilities, both the Navy and the Army should be in a position to depend upon the services of their own medical officers.

MEDICAL SOCIETY OF LONDON.

On Monday last there was a large and influential gathering of medical men at the house of the Medical Society of London to hear the Annual Oration, which was delivered by Dr. Alfred Carpenter. The subject chosen was "Alcoholic Drinks: as Diet, as Medicine, and as Poison." The oration, a most able one, was listened to with the greatest attention; but, as it will be published *in extenso*, we refrain from giving an abstract of it. The President proposed a vote of thanks to the author, which was carried by acclamation. During the *conversazione* which followed, the band of the Royal Artillery, under the direction of Mr. Smyth, the bandmaster, played a choice selection of music, and there was also some excellent part-singing. This innovation appeared to meet with the cordial approval of the company present. A few objects of interest were exhibited, among which was a paraboloid illuminator by Dr. Edmunds. This instrument condenses upon a microscopic specimen a large pencil of unrefracted light, and the image is seen upon a black foreground; by its means the markings upon a podura scale were shown to be distinct featherlets.

THE SAMARITAN FREE HOSPITAL.

On May 6 the Samaritan Free Hospital held its "periodical festival," as it is called, at Willis's Rooms. The Hospital authorities then took occasion to circulate among their friends an abstract of one particular department of the work done by the Hospital since its commencement, thirty-one years ago, in the shape of one small room, hired at the rate of five shillings a week. It is, in point of fact, to the operation of ovariotomy that this Hospital owes its world-wide reputation, and there can be as little doubt that this great success has been chiefly the work of Mr. Spencer Wells. The following statistics may, however, be allowed to speak for themselves. Up to the end of 1877 the operation of ovariotomy had been performed in the Samaritan Hospital upon 471 patients, of whom 361 recovered. The first of these opera-

tions successfully performed at the Samaritan Hospital was in February, 1858. The only successful case at any London Hospital was in 1846, twelve years before. In 1876 the mortality was reduced to 9·99 per cent., fifty-five cases, fifty recoveries, and only five deaths—the lowest hitherto attained or anywhere recorded. In 1877, with a large increase in the number of operations, the mortality was still remarkably low—seventy-seven cases, sixty-five recoveries, and only twelve deaths; making the mortality for the two last years 12·89 per cent.

	Cases.	Recoveries.	Deaths.	Mortality per cent.
Five large hospitals and Guy's before 1868	83	32	51	61·44
Samaritan before 1868	113	82	31	27·43
For nine years from 1868-76 inclusive—				
Three large hospitals	61	24	37	60·65
Guy's Hospital	82	39	43	52·43
Hospital for Women (Soho-sq.)	71	44	27	38·16
Samaritan	281	214	67	23·84
Five hospitals and Guy's to 1868, and three hospitals, Guy's & Soho, to 1876	297	139	158	53·19
Samaritan to end of 1877	471	361	110	23·14

We cannot help seeing with deep regret the name of Mr. Spencer Wells, so long associated with the active work of this Hospital, for the last time on the list of acting surgeons in the report now before us. Mr. Wells, with a good sense and feeling which well becomes him, has resolved, whilst yet in the prime of his activity, to make way for those who have for some time assisted him in his work. Dr. Bantock and Mr. Knowsley Thornton will, we hope, continue and increase the reputation of the Hospital; and that they are likely to do so the last year's statistics of ovariotomy bear ample testimony.

THE NEW SENATE-HOUSE OF MADRAS.

The new Senate-House of the Madras University, which has been provided through the liberality of Mr. Chisholm, was recently opened with due ceremonial. The building is described as something noteworthy even in a country where magnificence of detail is the rule and not the exception, and is destined by universal consent to become one of the sights of Madras. Dr. Furnell, the Principal of the Medical College, was called upon to deliver the address. His oration was masterly, and eminently fitted for an audience the greater part of whom were educated natives. At its conclusion he alluded to the unmerited slights to which the medical profession was subjected. "Medicine," he said, "is not an honoured calling among Englishmen; there is no use blinking the fact. It is the Cinderella among professions. It wears the poor clothing and does the drudgery; whilst its sisters Law and Divinity, and, in this country, Arms and the Civil Service, are clad in purple and fine linen, and obtain all the honours. You hear it called an 'honourable profession,' a 'noble profession'; but this latter does not allude to its rewards. No English physician, ever so famous, was ennobled. In this country no English physician has ever been deemed worthy a seat in the Legislative Council." It would be waste of time, as Dr. Furnell remarked later on in his address, to offer any speculations why this is so—it is sufficient to know that so it is; and the fact has never been more forcibly brought home to the notice of the medical profession than in the circumstance that, after all his efforts to arrest and alleviate the distressing consequences of the recent famine in Madras, the exertions of Dr. Cornish have been studiously ignored, and neither acknowledgment nor reward have been accorded to him for an immense amount of labour and advice cheerfully tendered upon the occasion.

ABERDEEN HOSPITAL FOR SICK CHILDREN.

We have much pleasure in calling attention to the first annual report of the Aberdeen Hospital for Sick Children, for the year 1877. The want of such an institution had been long felt, and it was therefore determined to begin in a small way; but the result has been so satisfactory that the directors have purchased the building, and intend to increase the accommodation from fourteen to twenty-two beds. The medical arrangements are entrusted to Professor Stephenson and Dr. Robert J. Garden; and the value of the hospital treatment has been so well appreciated that the demand for beds during the past year has almost always been greater than the supply, and in consequence some of the children have had to be sent home to become out-patients sooner than would otherwise have been the case. The directors make the modest estimate that about £600 a year will be required for the current wants of the institution, and they look forward with confidence to obtaining this amount annually for such a useful and much-needed charity.

THE ST. GEORGE'S, HANOVER-SQUARE, DISPENSARY.

The St. George's, Hanover-square, Dispensary, in Mount-street, Grosvenor-square, may be taken as a very fair sample of these institutions, which, with a great deal of charitable support added to the members' payments, endeavour to keep the poorer class of the community from applying for gratuitous relief to the large hospitals. The tenth report of this Dispensary for the year 1877 shows that £183 0s. 10d. was received from members in the shape of payments, and this sum is £16 more than was received from the same source in the previous year. With annual subscriptions £432, collections in the parish churches, and donations from friends and the Hospital Sunday and Saturday Funds, the total income for the year 1877 amounted to £913. The medical staff of the Dispensary is all that could be desired, and it is evidently well managed and looked after, but it is to be hoped that eventually it will become more self-supporting. Paying dispensaries should be steadily encouraged, so that they may draw off from the public hospitals a large class of applicants who can afford a small sum for medical attendance, but in the present instance only about one-fifth of the annual income is derived from the patients, and it may be that some portion of the remainder of the £913 would have been subscribed to the funds of the large hospitals if it had not been diverted in this direction. We shall hope to see an improvement on this point in the next annual report of the St. George's Dispensary.

SIMULATION OF FEVER.

Dr. Sellerbeck (*Berlin. Klin. Wochenschrift*, No. 3, 1878) describes a case which was treated in the Charité Hospital at Berlin for supposed ulcer of the stomach, and in which the patient, a female, successfully imposed on her attendants for some time by simulating fever. She appeared to have temperatures reaching 39·4° Cent., with a pulse of 120, and respirations of 24, and yet nothing in her physical state was sufficient to account for them. Dr. Sellerbeck detected the imposture by observing that the highest temperatures occurred sometimes at night and sometimes in the morning, and at last a simultaneous observation in the axilla and rectum gave 38·5° for the former and 37·8° for the latter. The false temperature was obtained by the patient, after the sister had inserted the thermometer into the axilla, taking the instrument and pushing it into a fold of her chemise, which she drew forward from behind. This fold she firmly wedged between her side and her arm, and she then twisted and rubbed the thermometer until it reached the required height. As the thermometer, however, was not a registering one, she had to warm it *above* the temperature to be read by the nurse, so that the mercury might sink gradually until the moment came for the observation. Dr. Sellerbeck found by his own experiments that by the above method the mercury could be raised in one to two minutes as high as 46° Cent.,

that it then fell rapidly to about 39·5°, and afterwards ranged for five or six minutes between that temperature and 38°, so that the patient could be sure of appearing to be feverish when the nurse read the thermometer. Less marked results are obtained by simply rubbing the bulb of the instrument between the skin of the arm and chest. The symptoms of increased frequency of pulse and respiration in the above case were of course easily simulated after the patient had learnt during her long stay in the hospital their association with fever.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS.

We understand that Sir Henry Thompson is likely to present himself as a candidate for a seat on the Council of the College of Surgeons at the coming election. That Sir Henry will be an able and efficient member of that body, if elected, we have little doubt. Moreover, from his well-known character, we may anticipate that the questionable system of canvassing will receive no countenance from him.

FROM ABROAD.

Ovariotomy under Lister's Method.

Dr. Carl Schröder, Professor of Midwifery at Berlin, reports, in the *Berliner Klin. Woch.* for March 10, on the results of fifty of what he terms "Listerian Ovariotomies," performed in Berlin between May 25, 1876, and February 24, 1878. The particulars of each case are exhibited in a tabular form, for which we have not space, so that we must confine our attention to the results, and to some of the Professor's general observations on the operation. These results are in the highest degree favourable, for of the fifty women operated upon, forty recovered. Three of the ten deaths also did not depend upon the operation, but occurred in consequence of the spread of cancer on the tenth, nineteenth, and forty-fifth days respectively; and hence must not be taken into account as unfavourable to the prognosis of the operation. As, on the other hand, they cannot be regarded as examples of its favourable issue, it will be the best course to remove them altogether from consideration, leaving the entire number of operations forty-seven, with seven deaths: therefore 14·9 deaths and 85·1 recoveries. When the table is examined, these fatal cases will be found to be unequally distributed, for (abstracting the three cases of cancer) in the first twenty-four cases six deaths occurred, and only one in the last twenty-three cases. This, perhaps, may seem to confirm the frequently entertained opinion that the results become more favourable with the more frequent practice of the operation. But in Prof. Schröder's opinion a more correct explanation is found in the fact that as infection is almost the exclusive cause of death after ovariotomy, the result depends upon the external conditions under which the operation is performed. With absolute certainty it may be stated that the results will be good in proportion as infection can be prevented.

In reference to where the operations were executed, it is found that of thirty-three operations performed in the Lying-in Hospital only one proved fatal, *i.e.*, 3 per cent.: while of the fourteen executed either at the patient's house or in the Charité Hospital, six (or 43 per cent.) terminated fatally. This extraordinary success in the operations executed in the Lying-in Hospital must surprise everyone, and most of all those who are acquainted with the conditions of this establishment. Converted from what was a private house, and situated badly as regards sanitary conditions, it is always overcrowded, so that its normal number of admissions is very commonly exceeded by one-half or more. It is also the receptacle for all the most difficult and dangerous cases occurring in Berlin, women being frequently admitted with stinking secretions, or with the remains of an abortion in a state of putrefaction. Isolated cases of puerperal fever occurring from time to time under these circumstances are unavoidable. One would think that a more unfavourable place for the performance of ovariotomy could not easily be found; and yet only one case out of thirty-three terminated fatally, and this not from infection, but from what may be called an unlucky accident—the rupture of a hæmatocele occurring on the nineteenth day. Adding the three cases of cancer, there were thirty-six women operated upon without any infection symptoms having occurred. The key to this riddle is that in a well-managed institution the control over persons and implements is so complete that those who have been operated upon can be guarded against the material of infection with the greatest certainty. This will become intelligible after a short description of what is done with regard to operations at this hospital. The operations are executed in private rooms, into which lying-in women are never admitted, and patients with suppuration only exceptionally. All the instruments required for an operation are brought freshly cleaned from the instrument-maker and placed in a 5 per cent. carbolic acid solution. The sponges are absolutely new, and are most carefully cleansed and scalded by the superintending midwife the day before, and are placed during the night in the carbolic acid solution. For the operation itself five persons are employed besides the chloroform administrator. Only the operator and an assistant come in contact with the wound; a second assistant sees to the instruments; the chief midwife mixes the solutions and superintends their employment; and a nurse stands beside the operator with a bowl filled with the solution. No one among others present must do anything but look on. The head midwife has the general superintendence of the room, and is directed to keep herself away from all sources of infection. The nurse confines her attention to ovariotomy patients, and does not come into contact with other patients or lying-in women.

"My assistants and myself employ the most painstaking care in the removal of all infective material. The operations are always performed in the morning, before coming in contact with other patients—at half-past eight in the summer, and as soon as it is sufficiently light in the winter. After taking a bath on getting up I put on clothes that are free from all infectious material, and having washed in carbolic acid solution, proceed to the operation. At least half an hour before this the spray has been distributed in the room; and after the patient has been washed in a pure atmosphere, the operation is commenced with clean hands and instruments. Operating in this manner, one acquires quite new ideas with regard to injuries of the peritoneum, becoming assured that it is possessed in a remarkable degree of the peculiarity of being able to localise inflammation. We may do what we will with the peritoneum—cut it, tear it in pieces, crush it, burn it, tear it off—and yet never is the classic picture of general peritonitis produced. The injured parts constantly unite with the neighbouring portions of the peritoneum; and even foreign bodies, such as blood, portions of tumours, ligatures, etc., become capsulated by local exudations. The portrait known as general peritonitis is really that of septic peritonitis. If the infectious material be kept away, the opening of the peritoneal cavity is a procedure entirely devoid of danger, and an act of little consequence. Even after difficult and prolonged operations, in which the peritoneum has been injured over a great extent of surface, there is but slight reaction. The pulse is only somewhat quickened, to 90 or 100, and the temperature rises only to about 37·8° C., and exceptionally on the first evening to somewhat above 38°. It not seldom remains absolutely normal. Immediately after the operation, as a rule, the temperature sinks very considerably: but although I acknowledge Wegner's researches on this subject to be of importance, I cannot agree with him as to the danger of this decline of temperature. Patients go on perfectly well with a temperature of 35°: and in no one case, although at various times I have operated during collapse, have I ever observed alarming symptoms.

"Vomiting is very frequent on the day of the operation, but it is caused by the chloroform, and lasts only exceptionally until the next day. Intense thirst is constantly present, but pain is absent. On the second or third day a good appetite appears, and the patients comport themselves very much as healthy persons would if confined to bed, requiring no special nursing. The occlusion-bandage is left on untouched for nine days. On the tenth it is removed under spray, as are also the ligatures. The wound is found to be united by primary intention, pus being nowhere visible

This is not exceptional, but the regular course of things, as exhibited in almost all the cases operated upon during the later period. After very difficult operations, or the irritation caused by a sunken ligature, circumscribed exudations may occur that not unfrequently break into the intestinal canal. These do not induce fever, and cause scarcely any danger.

"By operating in the manner described, the danger is so slight that the cases of death, excepting those from cancer, may almost be described as occurring from unfortunate accidents, as hæmorrhage from the pedicle or adhesions, wounds of the intestine, etc., it being always assumed that the access of infective material to the abdominal cavity has been effectually prevented. This is not an easy and simple matter; and in the possibility that occasionally, in spite of the most painstaking care, and in spite of all precautionary rules, infecting substances may still gain access to the cavity of the abdomen, lies, according to my convictions, the chief danger in opening the peritoneum. Of decidedly small importance are the difficulties of the case, and the mode of executing the operation. Everyone who looks through my table must admit that it would not be easy for a greater number of more difficult and more complicated operations to be found following each other in fifty consecutive cases; and yet are the results satisfactory, inasmuch as this series of the most complicated operations have had so favourable an issue. As regards the method, the subsidence of the pedicle is of importance, as its extraperitoneal attachment would render the carrying out of the Listerian procedure more difficult. Silken ligatures decidedly irritate, and yet I do not know how to dispense with them, as those made of catgut are not safe, and I have no trust in the actual cautery. Drainage of the abdomen, which I have employed only in one case, is never necessary, but sometimes is quite harmless. The great thing is the keeping away of infective material; and when this can be done, the mortality after ovariotomy is very small, so that it may be under 10 and apparently under 5 per cent. We may therefore confidently assert that 'Listerian ovariotomy' cures radically, with great certainty and but little danger, a disease of the most dangerous character, which is only curable by operation."

The American National Medical Library.

Most of our readers are aware that, owing chiefly to the great exertions and industry of Dr. Billings, having great resources at his command as an officer of the United States Army, a medical library has within a few years been organised, which bids fair to become one of the largest in existence, and is said even now to contain 100,000 volumes and pamphlets. Originally intended only as a library attached to the Surgeon-General's office, it has expanded into a truly grand national establishment; and an attempt is about to be made at rendering it of use to the profession throughout the world by the publication of an elaborate catalogue. The catalogue, we believe, has been compiled, or in great part compiled; at all events, the first two volumes are ready for printing, and in his estimates the Secretary of the Treasury has asked of Congress a sum of $25,000 to defray the expenses of printing and binding 3000 copies. The Committee of Printing, the *New York Medical Record* (March 16) states, have now the matter before them, and as economy is the order of the day, the probable ultimate expense is being rather closely inquired into. The entire catalogue is expected to occupy from seven to ten royal octavo volumes of 1000 pages each, according to whether it contains subjects as well as authors. The total cost will be about $125,000, which, however, will be spread over four or five years, as probably only two volumes can be printed a year. A fasciculus specimen of the catalogue has been widely circulated in America and Europe, and but one opinion has been expressed of the immense value of such a contribution to medical bibliography. The catalogue not only in fact comprehends in alphabetical arrangement both authors and subjects, but also an immense number of references to articles in the medical periodicals, so that it will also do for medical literature, but not quite so exhaustively, what the Royal Society's Catalogue of Papers has done for scientific periodical literature.

The Medical Society of the County of New York has memorialised Congress in favour of the grant required; and when the world-wide importance of such a work is taken into consideration, we sincerely hope that that body, which has hitherto sanctioned the expenditure of such large sums on the medical history of the late war, on the publication of the results of territorial explorations, and various other laudable objects, will not allow a temporary financial crisis to divert it from so beneficial a course.

REVIEWS.

Iconographie Photographique de la Salpêtrière. Par MM. Bourneville et Regnard. Vol. I., 1877. Paris: V. Adrien, Delahaye, and Co., Place de l'Ecole-de-Médecine.

This work, which has been appearing in parts for many months past, is intended to enable readers at a distance to gain an accurate knowledge of the personal history and pathological peculiarities of some of the patients who have figured so largely of late years in the writings of Professor Charcot. As the great French professor has paid special attention to the phenomena of hystero-epilepsy, so the two gentlemen to whom we owe the volume before us have elected to devote the first part of their work to the same intricate subject. We are indebted to M. Bourneville for the clinical histories of the cases in question, which have been taken for the most part with extreme care and elaboration; whilst M. Regnard has illustrated the reports by a large number of photographs, showing the patients in various stages of their attacks. These have been executed with great care, and, considering the difficulties with which M. Regnard must have had to contend, they exhibit no small artistic skill.

It is only quite recently that any systematic attempts have been made to study hysteria and hystero-epilepsy in a truly scientific manner. For some time past various observers have analysed the phenomena of epilepsy, and by comparing the observations thus made with the results of experimental stimulation of different parts of the brain, it has been sought to deduce the laws which govern the action of that organ, and to arrive at a knowledge of the function of its individual parts. The question arises whether we may not extend investigations of the same order to hystero-epilepsy and hysteria, and whether we may not hope to advance our knowledge of the physiology of the nervous system equally by such researches as by observation of the the less abstruse form of disease.

In epilepsy we have to deal for the most part with the simpler, less co-ordinated muscular actions—an unintelligent or, as it may be called, a "massive" contraction of the muscles of one limb, of one side, or more often of nearly every voluntary muscle in the body, whilst the mind is affected generally only in the simplest possible manner by complete cessation of all mental acts and the production of total unconsciousness. Here, then, all we can hope to study is the mechanism of movements in their lowest degrees of co-ordination, and perhaps that of the commoner orders of sensation; but we can hope to throw little, if any, light on the higher processes of the brain connected with the emotions and the intellect. It is just these processes, however, which we may hope to elucidate by the study of hystero-epilepsy, for in many cases of this disease we get no gross and complete cessation of all mental action, no "massive" contraction of every muscle in the body, with the subsequent exhaustion, mental and muscular; but we find more often than not that the patient is in much the same condition as a somnabulist, whose voluntary control over her actions is indeed suspended, but who nevertheless is capable of passing through a considerable variety of mental phases in a somewhat mechanical way. In such a patient, many of the higher reasoning faculties being for the time dormant, the emotional centres respond more readily and with greater certainty to given stimuli; and, just as in an animal under the influence of an anæsthetic the stimulation of any given part of the motor centres is always followed by the same result, so here, where the emotions are for the time removed from the control of the hitherto overruling intellect, we may expect to find that a given stimulus will be generally followed by the same emotional result. It is this point especially which is brought out in the cases reported in the present work. In several of them the peculiarity of the fits lay in the fact that the patient, whilst more or less unconscious of what was going on around her, passed through a variety of emotional phases dependent upon stimuli arising either from without, or, more frequently, from the vivid reproduction within her brain of impressions resulting from scenes which had pro-

foundly affected her at some previous period of her life. Thus there are photographs of one patient taken while she was in an attack, and in which the several emotional states of terror, mental distress, surprise, irony, disdain, repugnance, are vividly depicted, each of these conditions being easily traceable to some scene in her former life, through which she was, in imagination, again passing.

We think that M. Bourneville has been unnecessarily prolix in his account of the different patients, and that but little was to be gained, from the scientific point of view, by the publication of each minute detail of a succession of fits. A careful *résumé* of the cases would, we believe, have been more valuable than the reports *in extenso*. Moreover, we must express the conviction that the constant minute observation to which these patients are subjected, the frequent recording of every symptom (objective and subjective), the very special interest taken in their "cases," the photographing of their various "attacks," and so on, is the very worst thing possible for such patients. Under such management are they not certain to become trained "typical cases," without a chance of recovery; and, on the other hand, without any real gain to medical science?

We doubt whether anything is to be gained by the publication of other histories of the same kind, according to the authors' present intentions; for, though they may not have described every variety of the complaint, yet we think they have already succeeded in placing before us instances of most, if not of all, the great groups of cases into which the disease may be divided, and it will be scarcely profitable to do more than this. We sincerely hope that in the immediate future they will utilise the great field at their disposal by presenting us with examples of many other forms of nervous disease, and we believe that the value of the work would be greatly enhanced were this done. However this may be, we have to thank the authors for a very interesting contribution, unique of its kind, to the literature of the diseases of the nervous system.

THE HEALTH OF BRIGHTON.—The fourth annual report on the health of Brighton for the year 1877 shows that in the list of death-rates of the twenty largest towns in England, Brighton secured the second place with a death-rate of 18·7 per 1000, Portsmouth appearing in the first position with a death-rate of 17·3. In the year 1876 the Brighton death-rate was lower than that of any other town. During the past year the total rate from the seven principal zymotic diseases was only 1·9, and although there were ten deaths from small-pox, that disease never assumed an epidemic form, principally due, Dr. Taaffe, the Medical Officer of Health, believes, to the measures adopted by the Sanitary Department for immediate isolation, and to the active and praiseworthy exertions of the parish authorities in carrying out the vaccination laws. Dr. Taaffe appends some very convincing statistics in support of the good effects of vaccination, and explains that he has been induced to do so by recent attempts which have been made, in Brighton and elsewhere, to deceive the public on this most important point.

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN APRIL, 1878.—The following are the returns (by Dr. Meymott Tidy) of the Society of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, etc.	Nitrogen: As Nitrates, etc.	Ammonia.		Hardness. (Clarke's Scale.	
				Saline.	Organic.	Before Boiling.	After Boiling.
Thames Water Companies.	Grs.	Grs.	Grs.	Grs.	Grs.	Degs.	Degs.
Grand Junction ...	18·00	0·089	0·105	0·000	0·009	12·1	3·3
West Middlesex	17·10	0·053	0·129	0·000	0·009	12·6	2·8
Southwark and Vauxhall ...	18·10	0·046	0·105	0·000	0·008	12·6	2·8
Chelsea	18·20	0·046	0·150	0·000	0·008	12·6	2·8
Lambeth	19·40	0·042	0·164	0·000	0·008	13·2	3·3
Other Companies.							
Kent	28·70	0·014	0·435	0·000	0·008	19·4	6·0
New River ...	17·40	0·092	0·165	0·000	0·008	12·6	2·4
East London ...	18·70	0·042	0·165	0·000	0·008	12·6	3·3

Note.—The amount of oxygen required to oxidise the organic matter, nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases.

PROVINCIAL CORRESPONDENCE.

LIVERPOOL.

April 8.

PROPOSED NEW SCIENCE COLLEGE FOR LIVERPOOL—THE MAYOR'S SUGGESTIONS FOR IMPROVING THE POSITION OF THE CHARITIES—THE ROYAL INFIRMARY—HOSPITAL SATURDAY.

LIVERPOOL is conspicuous among large towns for its deficiency of institutions for the impartment of a higher scientific education. While Manchester, Leeds, Birmingham, Bristol, Sheffield, and even Nottingham, have, or are about to obtain, colleges wholly or partly devoted to that end, Liverpool students who require anything more than a general knowledge of science are obliged to go elsewhere to seek it. Feeling that this was not creditable to the town, the Council of the Royal Infirmary School of Medicine, acting in conjunction with the Liverpool Committtee of the Cambridge University Extension Scheme, some time ago formed an independent committee, which met several times, and ultimately sent an influentially signed requisition to the Mayor, who has decided to call a public meeting on the 29th inst. for the purpose of endeavouring to bring about the establishment of such a college as is needed.

This is not the only good thing that the present Mayor has done. His sensible innovation on the practice of giving heavy dinners I have alluded to previously; but some suggestions which he submitted a short time since to a number of representatives from the leading local charities, for a better organisation for the collection and increase of subscriptions in support of these institutions, are so valuable as to be worth reproducing.

Having had to preside, within the few months since taking office, over the annual meetings of more than forty local charitable and philanthropic institutions, his Worship was struck by two facts, viz.—first, the difficulty experienced by the majority of them in obtaining subscriptions adequate to their expenditure; and, secondly, the small number of subscribers when compared with the population and wealth of the town and neighbourhood. The population open to receive benefit from the charities is 700,000, of whom barely 6000 contribute 5s. or upwards per annum; and of that number about one-half subscribe to only one of the thirty-eight leading charities.

Returns were obtained by his Worship from eleven out of twelve local parishes and districts, from which it appears that there are in these 30,378 premises rated at £20 and upwards, of which 15,007 are rated at £50 or over. These figures prove, as the Mayor observed, that there is an ample field from which to seek for additional subscriptions, and that there is a large work open to a properly organised house-to-house canvass. The suggestions made were that a central body should be formed in Liverpool, whose duties should consist in the collection and reception of the contributions for the charities admitted into association; that this body should arrange and keep up an efficient system of canvass of the town and neighbourhood; that its name should be the "Association of Liverpool Charities"; that a proportion of the committee should be elected by representatives of the various charities in association; that the Mayor for the time being should be chairman; and that the expenses should be paid by a poundage on the amount collected. It was further suggested that a certain standard should be adopted, qualifying charities for admission to association; that a *sine quâ non* certainly should be an annual public audit of the accounts of the applicant; that a general or unappropriated fund should be formed to be disbursed among the various charities according to the discretion of the committee; and lastly, that inquiry should be made into cases applying for relief.

It is much to be hoped that this plan, or some modification of it, will soon be adopted, as the large excess of expenditure over income by our chief medical charity this year shows how desirable it is that the income should rest on a securer basis than at present.

It is satisfactory to be able to report, however, that the alarming deficit of £5000 in the Royal Infirmary receipts for the year has already nearly been made good by donations, and that a considerable promised increase in the amount of annual subscriptions renders it less probable that its useful-

ness will be seriously curtailed owing to want of funds, as seemed probable but a short time back.

The Hospital Saturday collections from the houses of business, &c., are less this year than last, the sums being—1878, £2142 16s. 11½d.; 1877, £2436 4s. 6¾d.

MANCHESTER.

May 8.

Typhoid Fever in Moss Side District, due to Milk-Contamination.

Typhoid fever has recently made its appearance in one of the most populous suburbs of Manchester. The outbreak has been clearly traced to milk-contamination, and its history affords another illustration of one serious defect in the Public Health Act, namely, the absence of a clause rendering it compulsory on householders to report every case of zymotic disease. For nearly two months cases of typhoid had been occurring here and there in the district before the Medical Officer, Mr. A. E. Sutcliffe, was made aware of the existence of a single case, or had any warning whatever that the health of the Moss Side district was in danger. And, indeed, when the first note of warning came, it did so quite unofficially, in the shape of a request from a private patient that Mr. Sutcliffe would examine a sample of milk in which had been detected a suspicious odour of disinfectants. The milk smelt strongly of chloride of lime, but appeared in other respects to be of excellent quality. It was found on inquiry from the milk-dealer that several other customers had on the same day made complaints to him of the peculiar odour of the milk. The man had obtained his milk partly from his own establishment, and partly from a farm eighteen miles distant, at Nether Peover in Cheshire. As the complaints came entirely from persons to whom this Cheshire milk was habitually supplied, the farmer was at once communicated with by telegram, when a reply was received from the managing farm servant to the effect that his master and mistress were both lying in the house dead from fever. In consequence of this startling information, Mr. Sutcliffe advised that no more milk should be obtained from that source. Orders were also given that a list should be furnished of the houses supplied with milk from the suspected locality, and that the sanitary authorities of the Mid-Cheshire district, in which Nether Peover is situated, should be forthwith communicated with and asked to investigate the condition of the farm premises. All this took place on March 2. The milk-dealer furnished the desired list of his customers; and the Medical Officer, with this list in his possession, held himself in readiness to take further steps if any case of typhoid were reported to him. He had already stopped the purchase of the Cheshire milk, and in the absence of any knowledge that typhoid had actually occurred he felt that nothing more could then be done without creating unnecessary alarm throughout the district. Not many days elapsed, however, before information was given that fever had broken out in one or more of the houses on the milk-dealer's list. Every house on the list was thereupon visited by the inspector, with the result of disclosing the presence of typhoid to an extent entirely unsuspected. It was ascertained that seven cases had occurred in the month of January, fourteen in February, and four since the end of February. Of the total of twenty-five cases, no fewer than twenty were children of twelve years of age and under—a fact sufficient by itself to throw suspicion on the milk-supply. Two additional cases were found to have occurred in a house supplied by another dealer; in this exceptional instance the inmates of the house had, owing to the existence of close family relationship, held direct communication with one of the houses already infected.

Besides those in the Moss Side district, the dealer had other customers in two of the neighbouring sanitary districts, a list of whom was in each instance forwarded to the Medical Officer of Health, along with full particulars as to the outbreak in Moss Side, and its suspected origin. In the larger of these adjacent districts the Peover milk was supplied to five houses, in two of which typhoid made its appearance. No other cases were known to exist in the whole district. The health officer of the second district reported three cases.

On the first intimation that typhoid fever had actually broken out in the Moss Side district, Mr. Sutcliffe went to Nether Peover for the purpose of instituting a personal investigation into the condition of the farm premises from which the milk was obtained. He found the arrangements deplorably bad. The pump attached to the well from which the entire water-supply of the farm was obtained stood at a distance of only a few yards from the ash-pits. The sanitary inspector had already been to the farm, and had entirely prohibited the sale of milk. He had also given orders that the pump-water was no longer to be used, and had procured a sample of the water for analytical purposes. The county analyst, Mr. Carter Bell, reported that the water was polluted to a sufficient extent to give rise to typhoid, and the well was subsequently discovered to be in communication with the drains and the "soakings from the sink."

On March 28, at the Northwich Petty Sessions, an order was granted against Lord de Tabley to close the well at Nether Peover, on his lordship's estate, on the ground that the water was so polluted as to be injurious to health. Mr. Fox, the Medical Officer of Health for Mid-Cheshire (recently appointed in succession to Dr. T. R. Fraser, of Edinburgh), took this occasion publicly to call in question the statement that the diffusion of typhoid in Moss Side, Manchester, was limited to the houses supplied with milk from the farm in question, "because he found that there was a case of typhoid fever at Moss Side at the end of last year, and that two children from the house became visitors at the farm where the well was situate. He thought the people at the farm had some little ground for thinking that these children might have been the means of communicating the fever from the Moss Side district into the Cheshire district." On reading this disclaimer, Mr. Sutcliffe made further inquiries, and learnt from the practitioner under whose advice the children alluded to had been sent into Cheshire, that their ailments had been of a simple and non-infectious character, and that they were sent to the farm-house for change of air. Even supposing, however, that these children did carry the infection from Moss Side to Peover, it by no means follows that the milk from the Peover farm did not carry it back again to Moss Side. With regard to the case of typhoid said to have occurred in Moss Side at the end of last year, the facts are these:—During the year 1877 there was only one death from typhoid in the Moss Side district. The last person known to have suffered from that disease before the present outbreak was, curiously enough, the very milk-dealer who figures so prominently in this narrative. His illness, however, commenced in September, 1877, and it cannot be found that any case of typhoid occurred during the three remaining months of that year. The dairy on his premises is sufficiently disconnected from the other outbuildings, and the water that has always been used for cleansing the milk-cans is that supplied by the Manchester Corporation.

That this case was not immediately followed by others is in all probability due to the purity of the Moss Side water-supply.

The essential facts which point to milk-contamination as the source of this localised outbreak may be briefly summarised as follows:—

1. The families attacked, with one exception, received their milk-supply from the same dealer. The members of the household which formed the exception were related to one of the families already attacked, and had held direct communication with it.

2. The houses principally infected received their regular supply of milk from the Cheshire farm only.

3. Two deaths from typhoid occurred in the farmhouse at Peover in the month of February.

4. The water-supply at the farm was derived from a well which was in close contiguity to the ash-pits, and the water was found on analysis to be polluted from sewage-contamination.

5. The line of infection did not follow the course of any particular street or any particular sewer; the customers of one milk-dealer were singled out from their neighbours in the infected district. Of 214 families, who resided in many instances in the same street with the infected houses, and who received their milk from another large dealer, one only was attacked; and in this instance there was, as already stated, proof of direct communication with one of the infected houses.

6. The outbreak was checked as soon as the purchase of milk from this farm was discontinued.

Other less striking, though still strongly corroborative, facts might be added, such as the preponderance of children affected; but those here enumerated are the leading features of the outbreak.

In addition to the precautions already mentioned, the Moss Side Local Board of Health adopted, at the suggestion of their Medical Officer, some further preventive measures. They inserted a series of advertisements in the local papers, requesting immediate information of the occurrence of cases of fever, of whatever description, amongst the inhabitants of the district; they organised a system of daily disinfection of the ash-pits and drains of all the houses to which the Peover milk had been supplied, and issued minute instructions to the householders as to the best mode of immediate disinfection of excreta.

It is extremely satisfactory to be able to record that no fresh cases occurred during the month of March. The inhabitants of the Moss Side district may consider themselves fortunate in having for their Health Officer a man of prompt and energetic action. Had it been otherwise, there is little doubt that the epidemic would speedily have assumed alarming proportions.

GENERAL CORRESPONDENCE.

TREATMENT OF NEURALGIA.

LETTER FROM MR. METCALFE JOHNSON.

[To the Editor of the Medical Times and Gazette.]

SIR,—May I ask you to lay before your readers the following results of my experience in the treatment of neuralgia, which, though consisting of a "nostrum" in great measure, is nevertheless, to my mind, so likely to afford relief to suffering humanity that I do not feel justified in withholding it. The treatment consists in painting the part affected with a nostrum called "anodyne amyl colloid," and prepared by Messrs. Ferris and Co., druggists, of Bristol, and in the exhibition of a remedy composed of the tincture of gelseminum and tincture of guarana. The following cases of relief will be my justification for offering advice to use a nostrum or prescription of a somewhat secret nature:—

J. P. called one morning, suffering from facial neuralgia in all the four points of the surface development of the facial nerves. I painted his face over the four spots, and before the liquid was dry his pain was gone. It returned the next day, but was again relieved by the remedy, the relief lasting for twenty-four hours.

I met A. B. in the street, who was complaining of an obstinate neuralgia, which had resisted several of the usual remedies. A trial of the treatment here indicated was attended with immediate relief.

It has been tried, I believe, at my suggestion by one member at least of the family of three of my professional brethren.

A patient suffering from podagric neuralgia of the forearm finds such relief that frequent resort is had at night to the use of the painting with the anodyne colloid.

A few days since, a lady suffering from that painful affection called "soft teeth," caused by caries, and in whose case considerable swelling was apparent, found immediate and permanent relief by painting the cheek with the remedy.

A clergyman, of a very high nervous organisation, and in whom, as is often the case, considerable strength of mental power is developed, described the relief which was obtained by the use of both the remedies as "like magic." In several other instances, of which I have kept no record, relief has been obtained by the use of one or both remedies.

Hoping this will induce more of your readers to try the remedies suggested, I leave the case in your hands, merely adding that the anodyne amyl colloid professes to be a solution of aconitine and veratrine with hydride of amyl in a medium of collodion; but the proportions are not stated. The tinctures of gelseminum and guarana are in all probability better known to your readers. I have at the request of Messrs. Ferris and Co. already given them my testimony to the value of their nostrum, in a letter addressed to them a few weeks ago. If you will kindly insert these few remarks in your paper I think you will oblige many of your subscribers, as you will also

Lancaster. Yours, &c., METCALFE JOHNSON.

GUN-COTTON AS A DISINFECTANT.

LETTER FROM DR. F. E. JENCKEN.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is certain that nothing has created so great a revolution in the practice of surgery as the application of the germ hypothesis to this useful and important art, especially in reference to the treatment and dressing of wounds, or, in other words, to the use of antiseptics in breaches of continuity, from the smallest abrasions of surface to injuries of the most formidable kind, whether produced by cutting instruments or inflicted by missiles of a dangerous and destructive character, as in gunshot or other lacerated wounds.

But though the employment of antiseptics, in the manner just alluded to, is comparatively of modern date, chemists have long been aware that certain substances have the power of retarding, or altogether preventing, fermentation, either by destroying the life of the ferment or by substituting a body which, though indifferent in itself, possesses nevertheless the property of supplanting the ferment in question, thus staying the progress of its action. Such are glycerine, sugar, and oil, their surgical action not so much depending upon any chemical properties they possess, as upon their protective power and the influence they have in modifying and improving the secretions; many volatile hydrocarbons of a vegetable order, as the essential oils of mint, thyme, sage, bergamot, and hops, or the resins and balsams, as tar, carbolic acid, creasote, myrrh, benzoin, the balsams of Peru and Copaiba; again, certain chemicals, as corrosive sublimate, hydrocyanic acid, chlorine and its allies, the sulphurets and the sulphites, under all of which animal and vegetable life becomes extinct, succumbing in each case, or nearly so, to the overruling force of the particular agent employed. But certain as their destructive power over every form of primitive life is, and universal as the introduction of some of these agents into medicine and surgery has been, they nevertheless possess certain disadvantages that continually crop up, and are keenly felt by such as are in the habit of resorting to their use, not the least of which is the irritation caused by their application to raw and exquisitely sensitive surfaces.

Carbolic acid, the antiseptic most in use, has this great drawback in common with its correlatives; hence the great discrepancy amongst professional men as to the proportion in which it should be employed—some recommending it in its pure form, as in Lister's dressing, whilst others dilute it in the proportion of forty to eighty parts of any convenient vehicle, this attenuation being even considered by some as not sufficiently low. Another disadvantage, though not so great as the former, is its disagreeable smell, which, though not exactly nauseous, is to many intolerable.

Salicylic acid has certainly none of this inconvenience, but then it is somewhat more irritating, and less efficacious; whilst others are open to still greater objections. It would therefore be a great desideratum if a material were discovered which, in possessing strong disinfecting properties, should, at the same time, not mar the progress of the cure by unnecessarily causing pain or irritation to the wound. Thymol bids fair to be such an agent; but we know too little about it to speak of it unconditionally, and only trust the profession will neglect no opportunity of investigating this new and promising antiseptic.

But, irrespective of chemical agents, we must, to a very great extent, depend upon mechanical means for the prevention of infection, as cleanliness, ventilation, and pure air, but, above all, upon the protection of wounded and exposed surfaces from the influence of the atmosphere. This has from the earliest times been done in an infinite variety of ways, even to the light gauze bandage of modern times; but, useful as many of these appliances are as mere protectives, and for the purpose of aërial filtration, they must, from their very nature, fall short of accomplishing the important end we have in view, *i.e.*, that of disinfection; and here we would venture to recommend the employment of gun-cotton, both as being a light and cleanly material, as well as, from the mode of its preparation, a covering of a decidedly antiseptic character. Gun-cotton, as is well known, is prepared by immersing cotton-wool in strong nitric and sulphuric acids, and then washing it in many successive waters, until every trace of acid has disappeared. It is thus rendered so

extremely loose as to its cohesive force as rapidly to explode upon a smart blow of a hammer or any other blunt instrument; but what is more to our immediate purpose, by having gone through the process of double acidification it has become, so to speak, like dynamic gunpowder. It is, therefore, exceedingly probable that, notwithstanding the repeated washings it has undergone, the principle of the acids in which it has been immersed still clings to its delicate fibres, and that, though extinct as to its chemical action, it still remains in its meshes in sufficient force to act the part of a positive disinfectant, without the drawback of being an irritant—a disadvantage we had to complain of when speaking of the other antiseptics.

Requiring the careful manipulation that it does, great caution should be exercised in the beginning in ascertaining the extent of its detonating properties, even under a moderate heat—say from 96° to 120° Fahr.—whether it would bear the warmth of the body, and to what extent. Again, it would be necessary to discover the amount of friction it would endure with safety, as the rubbing of the bedclothes and bandages, turning of the patient, etc.; and lastly, we should make sure of its not being liable to suffer from prolonged pressure, such as the close covering inseparable from surgical appliance, etc. All these matters would have to be carefully gone into, and the feasibility as to its employment thoroughly ascertained before resorting to its use. For my own part, I should scarcely apprehend any danger as likely to arise from any such tendency, yet, upon general principles, when any new experiment is tried, caution is the first and most imperative rule.

Collodion has long since been in use, but, from its liquid character and the disposition it has to scale off, it can only be applied to superficial sores and ulcerations, not to speak of its etherial menstruum by which the pristine character of the cotton has been considerably altered. Flexible collodion is certainly more manageable, but also a great deal more irritating, being still further removed from the original material owing to its admixture with Canadian balsam and castor oil. Gun-cotton, on the contrary, has none of these objections, and though its molecular arrangement has been subjected to a considerable disturbance, verging as it does on the eve of chemical transformation, it is free from every medication in the ordinary acceptation of the term, retaining its valuable properties, to all outward appearance, as before.

Should the above surmises turn out to be correct, gauze, prepared in the manner of gun-cotton, may be employed instead, either in its simple form, or rendered impervious to the air by steeping it in spermaceti and resin, as in Lister's dressing. I regret I am prevented from testing the efficacy of gun-cotton as a surgical dressing myself, having entirely limited my practice to that of a pure physician, but as a disinfectant it appears to me so plain, and the benefit likely to arise to surgery from its use so great, that I earnestly hope my suggestions may meet with a favourable reception on the part of the profession, and that they may eventually lead to its adoption by those whose privilege it is, from the position they occupy, to put new discoveries to the test, and who—what is of more importance still—from the authority with which they are invested, have every facility to introduce them into practice. I am, &c.,

FERDINAND E. JENCKEN, M.D.

22, Anglesey-place, Kingstown, Ireland.

A QUESTION OF PRONUNCIATION.

[To the Editor of the Medical Times and Gazette.]

SIR,—The other evening, when attending the meeting of the Pathological Society, the subject under discussion being diseases of the lymphatic system, I was very much struck by the peculiar pronunciation that prevailed of the word *corpuscle*, which was almost generally spoken as if spelt *corpuskel*. If this change in our language is to be admitted, we must henceforth speak of *muskels* instead of muscles, as has hitherto been our custom. The orthographical derivation is alike in both cases—*musculus, corpusculum*. The pronunciation in question arises, I apprehend, out of a misuse of the recently introduced (improved?) mode of pronouncing Latin and Greek words and their derivatives. I do not dare to enter the lists with schoolmasters in this matter, but, yielding to them the presumption that they are better judges of pronunciation than myself, I only ask that orthography should keep up at least a decent consistency therewith. If it shall be agreed that Cicero shall be *Kikero*, why not spell it in that way? If the Celt is in the future to be a *Kelt*, in the name of consistency let him have his hard consonant. If we are, in like manner, to talk of "corpuskel," let us drop the corpus*cle*, and at the same time the mus*cle*. Our profession is not distinguished by its high classical attainments derived from preliminary training (perhaps we can answer the practical public call as well without these), yet, when in a scientific society technical words are used, they should be made to conform to some standard of pronunciation.

I am, &c., M.D.

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, APRIL 3.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair

THE following gentlemen were elected Fellows of the Society: Harrison Branthwaite, F.R.C.S. Ed.; Job Edwin Brooks, L.R.C.P. Ed.; and Albert W. Leachman, M.D. (Petersfield).

RUPTURE OF THE FŒTAL HEAD.

Dr. CORY showed a fœtal head with a rent situated on the left side of the coronal suture, through which brain-matter had escaped. The tear was at first supposed to have been produced by the forceps, but it was subsequently ascertained that the student in attendance had used a hair-pin to rupture the membranes, at which time the injury to the scalp had probably been produced. There was a tumour attached to the sacrum, which impeded delivery, and craniotomy would in all probability have had to be performed.

CANCEROUS POLYPI REMOVED DURING PREGNANCY.

Dr. GALABIN exhibited two specimens of cancerous polypi of the cervix uteri which he had removed from pregnant women, and showed microscopical sections of them. Both specimens, he said, were instances of a somewhat rare combination of pathological products, viz., myoma and carcinoma. The smaller tumour, which was about the size of a Spanish chesnut, was removed by means of the galvanic cautery at the fourth month of pregnancy, the patient having suffered from excessive hæmorrhage. Delivery took place naturally at full term, since which there had been no trace of recurrence. The larger tumour was removed by the galvanic cautery at the eighth month of pregnancy, the patient being much reduced by continued hæmorrhage and persistent vomiting. Premature labour occurred twenty-four hours after the operation, the child presenting by the breech, and being lost from the slow yielding of the cervix. The patient apparently recovered, but died some months later, probably from internal extension of the disease. The tumour appeared to have originated in an epithelioma, the nested masses being very distinct.

CYSTIC DISEASE OF THE FŒTAL KIDNEY.

Dr. GERVIS exhibited a specimen of this disease from a case which had occurred in the practice of Dr. Fletcher, of Earl Soham. Extreme difficulty was experienced in the delivery of the body of the fœtus, and ultimately it was found necessary to eviscerate. Dr. Gervis had on previous occasions exhibited specimens of hydrometra and hydronephresis occurring in the fœtus as causes of difficult labour, but this was a specimen of a still rarer fœtal disease. In reply to Dr. Heywood Smith, Dr. Gervis said that previous to her confinement the mother had been in a state of perfect health.

CONGENITAL SYPHILIS.

Dr. WILTSHIRE exhibited a photograph of an infant aged five months, who came under his care at St. Mary's Hospital, with enormous enlargements of the shoulder-joints, hip-joints, and knee-joints. The swellings came on very rapidly, and fluctuation was distinct in them. The child was remarkably anæmic, and presented in his face and elsewhere signs of congenital syphilis. The abscesses were tapped with the aspirator, and a large quantity of pus was withdrawn. The child, however, died soon after, and at the post-mortem examination the affected joints were found to be disorganised, and the epiphyses separated. The liver was the seat of an abscess,

which was apparently due to the breaking down of a syphilitic gumma.

Cancer of the Body of the Uterus.

Dr. Squire exhibited a specimen of cancer of the uterus where carcinomatous degeneration had proceeded to its most extreme point without pain ever having been a marked symptom. A maiden lady, aged fifty-eight, rather stout, but cachectic, began to suffer two years ago from a sanious vaginal discharge. This was arrested for a time by the use of general tonics, but reappeared a few months later. Occasional doses of ergot controlled the discharge. Vaginal examination then showed the uterus and cervix to be small and perfectly movable. The patient felt quite well till a year ago, when febrile disturbance set in, with evening exacerbation. A resistance was felt in the right hypogastric region, and tenderness was complained of there. The cervix was still movable and appeared healthy. The patient lost flesh. From these symptoms and the family history, cancer of the body of the uterus was diagnosed. During the last three months of life phlebitis occurred in each leg, and did not cease till about a fortnight before death, when collapse set in. Fæces subsequently passed from the vagina, and the patient gradually sank. On post-mortem examination no secondary deposits were found in any viscera; there were no enlarged glands; the peritoneum was smooth, and free from adhesions, except in the pelvis, where the small intestines were attached to the uterus on the right side, while the upper part of the sigmoid flexure had been drawn down into the pelvis, and become adherent to the uterus. Perforation had occurred, allowing the escape of fæces. The ovaries were small, but not diseased.

Rupture of the Uterus.

Dr. John Williams showed a specimen of rupture of the uterus, the rent being situated in the anterior aspect of the cervix. The patient in whom it occurred was under the care of Mr. Marshall, of Colney Hatch Asylum; and when first called to the case Dr. Williams found her with extensive emphysema of the head and face, and of the whole trunk. The child was presenting by the breech, and he delivered without difficulty. The placenta was slightly adherent, and on separating it he felt a rupture in the cervix, apparently not implicating the peritoneum. At the post-mortem examination the cervix was found to be the seat of a tear of about an inch and a half in length, surrounded by a sacculated pouch; the broad ligament in its neighbourhood was excessively distended with air.

Mr. Marshall gave the history of the case previous to Dr. John Williams' attendance.

The President suggested that the uterus should be submitted to microscopical examination. Many cases of so-called spontaneous rupture of the uterus had been recorded; but we still wanted information as to the histological characters of the organ in such cases.

Dr. Braxton Hicks considered that rupture of the uterus seldom, if ever, occurred nowadays from excessive and violent action, as described in the text-books. Probably such an accident had been eliminated by our improved methods of delivery.

Two Cases of Repair of the Female Bladder and Urethra.

The above formed the subject of a paper by Mr. Lawson Tait, of Birmingham. The first case (that of S. H., aged twenty-one) came under Mr. Tait's care on April 30, 1877, two months after delivery. Ever since labour her urine had dribbled away. On examination the vestibulum vaginæ was found to be merely a mass of cicatricial tissue of almost cartilaginous hardness, and this extended up the posterior wall of the vagina for very nearly two inches, and embraced the lateral walls of the passage for about half an inch further. On the anterior aspect, everything seemed gone save the apex of the urethra, of which about three-eighths of an inch were left. At the roof of the vagina a hard thick ridge ran across from side to side, and on the posterior surface of this the os uteri was discovered. In front of this ridge was a protrusion of mucous membrane, which was identified as the remains of the bladder by the fact that the two ureters were discovered upon it. The anterior edge of this protrusion was adherent to the rim of the pubis, and the whole of the mucous area was not much larger than a five-shilling piece. No trace of the anterior wall of the bladder could be found on careful search. Such being the state of things, Mr. Tait conceived that if he could make anything in the shape of a tube out of the cicatricial tissue in the vaginal wall, he might, by releasing the ridge at each side, bring it and the uterus down, and folding the remains of the bladder upon itself, and fastening it to the new tube, might at least make a receptacle for a small quantity of urine. Accordingly, on May 15, he made two flaps, each about an inch long, out of the tissue behind the symphysis pubis, and joined them in the middle by silver sutures. He did not attempt even to look at them again till July 14, when he found the operation had practically failed. He therefore, on July 18, proceeded to make two similar, but larger flaps, consisting of everything he could raise from the bone, and again united them in the middle. On examining the parts two months later, he found that a canal three-quarters of an inch in length, and allowing of the passage of a No. 6 catheter, had been formed. A few days later he proceeded to make a raw surface on each side of this bridge at its upper end; he then made a deep incision at each end of the tense ridge at the upper part of the vagina, and, after arresting the hæmorrhage, pared the edge of the ridge, and fastened it down to the raw surface with sutures, with the exception of one corner, where a free exit for the urine was left. On October 11 he found that the whole of his proceedings had been successful, the artificial urethra leading into a bladder-cavity, and nothing remaining but to close the provisional orifice. This was done on November 17, a cannula being kept in the urethra for twenty-four hours. The patient left the hospital on November 28, still unable to retain her water, but returned on January 1, when it was found that the water escaped through one of the stitch-holes. A few days after this was healed she began to have a sense of desire to pass water, and was able to remain dry for about an hour. Since then the quantity retained had increased from half an ounce to four ounces, and she described the feeling as being that almost of a new life. In commenting on the reappearance of sphincter action after utter destruction of sphincter muscle, Mr. Tait put forward two explanations—first, that some of the involuntary muscular fibres of the vaginal submucous tissue had taken the place of sphincter action; and secondly, that a valve-shaped opening had been made, which only yielded on pressure being exerted upon it by the contraction of the muscular tissue in the remainder of the bladder when over-distended. The second case was that of a Mrs. M. H., who, since her first confinement, in January, 1862, had been subjected to a variety of surgical proceedings for a "tear in the bladder," but without avail. In March, 1877, Mr. Tait found a large irregular opening, extending from within an inch of the cervix uteri to within a quarter of an inch of the meatus urinarius, admitting of the protrusion of the anterior wall of the bladder. This opening was narrow at its two extremities, but very wide at the point where the trigone and neck of the bladder should have been, and thus tissue was lost just where it was most wanted. On March 17, Mr. Tait operated upon the narrow part of the opening above, and lifted two urethral flaps with the view of forming the basis of a new urethra. The second part of the operation failed: it was, however, repeated with perfect success on April 6. On May 16 he operated on the remainder of the aperture by making two large wedge-shaped flaps, the axis of which coincided with the circumference of the vagina. The free truncated ends coincided with the margins of the fistula, and the lateral margins of each flap were formed by somewhat divergent incisions, which travelled round quite one-fourth of the circumference of the vagina. The flaps were then carefully joined at their apices, and the lateral margins stitched down so as to ease the apices of as much strain as possible, a drainage-tube being fastened in at the outer end of the lower left hand incision. Union took place except in a small portion, for which the same operation was repeated on a smaller scale. The stitches were removed a fortnight later, and in a few days the patient began to pass small quantities of urine with voluntary effort. By February 7, 1878, she was passing eight and nine ounces of urine regularly, and was as well and as comfortable as she ever was in her life.

In accordance with the President's request, Mr. Lawson Tait then demonstrated on the black-board the steps of the operations, adding that he had seen the first patient only a few days ago, and had found the shrinkage of the parts very considerable. The length of the urethra was now not more than a quarter of an inch, but it still served to keep the patient dry. In reply to Dr. Aveling, he said that the drainage-tube used in the first operation was one of Chassaignac's coiled wires, and that in the three cases in which he had employed

it he had not been troubled with the deposit upon it of phosphatic concretions.

Dr. Avelino had found that the concretions might be prevented by injecting twice a day a weak solution of nitric acid.

Dr. Cleveland asked whether it was necessary to keep the sutures in for so long a time as in Mr. Tait's cases. Did not the adhesions become sufficiently strong in fourteen or twenty-one days to admit of their removal with perfect safety?

Mr. Lawson Tait had never seen sutures do much harm by remaining in for long periods; but on this point he would appeal to Dr. Marion Sims, who had had probably more experience on the subject than any English surgeon.

Dr. Marion Sims said that where there was plenty of tissue left the operation for vesico-vaginal fistula was so easy that we scarcely thought of recording successful cases; but those of Mr. Lawson Tait fell in quite a different category, and might be looked upon as most exceptional. He had hitherto regarded those cases in which the neck of the bladder was destroyed as all but incurable, and only a fortnight ago he had reported unfavourably on such a case. Mr. Lawson Tait had, however, now laid down and followed out a new principle of action, and had invented a procedure which had never been tried before. As to the phosphatic deposits which had been mentioned, he believed that they never occurred except where the surface was denuded of epithelium. They might easily be cured by injecting a solution of nitrate of silver. The sutures, he believed, need never remain in longer than eight or nine days; otherwise they were apt to excite a degree of ulceration which made it necessary to remove them.

Mr. Tait said, in reply to Dr. Heywood Smith, that he did not attach importance to any particular kind of needle, but he liked the tubular needle very much indeed. Those usually employed made far too large holes, but he had had a special instrument made for him in Paris. As a rule, however, he thought the best needle was that invented by the late Professor Simon, of Heidelberg, who was by far the most successful operator in these cases, and from whose teaching he had first derived the feeling that no case ought to be regarded as entirely hopeless.

Dr. Murray mentioned a severe case which had been under his care, in which the whole vagina and bladder formed one immense cloaca, the cervix uteri in the process of cicatrisation having become enclosed within the bladder. After failure in one operation he undertook another, using Dr. Aveling's needle and wire coils, and the result was perfectly successful.

Rupture of the Uterus.

Dr. Hickinbotham, of Birmingham, contributed the notes of the case of a patient aged thirty-two, who was in the ninth month of her sixth pregnancy, when she fell off a chair on September 16, 1875, and profuse hæmorrhage immediately followed. On Dr. Hickinbotham's arrival, a few minutes after, she was blanched and pulseless, and the floor was covered with blood. The hæmorrhage came from an opening in the posterior aspect of the uterine wall, which easily admitted two fingers, and through which the edge of the placenta could be readily felt. The os was undilated, and at least one inch from and anterior to the wound. A soft sponge soaked in cold water was at once pushed tightly up to the uterus, and ether and brandy administered. The idea of transfusion had to be given up, the apparatus being found out of order. The patient slowly rallied, and, on examination twelve hours after the accident, the wound was found gaping, but there was no hæmorrhage from it. Labour came on on the 18th, and the head of the child was found greatly stretching the wound. The os was therefore pulled backward, so as to direct the stress of the pain from the rupture. Delivery was safely completed, and the patient had gradually recovered, though still very exsanguine. From the condition of the placenta, it had evidently been compressed by the fœtal head. In explanation of the position and causation of the wound, Dr. Hickinbotham added that the patient had probably fallen with her abdomen across some part of the chair, and that the pressure ruptured the uterus in that part which happened to be weakest, and which was in this instance a point opposite to where the injury was received.

Mr. Edward Skinner, of Sheffield, also contributed the notes of a case of this accident, which occurred in a young woman, about twenty-three, who was suddenly taken ill on the evening of January 2, 1877, with pain in the abdomen. She rapidly became worse, and when seen by Mr. Skinner was pale and collapsed, with a cold clammy skin and imperceptible pulse. The os uteri was found closed, and there was no hæmorrhage. She died about two hours after. On post-mortem examination the pelvis was found to contain a very large clot, with a three-months fœtus in it, and part of the membranes and placenta, the other portion being still in the uterus, and projecting from a rupture an inch and a half long in its posterior wall. The walls of the uterus in the neighbourhood of the rupture were about half the thickness of the other parts, and soft. The patient had had one confinement previously, from which she had made a good recovery, and there was nothing in her history to point to anything but spontaneous rupture. The week previous to her death she was in bed two days complaining of pain in the abdomen, but was not seen by any medical man. This was believed by Mr. Skinner to be really inflammation of the uterus, which led to the subsequent softening and thinning of the uterine walls.

Dr. Braxton Hicks said that the case reminded him of one of intra-mural pregnancy in which the fœtus was expelled per vaginam but the placenta was retained, and the patient died from internal hæmorrhage. A rupture had occurred through the peritoneal surface at the situation of a large sinus.

Mr. Lawson Tait mentioned a case of hæmorrhage into the abdominal cavity, now under his care, which he believed to be due to rupture of the uterus. He had twice drawn off the effused blood by tapping, but it had again accumulated, and, the condition of the patient being so severe, he proposed in a day or two to open the abdomen, and try and find the source of the hæmorrhage.

After some remarks from Drs. Clement Godson, Dr. Squire, and Dr. Malins, of Birmingham,

A Case of Puerperal Convulsions

was narrated by Dr. W. T. Greene. The convulsions appeared to be mitigated by the use of morphia suppositories, and disappeared on the fourth day after delivery, after which the patient made an uninterrupted and most satisfactory recovery.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Friday, April 12.

Dr. Stevenson, President, in the Chair.

The minutes of the previous meeting having been read and confirmed, Mr. Haviland was balloted for, and duly elected as an extra-metropolitan member.

Mr. Lovett inquired whether it was generally thought desirable to flush the sewers with carbolic acid once a year, *e.g.*, during the month of May.

Dr. Dudfield thought it well that the Society should decide as to the best disinfectant for this purpose. In Kensington the sewers are frequently flushed with carbolic acid during the summer months. The objection to carbolic acid is, that it will not mix very readily with sewage.

Dr. Stevenson approved of the use of carbolic acid for street gullies, but for sewers the results were unsatisfactory. The idea of Pettenköfer, that by acidulating the discharges from the body they will be rendered innocuous as regards the spread of disease, is worthy of consideration. Dr. Lionel Beale had found a weak solution of carbolic acid very serviceable in preserving plants from fungoid disease, especially those in Wardian cases.

Dr. Buchanan recommended crude perchloride of iron as very effective upon masses of excrement, though perhaps undesirable for general use in sewers, on account of its action upon the cement.

A communication was read from the Ladies' Sanitary Association, on the prevention of the spread of measles in schools. At a Conference of Elementary School Mistresses at Bradford, the subject was discussed, and no definite result had been arrived at. The ladies desire to have the opinion of the Society as to the period of incubation of measles and the length of quarantine needful after convalescence is established.

Dr. Bristowe, who has had considerable experience in this somewhat intricate question as medical officer to a public school, said that it would be difficult to give definite information, because measles is infectious in the early catarrhal stage, when it is impossible to distinguish it from an ordinary nasal catarrh. He had found measles to be infectious

at least three days before the appearance of the eruption. It was therefore practically impossible to effectually isolate infected cases. At St. Thomas's Hospital the disease often breaks out in the children's ward, and then disinfecting measures are adopted, and all the children cleared out. He was in favour of letting the disease run its course, as the children would probably have the disease anyhow, and, being distributed, would communicate it to others.

Mr. Ellison, of Ipswich, commented upon an outbreak of German measles in his district, and detailed the symptoms, showing that it presented some of the characteristics of scarlet fever as well as measles.

The inquiry of the Ladies' Sanitary Association was referred to the Council for consideration and report.

Dr. Tidy desired to know what, if any, decision had been arrived at as the result of the proposal to analyse milk at the request of the Aylesbury Dairy Company.

Dr. Stevenson replied that the samples were never submitted to him, and so the proposal "fell to the ground."

Dr. Dudfield made some remarks on a recent epidemic of enteric fever in Kensington, supposed to be related to milk—relation apparently disproved. Typhoid fever, he said, had not prevailed in Kensington as an epidemic until lately, when his attention was directed to 30 cases having apparently a community of origin. Sixteen of these cases occurred between November 18 and December 16; 14 from that date to February 16, one or two were doubtful, and one or two had been imported into the district. Of the first 16 cases 3 were secondary, *i.e.*, in families where the disease already existed; 13 other cases occurred in thirteen houses and nine streets. Two were adult men, 8 females, and 6 children. The thirteen houses contained 161 adults. Out of the 16 attacked no fewer than 8 died—2 children and 6 adults. All had their milk from one dairy, which was the most extensive in the parish, and no sanitary defects were traceable in it. There was no illness in the houses of the *employés*, specific or otherwise. The epidemic extended from Addison-road to beyond the Boltons—*i.e.*, about a mile and a half. Six persons were employed to take out the milk to 116 customers in nine streets. All the water to the customers was supplied by the West Middlesex Company. Part of the supply was brought from Wantage and Farringdon, in Berkshire. Inquiries were made in both these districts, and reports furnished by the medical officers of health upon the sanitary condition of the farms and labourers' dwellings, but there was nothing to suggest the possibility of infection being conveyed in the country milk. Dr. Dudfield next compared the results of this investigation with those reported by Dr. Ballard upon the Islington epidemic, and by Mr. Netten Radcliffe and others upon the Marylebone epidemic. The chief difference in the Kensington epidemic consisted in the fact that the cases were much more scattered. In Islington, out of 175 cases only twenty-two were solitary, and the grouping averaged three in a family; whereas in Kensington ten of the sixteen cases were solitary, only three groups of two cases in each family, and the second cases occurred after an interval of many days. In one house containing twenty-eight persons, of whom twenty were children, and where sixteen pints of milk were consumed daily, there was but one case. The Kensington cases occurred when the disease was known to be more than usually prevalent, whereas in the Islington and Marylebone epidemics the fever was comparatively in abeyance prior to the outbreak. Milk-typhoid is usually a mild form of this disease with a low mortality—*e.g.*, in Marylebone the percentage of deaths was 10·6, whereas in Kensington it was 50 per cent. of those who had taken milk from the suspected dairies, but 33·3 per cent. of the thirty known cases. Such an unusual fatality testifies to the virulence of the infective agency. It also suggests the inquiry, "How was it that with a poison of such intensity distributed among so many hundred persons—if milk was the vehicle of the contagium—so few persons suffered, and they so sorely?" And if milk was not in fault, "To what cause or causes are we to attribute the outbreak?" To the former question Dr. Dudfield gave no answer, but to the latter he replied, "Presumably to one or other of those causes of water or air pollution to which the occurrence of ordinary cases of typhoid fever is usually traceable"—viz., to defective sewerage or drainage, to the breathing of polluted air, or the drinking of polluted water, leaving out of the question whether specific pollution of air or water is essential to the causation of typhoid. The possibility of such an origin had not been overlooked from the first, though the inquiry was primarily directed to the discovery of the source of the suspected milk infection. Inspection of the houses where the disease had appeared did reveal in nearly all of them such sanitary defects as would in almost any of the sixteen cases, occurring singly, have been deemed adequate to account for the illness, the difficulty of admitting this explanation being increased by the coincidence of a common source of milk-supply. All but two of the eighteen streets in Kensington in which the disease appeared belong to the same system of drainage. The sewers are affluents of an underground river, known as the Counters Creek sewer, which traverses the parish near its western boundary, from north to south, terminating at the Grosvenor-bridge Pumping-station. Much infected excrementitious matter must have passed into the main sewer between November 18 and December 16 (and cases had certainly occurred in the course of it not long before). It is not difficult to conceive, therefore, that the air circulating in it and through its affluents had become specifically poisoned, and that the gases escaping into houses where sanitary defects existed, or becoming in some cases absorbed by the water in cisterns, may have caused the mischief. Dr. Dudfield thought that the infective agency operating in the first cases was contained in, and conveyed through, the sewers and house drains, and that the illness in the second cases in the same houses, and in second cases in the same streets, may have been due to the infected condition of the sewers, though, as before remarked, second cases in the same houses may have derived the infection directly from the first cases. In three of the streets, where eight cases occurred, the sewers have blind or dead ends, which always involve the risk of a heavy pressure of sewer-gas on the drain inlets of the adjoining houses. A case occurred in a family of seven persons living in the Abingdon-road, the milk being supplied from the suspected dairy, and within the period to which the other cases belong; the sick person, however, was the only member of the family who never took milk. Dr. Frankland in his monthly report for November stated that the Thames waters were efficiently filtered, and of medium quality as regards organic impurity; but in December, though efficiently filtered, the water was "much polluted by organic matter, some of which was of most objectionable origin . . . . and quite unfit for dietetic purposes." Only four out of the thirteen affected families forsook the suspected dairy. All these were arguments against the milk theory of propagation.

In the debate which followed the reading of the paper, Dr. Stevenson commented upon the painstaking inquiry instituted by Dr. Dudfield, and the unbiassed judgment as shown by the final decision being in a direction contrary to that which was at first suspected as the cause of the epidemic—viz., the milk-supply.

Dr. Hardwicke spoke in somewhat disparaging terms of the investigation which was made at Islington. He thought a different result would have been arrived at if the same care in scrutinising every possible source of fallacy had been resorted to. He found a decidedly insanitary condition of many of the houses which were supplied by the condemned milk. Alluding to the epidemic in Harley-street, he said it was well known that many of the houses were constructed over hidden cesspools. In one case the cook had drawn off a piece of the *Times* newspaper through the scullery tap, which had found its way back into the cistern through the overflow-pipe in consequence of the soil-pipe being blocked.

Dr. Buchanan was puzzled at the large mortality in the Kensington epidemic. Was it that all the deaths were reckoned, and only a small percentage of recoveries reported upon?

Dr. Bristowe made a similar observation.

Dr. Dudfield replied that he had written to over one hundred of the leading practitioners in Kensington, and had received replies from about half. Several cases registered as typhus fever are clearly enteric. Although his observations pointed to defective drainage as the *fons et origo mali*, he could not entirely free himself from suspicion in the direction of the milk-supply. Of the 500 or more customers of this milkman, not a single case of typhoid fever has been reported since the middle of February.

Dr. Vinen followed with a paper giving some particulars of a limited outbreak of typhus fever in Bermondsey. Six or eight persons in all were attacked, and four died. The

origin of the epidemic was distinctly traceable to an infected bundle of linen brought by a woman who had been in the habit of paying domiciliary visits at different houses in Bermondsey for the purpose of washing the clothes at some of the sick-houses. Endeavouring to find out the period of incubation of the disease, Dr. Vinen ascertained that a child was taken ill four days after the clothes were brought to the house, and a young woman supposed to have taken the disease from the child was not taken ill for a fortnight after.

Dr. BRISTOWE gave some interesting particulars of an epidemic of typhus fever in Camberwell among the Irish working in the neighbourhood of Rotherhithe. The disease spread rapidly. In many cases the medical attendant declined to certify to the disease being typhus, and without such certificate he would not remove the case. A young girl was certified to have died of scarlet fever. Shortly afterwards the inspector found several dying of typhus fever. Friends visiting at the girl's home took the disease, and conveyed it to others. The epidemic is now abating.

Dr. DUDFIELD reminded Dr. Bristowe of the power possessed by the local authority of removing to hospital all cases of fever not having "proper lodging or accommodation."

Dr. BRISTOWE replied that he thought it very undesirable for the medical officer of health to act independently of the district medical officer, or to remove cases without his sanction. In some cases he had obtained from the magistrate compulsory orders for removal, with the approval of the medical officer in attendance.

OBITUARY.

WALTER BARTON STOTT, M.R.C.S.

THE death of Mr. W. B. Stott took place at Disley, Cheshire, on the 8th ult. He was one of the oldest, if not *the* oldest, surgeons of Manchester, his name having been intimately associated with those of Turner, Jordan, and other well-known old Manchester surgeons. He was born in Deansgate, in December, 1799, and educated at Bradford, Yorkshire. He commenced his medical studies under Mr. Jordan, who was then giving lectures and demonstrations in anatomy at his house in Bridge-street, and who afterwards removed to Mount-street, where a sort of college was established, his certificates being then accepted by the College of Surgeons and other licensing bodies. Mr. Stott became L.S.A. in 1826, and M.R.C.S. in 1827, and continued in practice till his retirement into private life, in 1862. He soon became Demonstrator of Anatomy at Mount-street with Mr. Jordan, and served in that capacity when it became the Old Pine-street School of Medicine. He was for many years Surgeon to the New Bailey Prison, and also held an appointment under the Poor-law. His memory will be chiefly esteemed and interesting to the inhabitants of Manchester from the fact that he was one of the founders of the Children's Hospital. A cottage was taken in Back King-street, opposite St. James's-square, about the year 1831, but want of accommodation soon rendered it necessary to remove to Cross-street, and afterwards to St. Mary's-parade. There, in consequence of a dispute with the medical officer, his connexion with the Hospital ceased, and, after sending in his resignation he was made Consulting Surgeon.

JOHN JOB, M.R.C.S. ENG., L.R.C.P. LOND.

THE subject of this notice was born at Redruth, in Cornwall. He received his professional education at the London Hospital, the medical school of which he entered in October, 1871. In 1874 he became a Member of the Royal College of Surgeons, and in 1877 a Licentiate of the Royal College of Physicians of London. After becoming qualified, he for some months assisted Mr. Emson, of Dorchester, in his practice. In April, 1875, he was appointed House-Surgeon to the London Hospital, the duties of which office he discharged so well, that when the term for which he was appointed had expired, an additional period was granted to him. He then became Senior Assistant-Surgeon to the Dowlais Ironworks Company, Glamorganshire, and here he remained till cut off by death.

He was a diligent student, and one most conscientious in the discharge of his duty: and he was therefore an able and a careful surgeon. His integrity of character, his unselfishness, and his modesty, gained him, wherever he went, the warm regard of those who knew him, and the respect of all. At Dowlais he was a great favourite with all classes, for he was courteous to everyone, kind and attentive to his patients, and, as a resident writes, "most fair and honourable in all his dealings." He died the noblest death that can happen to man, for he fell in the discharge of his duty, sacrificing his own life in caring for that of others. While in attendance upon a bad case of typhus fever he himself caught the disease, which ended fatally on the eleventh day. He died on March 28, 1878, aged twenty-seven years and six months. He was buried at Redruth on April 1. Out of respect to his memory nearly all the shops in the town were closed, and all classes were represented at the funeral.

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 2nd inst., and when eligible will be admitted to the pass examination:—

Billiald, Richard A., student of King's College Hospital.
Cooper, Richard G., of St. Bartholomew's Hospital.
Evans, Henry R., of St. Thomas's Hospital.
Hallowes, Herbert C., of St. George's Hospital.
Lawrence, Joseph H. H., of the Middlesex Hospital.
Pearce, Walter, of St. Mary's Hospital.
Pritchard, Owen, of St. Bartholomew's Hospital.
Rolston, John R., of Guy's Hospital.
Tyrrell, Charles R., of the Middlesex Hospital.
Whitcombe, Charles H., of King's College Hospital.

Fourteen candidates were rejected. The following gentlemen passed on the 3rd inst., viz.:—

Carpenter, Arthur B., student of St. Thomas's Hospital.
Charnley, Wm., M.D. Cantab., of University College Hospital.
Cuffe, Robert E. G., of St. Mary's Hospital.
Daly, Edward, of St. George's Hospital.
Gaylor, N. E. Johnson, of Guy's Hospital.
Holberton, Henry N., of St. Thomas's Hospital.
Johnson, Walter, of King's College Hospital.
Male, Herbert C., of the Edinburgh School.
Mead, Robert W., of the Edinburgh School.
Noding, Thomas E., of St. Mary's Hospital.
Oakley, John L. B., of St. Bartholomew's Hospital.
Stokes, Arthur S., of Guy's Hospital.
Taylor, Henry H., of St. George's Hospital.
Wainewright, Benjamin, of the Edinburgh School.
Willoughby, James F. D., of St. George's Hospital.

Ten candidates were rejected, making a total of 75 out of the 168 examined.

Arts Examinations.—The following gentlemen have passed the preliminary examination for the diplomas of Fellow and Member of the Royal College of Surgeons, when 338 candidates presented themselves—viz., for the first-named distinction 96, and for the Membership 242. For the Fellowship:—

G. B. Batten, C. W. Bell, F. J. Bennett, C. P. Blake, Robert Bruce, J. A. Caldwell, H. J. Capoo, H. A. Clowes, W. T. Clegg, F. W. Cock, W. S. Cunliffe, J. W. Davis, H. V. Drew, C. R. Edwards, F. W. Farr, W. H. Francis, S. J. Gabriel, H. F. Iliewicz, John Johnson, H. W. M. Kendall, William Lang, J. W. McVitie, W. L. W. Marshall, W. A. Martin, B. S. Mends, A. H. Norman, R. H. Perks, J. J. Pitcairn, J. D. Priest, A. H. Robinson, A. W. M. Robson, R. E. Rouse, J. W. Sanders, J. J. Short, John Sinclair, H. B. L. Smith, W. H. Smith, W. H. Square, C. E. Stickland, F. A. Stokes, F. W. Strogoell, Frank Taylor, Alfred Thomas, J. R. W. Webb, G. L. Webster, D. L. Williams, A. H. Willoughby, J. D. Woodman, W. E. Woodman, H. H. Wright, G. J. Lloyd, and G. L. Pardington.

Of the ninety-six candidates, fifty-two were successful, twenty-two failed to reach the required standard for the Fellowship but passed for Membership, fourteen had not completed all the required subjects, and eight were rejected. The following gentlemen presented themselves for the Membership:—

J. U. Bolton, H. U. Bromley, N. T. Cafferata, J. S. Claytoo, Graham Cox, A. D. Edginton, H. W. Hart, A. W. Hogg, F. H. M. Jowers, A. L. Oakes, J. E. Penn, G. R. Pigg, B. G. Pullin, W. F. C. Rogers, Frank Rothera, W. W. M. Sharman, E. W. Skinner, W. A. Summers, G. J. E. Trotter, P. H. Wells, T. H. White, W. M. Woodhouse, H. W. N. Abbott, J. A. Albrecht, L. S. Archer, T. L. Archer, R. A. Baillie, A. B. Bake, J. B. Ball, W. W. Banham, C. H. Barkley, A. J. Barnard, T. S. Barnett, H. R. Beckett, E. H. L. Bell, E. H. Biddlecombe, E. F. Bindloss, Henry Bradley, C. D. H. Braine, C. G. Brodie, R. D. Broome, H. P. Butcher, Alfred Buxton, C. W. M. Castle, W. C. Christopher, H. L. Coote, F. J. E. Culhane, T. F. Cullen, A. J. Dalton, V. E. Deacon, D. D. Dryden, E. D. Duffett, S. R. Dyer, G. Y. Eales, S. B. A. Edsall, A. H. Ellis, A. C. Evered, John Eyre, J. J. W. Farr, H. R. Fowler, H. A. Francis, George Frost, J. F. Gibbons, M. R. Gooding, E. E. Gould, V. H. Harcourt, Alexander Harper, J. H. Harris, A. H. Hart, E. S. Hart, Hugh Heald, A. W. Herbert, G. L. W. Hormazdji, F. C. W. Hounsell, J. D. Howe, Morgan Hughes, G. J. Hugo, A. G. James, R. W. Jephcott, David John, Hugh John,

Matthew Johnston, C. E. Kempe, George Kendall, Alexander Kirby, C. G. Lermitte, J. W. Lichfield, W. W. Liuney, H. H. Lloyd, George Locke, Harry Lockwood, T. E. Lovegrove, C. J. Maddison, Alfred McKinnell, A. T. Masters, Arthur Matthey, S. H. Mangin, T. H. Miller, A. W. Mitchell, H. R. Neblett, R. H. Nicholson, W. A. Norry, J. A. Odlum, F. H. Oliver, J. F. H. Owen, W. G. Padwick, W. T. Patterson, F. L. Phillips, G. F. Phillpot, S. C. Philson, J. R. Polson, A. N. Potter, W. E. Pounds, H. E. Powell, N. G. Powne, S. T. Pruen, S. W. Quartley, F. H. S. Raven, H. E. Rawlings, A. E. Read, W. L. Rhys, A. H. Roberts, G. A. E. Roberts, R. G. Roberts, Henry Roberts, John Rodley, L. E. A. Salmon, G. H. Salter, A. de C. Scanlan, A. L. Scott, George Seymour, E. C. Sharpin, Edward Skipper, A. E. M. Smith, F. A. Spreat, S. H. Stephenson, J. B. Sutton, H. M. Sutton, T. G. G. Symons, C. J. W. Tatham, J. H. Taylor, F. J. Thompson, D. L. Thomson, H. J. Thornton, E. B. Townsend, H. W. S. Verity, W. J. Waddington, H. V. Walker, F. F. Walton, A. W. Wheatly, C. E. Whitby, T. E. White, J. H. Williams, J. O. Wilson, A. A. Woodson, A. P. Du Heaume, A. D. Owen, L. M. Gabriel, and W. M. Gabriel.

Of the 242 candidates for the membership, 137 were approved and 105 rejected. These gentlemen can at once commence their professional studies if desirous.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At the examination held on April 24 and following days, the undernamed gentlemen having passed the several examinations for the letters testimonial, and having made and subscribed the declaration, were admitted Licentiates of the College, viz.:

Banks, Henry.
Bennett, Edward.
Brennan, Henry Arthur.
Carson, Walter P.
Denning, Francis A.
Drury, Maurice O'C.
Fitzmaurice, Joseph.
Garland, James.
Gibbons, James B. F.
Gordon, Robert.
Hawkins, John S.
Hughes, Richard L.
Mackie, William J.
MacMunn, John R.
Mullen, Vincent F.
Nicolls, Archibald J.
O'Donnell, Thomas J.
Oldham, George St. John.
O'Shaughnessy, Patrick J. B.
Poole, Walter C. T.
Philip, Alexander.
Powell, Blacker C.
Rundle, Edmund.
Smartt, Thomas W.
Walley, Thomas B.
Warnock, Robert.
Westropp, Cecil G.

The Council held a meeting on Tuesday, the 7th inst., pursuant to the provisions of the Supplemental Charter, to elect Examiners for the ensuing year, when the undernamed gentlemen were elected, viz.:—Examiners to examine candidates for the Letters Testimonial and Fellowship:—Drs. B. Wills Richardson, Edward A. Stoker, John Barker, Edward O'Grady, William O'Leary, William Thomson, Robert L. Swan, and William Ireland Wheeler. Examiners to examine candidates for the Diploma in Midwifery:—Drs. Henry Croly, John R. Kirkpatrick, and William J. Smyly. Examiners to examine students as to their proficiency in general education:—Drs. Frank J. Davys, Michael J. Malone, and Robert Morton.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 2:—

Pope, Herbert Francis Montagu, West Malling, Kent.
Lucas, Charles, Bunwell, Cambridgeshire.
Williams, Hugh Harries, Haverfordwest.

BIRTHS.

CANTON.—On May 4, the wife of Frederic Canton, M.R.C.S., L.R.C.P. Lond., of Great Marlborough-street, W., of a daughter.

CARMICHAEL.—On April 30, at Wyrley Grove, Staffordshire, the wife of William Carmichael, M.D., of a daughter.

CHURCHILL.—On May 5, at Sumner-place, South Kensington, the wife of Frederick Churchill, M.D., of a son.

NICHOLSON.—On April 30, at Hanover, the wife of Gilbert de P. Nicholson, M.D., of a son.

PIGOTT.—On May 2, at Hartley Court, near Reading, the wife of Royston Pigott, M.D., F.R.S., of a daughter.

MARRIAGES.

BOVILL—SHERER.—On March 26, at Tezpore, Assam, Edward Bovill, M.D., F.R.C.S., Surgeon H.M.'s Indian Medical Department, to Ada Helen Isabel, second daughter of Lieut.-Colonel Sherer, Bengal Staff Corps, at Tezpore.

CAREY—STOCKER.—On April 25, at Stratford, Essex, Richard John Carey, M.A. Camb., M.R.C.S., of St. John's House, Barking-road, to Lavina Frances, daughter of James Stocker, Esq., of Globe House, Stratford.

FEARNLEY—BRUCE.—On May 1, at Kilburn, William Fearnley, L.R.C.S. Edin., to Thomas Anne Cole, sixth daughter of the late William Bruce, of Symbister, Shetland.

GAUNT—ROGERS.—On April 15, at St. Leonard's, Bromley-by-Bow, John Penn Gaunt, M.R.C.S., of Alvechurch, Worcestershire, to Eleanor Annie, second daughter of Josiah Thomas Rogers, of Bow.

LIDDELL—CAANE.—On April 30, at Falmouth, Henry John Shepheard Liddell, M.R.C.S., only son of Henry Liddell, Esq., R.N., Deputy-Inspector of Hospitals and Fleets, to Jessie, elder daughter of Edward Clifton Carne, of Gillanvaze, Falmouth.

McEWEN—FORDE.—On April 27, at St. Peter's, Hammersmith, Allan Calveley, L.R.C.P. Edin., of Burton-on-Trent, eldest son of William McEwen, M.D., of Chester, to Beatrice, youngest daughter of Anne and Frederick Forde, M.A., Chaplain of St. John's Hospital, Chester.

O'BRIEN—TAYLOR.—On April 2, at Bombay, Surgeon-Major T. M. O'Brien, L.R.C.S.I., to Olivia Caroline, second daughter of George Taylor, barrister-at-law, of the Inner Temple.

STRANGE—WILLIAMS.—On April 30, at St. Chad's, Shrewsbury, Arthur Strange, M.D., of Bicton, near Shrewsbury, to Emma Elizabeth, second surviving daughter of the late Edward Williams, of Lloran House, Oswestry.

STUATON—STURTON.—On April 18, at Neuchâtel, Switzerland, Herbert W. S. Sturton, M.R.C.S., of Greenwich, to Esther, daughter of John Sturton, Esq., of Dogsthorpe, Peterborough.

TOMKINS—BRADSHAW.—On April 11, at Aston, near Birmingham, Herbert William, third son of Charles Joseph Tomkins, M.R.C.S.E., of Upper Teddington, to Alicia, eldest daughter of the Rev. George Bradshaw, D.D., LL.D., D.C.L., late of Southampton.

DEATHS.

FURNIVALL, JOHN JAMES, M.D., M.R.C.P., at Boulogne-sur-Mer, on April 29, aged 85.

NICHOLSON, ROBERT, M.D., Surgeon-Major Bombay Army, on April 28, at Ryder-street, St. James's, London.

WHITE, WILLIAM, M.D., at Kelvin, Southport, on May 2, aged 72.

WILMOT, JOHN BRAINSTON, M.D., F.R.C.P., at Tunbridge Wells, on April 30, aged 72.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

BRISTOL ROYAL INFIRMARY.—House-Surgeon: Candidates must be Fellows or Members of the Royal College of Surgeons of London, Edinburgh, or Dublin, or Masters in Surgery of one of the universities of the United Kingdom, and also possess a registered medical qualification. Applications, with testimonials, to the Secretary, on or before May 11.

EVELINA HOSPITAL FOR SICK CHILDREN, SOUTHWARK-BRIDGE-ROAD, S.E.—Registrar and Chloroformist. Candidates must be duly qualified. Applications to the Secretary at the Hospital.

KENT AND CANTERBURY HOSPITAL.—Physician. Candidates must have been practising as physicians for the space of two years previous to election, and be registered as regular graduates in medicine of some University of Great Britain or Ireland, or Fellows or Members of the Royal College of Physicians of London. Qualifications and testimonials to be sent to the Board of Management on or before June 28.

MANCHESTER ROYAL INFIRMARY.—General Superintendent and Secretary. Candidates must be not less than thirty years of age. Applications, with testimonials, to the Chairman of the Board, on or before May 18.

METROPOLITAN FREE HOSPITAL.—Two House-Surgeons. Candidates must be Members of the Royal College of Surgeons. Further particulars may be obtained of the Secretary, George Croxton, 81, Commercial-street, Spitalfields, E.

ROYAL HANTS COUNTY HOSPITAL, WINCHESTER.—House-Surgeon and Secretary. Candidates must possess the diploma of the Royal College of Surgeons of England, or surgical diploma of a Royal College or University in Scotland or Ireland; also a licence from the Royal College of Physicians of London, or from the Apothecaries' Society. Applications, with testimonials as to moral character, to the Committee, under cover to the Secretary, before May 27.

ROYAL HOSPITAL AT BETHLEHEM.—Resident Physician and Medical Superintendent. Candidates for the above appointment must be Doctors of Medicine of an University in the United Kingdom, and Fellows or Members of the College of Physicians in London, Edinburgh, or Dublin, qualified to practise as physicians. Applications and testimonials must be accompanied by answers to a printed form, which, with a copy of the duties of the office, may be obtained from A. M. Jeaffreson, Clerk, etc., Bridewell Hospital, Bridge-street, Blackfriars. Applications must be forwarded to the same on or before May 16.

WILTS COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Candidates must be duly qualified and registered medical practitioners. Applications, state age, with not more than six recent testimonials, to "The Clerk to the Committee of Visitors, Wilts County Lunatic Asylum," Devizes, on or before May 15.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population in computed according to the census of 1871.

RESIGNATIONS.

Birmingham Parish.—Mr. J. H. Kenny has resigned the Third District; salary £175 per annum.

Hailsham Union.—The First District is vacant; area 10,468; population 8040; salary £58 per annum.

APPOINTMENTS.

Chorlton Union.—James S. Orchard, M.D. and C.M. Aber., M.R.C.S. Eng. as Resident Medical Officer at the Workhouse.

Oakham Union.—Ebenezer Snell, M.R.C.S. Eng., L.S.A., to the Empingham District.

Uppinghham Union.—Edward Greaves, L.R.C.P. Edin., M.R.C.S. Eng., to the Great Easton District.

THE Merchant Taylors' Company have made a fourth grant of thirty guineas in aid of the funds of the National Hospital for Consumption and Diseases of the Chest, situate at Ventnor.

THE managers of the Royal Institution have granted the use of the lecture-theatre to the Sanitary Institute of Great Britain for their anniversary meeting on July 3, at three o'clock, when an address will be given by Mr. Frank Buckland, M.A., on "The Pollution of Rivers, and its Effects upon the Fisheries and the Supply of Water to Towns and Villages."

HOSPITAL SATURDAY, which was established in Sheffield last year, has not been so great a success upon the present anniversary, owing to the many recent calls on public benevolence, and the great depression of trade existing in the district. Up to last Saturday evening the amount received was close on £850, which is nearly £400 short of the sum obtained up to a similar time last year.

PROF. PASTEUR ON THE THEORY OF GERMS.—The *Bulletin de l'Académie de Médecine de Paris* for April 30 contains a long communication from M. Pasteur, in which he seeks to show that by the proper "culture" of germs we may at will produce in the animal economy purulent infection, putrefactive infection, or *charboneuse* infection, or any combination of these we desire.

PROF. T. SPENCER WELLS will commence his course of six lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours, in the theatre of the Royal College of Surgeons, on Monday, the 10th prox.; and on the 24th prox. Mr. B. T. Lowne will commence his course of lectures on the Physiology of Nerve-Stimulation; and with his lectures the annual courses of lectures at the College will terminate.

HEAVY INFANTS.—Dr. White, of Sandy Hook, adduces some cases of heavy infants, of the reality of which there can be no doubt, as he weighed the children himself. Mrs. B., about twenty-three, a very muscular, large-boned woman, was delivered of a child by the forceps, August, 1874, which weighed before dressing 15 lbs. 2 oz. Another child of hers, born in May, 1876, weighed 15 lbs. Both these were girls, and in May, 1877, she was delivered of a boy weighing 14 lbs. 14 oz. He has met with two other cases—one in which the child weighed 15 lbs.; and another, on whom craniotomy had been performed, which weighed 20 lbs. without its brain. —*New York Med. Record*, March 23.

MUSTARD HOT BATH IN PNEUMONIA OF CHILDREN. —In a paper read at the New York Medical Association, Dr. Mann stated that since 1869 he had employed with the most beneficial results mustard hot baths in the pneumonia and capillary bronchitis of infants from four to six months of age, the symptoms being extremely urgent. Half a pound or a pound of mustard is added to a "baby-tub" of water, ranging in temperature from 100° to 105°. The surface of the body is thoroughly rubbed until the skin begins to look red, which it usually does in from seven to ten minutes. The child is then wiped dry and put into a bed previously warmed. The bath might be repeated every three hours. No harm results from leaving the genitals unprotected.—*New York Med. Record*, March 9.

MEATH HOSPITAL AND COUNTY DUBLIN INFIRMARY.— The distribution of prizes and certificates at the close of the winter session of 1877-78 took place on Thursday, May 2, Dr. A. W. Foot, Senior Physician, gave away the medical prizes, and Mr. G. H. Porter, Senior Surgeon, presented the surgical prizes, which were awarded as follows:—First medical prize, Mr. Thomas Lecky; second medical prize. Mr. Armitage Forbes; first senior surgical prize, Mr. Thomas R. Lingard; second senior surgical prize, Mr. Lucas Middleton; junior surgical prize, Mr. William Watson Pike and Mr. Charles Adams (equal). Certificates were also presented to the outgoing surgical resident pupils, Messrs. Blacker Powell and Robert Gordon; and to the outgoing clinical clerks, Messrs. Armitage Forbes and Robert Gordon.

CANTHARIDISED COLLODION.—Prof. Gubler observed, at the Therapeutical Society, that cantharidised collodion forms the most practically useful of vesicants, all that is necessary being to paint with a brush within the exact limits to which blistering is required to be confined. The collodion dries, and the blister is formed. So complete is the adhesion, that when applied to an indocile child he is unable to remove the collodion before the vesicating action occurs. We are also always certain that the blistering will invariably take place at the spot desired. This is not at all times the case with the ordinary blister, which readily undergoes displacement. No dressing is reqnired, as after the liquid has been discharged by a needle, the collodion collapses, and all is done. This form of blistering may, however, be inconvenient when it causes cystitis, as the deposited layer cannot be removed until its action has ceased. Prof. Gubler, therefore, never employs it to large surfaces, or when albumen has been observed in the patient's urine.—*Gaz. Hebd.*, May 5.

THE PARIS NIGHT MEDICAL SERVICE.—This, which was instituted a year or two ago, is said to be working very well, there being no dearth of practitioners who inscribe their names as willing to obey the call of the police, by whom their fee of 10 fr. is paid. During the first two months of this year there were 901 calls, averaging 12 per night: 31 per cent. of the visits were paid to men, 50 per cent. to women, and 19 per cent. to children. Of the 901 calls, 53 are set down to cases of apoplexy, 86 for angina, 41 for croup, 160 for affections of the chest, 10 for hernia, 11 for retention of urine, 39 for metro-peritonitis, 28 for uterine hæmorrhage, 86 for miscarriages and accouchements, 61 for convulsions, 48 for hæmorrhages, 41 for neuroses, 17 for "eruptive affections," 52 for wounds and fractures.—*Gaz. des Hop.*, April 30.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

L.R.C.P. Edin.—In the registration section of the Duke of Richmond's Bill it is especially provided by Clause 3 "that nothing in this section shall extend to a person who at the commencement of this Act is registered or entitled to be registered in the Medical Register."

Hygiene.—Many definitions have been suggested of "health." It has been defined as "the greatest energy of each part compatible with the energy of the whole." A simpler definition, given in a short sanitary catechism for primary schools, is "being able to do a good day's work easily."

A Tutor, G. M., and others.—Notwithstanding the great length of the list you will find it published in another column; but we cannot undertake to publish the names of the educational establishments. In the case of "F. M. H.," pupilage before passing the Arts examination will not be recognised. No ladies presented themselves for the ordeal, as at Apothecaries' Hall.

Amateur.—Mr. Archibald Maclaren, a high authority on the subject, remarks—"The part of the body which receives the smallest share of the exercise in rowing is the chest—it has little or no employment in the muscular effort required for the propulsion of the boat; and this is impressively evident in the results. Not only does it make no advance in development in this exercise, but, if it be exclusively practised, an absolutely depressing effect is experienced." He holds it to be foreign from the purpose of training, suddenly or greatly to change a man's habits in anything, and especially in such as notably affect the nervous system.

Coroners' Juries and Prison Inspection.—In answer to a complaint from Manchester, a letter from the Home Office says that the governor of the prison has been instructed by the Prison Commissioners that coroners' juries are to be permitted to see any part of the prison when the coroner may deem an inspection necessary, and that every courtesy is to be shown them.

A Guardian, Hants.—The report of the Medical Officer of Health for Christchurch and district showed that in the year ending December, 1877, the total number of deaths from all causes was 165, and the death-rate 15 per 1000 living.

Practical Instruction for Aiding the Wounded.—The recently formed St. John's Ambulance Association is rapidly enlarging its usefulness. Branches have been successfully established in many provincial towns, and the Committee of the Association are in daily receipt of applications for the formation of further classes in country districts. Moreover, an effort is now also being made to extend the influence of the classes to our great railway centres, and a branch for instruction of railway *employés* was inaugurated at Paddington Station last week, and was attended by a large number of men. Sir Richard Wallace, Bart., M.P., has subscribed £500 to the guarantee fund of the Association.

Can it be True?—The *Staffordshire Times* recently reported that at a meeting of the Stoke Board of Guardians an inmate of the local workhouse made a revelation of a somewhat surprising character. A pauper of ten years' residence observed to these officials that "for the whole time he had been in the house he had never known the beds to be separately occupied, and that at the present time the rule was *two* or *three* in a bed." It moreover appeared that there are forty-eight beds in which to place ninety-three paupers.

Cuisine.—The shop for the sale of horse, donkey, and mule flesh as food was opened in Castle-street, Leicester-square, on Saturday last. Sides of horse, donkey, and mule, certified by a veterinary surgeon's certificate to be those of healthy animals, were hung round the shop, beside sausages and sausage-meat. The price of the joints ranged from 2d. to 6d. per lb.

COMMUNICATIONS have been received from—

Mr. F. W. Lowndes, Liverpool; Mr. B. R. Wheatley, London; Dr. J. M. Bauce, London; Mr. T. M. Stone, London; Mr. J. Chatto, London; Dr. F. E. Jencken, Kingstown, Irelsnd; Dr. James Ross, Manchester; Dr. J. C. Bucknill, London; Mr. C. J. Cullingworth, Manchester; Dr. R. J. Garden, Aberdeen; Mr. F. G. Heath, South Hackney; The Registrar-General of England; Dr. Grover, London; The Secretary of the Royal Institution, London; Dr. C. M. Tidy, London; The Hon. Secretaries of the Thialmeae Defence Association; The Hon. Secretary of the Harveian Society; The Hon. Secretary of the Association of Surgeons Practising Dental Surgery; The Registrar-General for Scotland; Dr. Carter, Liverpool; Mr. B. Squire, London; Dr. J. W. Moore, Dublin; Mr. M. Becher, London; The Chairman of the Council of the Hospital Saturday Fund, London; The Registrar of the University of London; The Registrar of Apothecaries' Hall, London.

BOOKS AND PAMPHLETS RECEIVED—

The Nature and Treatment of Rabies or Hydrophobia, being the Report of the *Medical Press and Circular* Special Commission—Ch. Ed. Schwartz, Recherches Anatomiques et Cliniques sur les Gaines Synoviales de la Face Palmaire de la Main—Dr. Paul Cuffer, Recherches Cliniques et Expérimentales sur les Altérations du Sang dans l'Urémie—George Granville Bantock, M.D., On the Use and Abuse of Pessaries—W. Douglas Hemming, M.R.C.S., Tinnitus Aurium, or Singing in the Ears—Transactions of the American Dermatological Association—Charles West, M.D., Medical Women: A Statement and an Argument—Edward John Tilt, M.D., A Handbook of Uterine Therapeutics and of Diseases of Women—Annual Report of the Poplar Hospital for Accidents, 1877—T. Henry Green, M.D., F.R.C.P., the Pathology of Pulmonary Consumption.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Western Review of Science and Industry—Transactions of the Odontological Society of Great Britain—London Figaro—Spiritualist—Gazeta Mediea da Bahia—Richmond and Louisville Medical Journal—Practitioner—Analyst—Journal of Anatomy and Physiology.

APPOINTMENTS FOR THE WEEK.

May 11. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Henry Morley, "On Richard Steele."

13. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Society of Arts, 8 p.m. Dr. B. W. Richardson, "Some Researches on Putrefactive Changes, and their Results in Relation to the Preservation of Animal Substances." (Cantor Lectures—IV.)

14. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Mr. W. T. Thiselton Dyer, "On some Points in Vegetable Morphology."

Royal Medical and Chirurgical Society, 8½ p.m. Mr. P. Kidd, "On the Pathology of Hæmophilia." Dr. Reg. Thompson, "On the Pathological Traces of Pulmonary Hæmorrhage." Dr. Gowers, "The Brain in Congenital Absence of One Hand." Dr. Topham, "Abscess within Thorax, accompanied by Pulsation."

15. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Association of Surgeons Practising Dental Surgery, 8½ p.m. Mr. Gaine, "On some Forms of Trismus arising from Dental Irritation."

16. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Harveian Society, 8½ p.m. Dr. Hughlings-Jackson, "On a Large Tumour of the Left Cerebral Hemisphere." Mr. Lister, "On the Effects of Position upon Local Circulation."

Royal Institution, 3 p.m. The Lord Rayleigh, "On Colour."

17. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal Institution (Weekly Meeting, 8 p.m.), 9 p.m. Mr. A. Graham Bell, "On Speech."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 4, 1878.

BIRTHS.

Births of Boys, 1365; Girls, 1337; Total, 2702.
Average of 10 corresponding years 1868-77, 2345·3.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	839	706	1545
Average of tha ten years 1868-77	726·1	683·3	1409·4
Average corrected to increased population ...	...	...	1508
Deaths of people aged 80 and upwards ...	...	...	43

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after rsising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	9	1	6	1	22	...	4	...	2
North ...	751729	38	7	6	2	18	1	3	...	8
Central ...	334369	...	2	3	...	8	...	...	...	...
East	639111	7	4	3	...	25	1	3	...	6
South	967692	6	15	9	7	44	3	9	5	7
Total	3254260	60	29	27	10	117	5	19	5	23

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·735 in.
Mean temperature	55·5°
Highest point of thermometer	70·1°
Lowest point of thermometer	39·6°
Mean dew-point temperature	48·4°
General direction of wind	S.W. & E.
Whole amount of rain in the week	0·66 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 4, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending May 4.	Deaths Registered during the week ending May 4.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2702	1545	70·1	39·6	55·5	13·06	0·66	1·68
Brighton	103923	44·1	63	37	65·3	40·0	53·2	11·78	0·34	0·86
Portsmouth ...	129461	28·9	87	54	...	...	...	...	...	...
Norwich	84620	11·3	78	38	72·2	37·5	54·3	12·39	0·09	0·23
Plymouth	73599	52·8	47	42	61·0	42·0	51·8	11·01	0·92	2·34
Bristol	206419	46·4	187	80	66·8	36·4	53·6	12·01	0·64	1·63
Wolverhampton ...	74240	21·9	68	32	67·5	37·0	52·0	11·11	0·71	1·80
Birmingham ...	383117	45·6	361	177	...	...	...	...	...	...
Leicester	121473	38·0	96	36	71·2	38·5	54·5	12·50	0·53	1·35
Nottingham ...	165267	16·6	144	66	73·7	32·1	53·9	12·17	0·33	0·84
Liverpool	532681	102·2	386	256	65·2	43·2	52·1	11·17	0·27	0·69
Manchester ...	360514	84·0	282	162	...	...	...	...	...	...
Salford	170251	32·9	147	88	68·2	35·8	51·1	10·62	0·66	1·68
Oldham	107366	23·0	115	48	...	...	...	...	...	...
Bradford	185088	25·6	146	68	64·0	38·2	50·1	10·06	0·11	0·28
Leeds	304948	14·1	229	127	68·0	38·0	51·1	10·62	0·18	0·46
Sheffield	289537	14·7	221	142	72·0	37·0	52·3	11·28	0·21	0·53
Hull	143139	39·4	110	51	69·0	35·0	49·8	9·89	0·19	0·48
Sunderland ...	112459	34·0	96	52	64·0	39·0	49·4	9·66	0·24	0·61
Newcastle-on-Tyne	144570	26·9	118	58	...	...	...	...	...	...
Edinburgh	222371	53·1	159	125	66·1	38·7	50·8	10·50	0·20	0·51
Glasgow	568940	94·0	457	300	64·0	39·5	51·7	10·95	0·07	0·18
Dublin	314666	31·3	184	194	66·6	37·2	54·1	12·28	1·26	3·20
Total of 23 Townsiu										
United Kingdom	8373953	87·9	6483	3776	73·7	32·1	52·3	11·28	0·42	1·07

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·74 in. The highest reading was 30·05 in. at the beginning of the week, and the lowest 29·44 in. on Wednesday afternoon.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

THE LUMLEIAN LECTURES
ON
INSANITY IN ITS LEGAL RELATIONS.

Delivered at the Royal College of Physicians, London.

By J. C. BUCKNILL, M.D., F.R.C.P., F.R.S.,
Late Lord Chancellor's Visitor in Lunacy, and Medical Superintendent of Devon County Asylum.

Lecture I.

Mr. President and Gentlemen,—Seeing that every medical man who practises his profession in this country is liable to be called upon, and sometimes compelled, to give evidence in courts of law, in his professional capacity, as to the mental state and condition of persons supposed or alleged to be insane, and that he cannot in any way exempt himself from this responsibility, it appears to me to be the unquestionable duty of every such medical man to make himself competent to form and to give on this question an opinion which may be just to society and creditable to himself. Any medical man may, I suppose, decline to attend a patient who is known to be a lunatic, but unless he were able to have all his patients not only certified that they were not insane, but also to provide that they should not become insane, the liability to be called into the witness-box can by no means be avoided. And it is to be remarked that in some respects this social duty lies closer at hand to the physician in general practice than to the expert, for it is the former who is intimate with the inner daily life of English homes, and who is therefore most brought into view of those stages of mental disease during which criminal offences are most likely to be committed. For it is not when a man has been recognised as insane, or even strongly suspected, so that the opinion of a mental physician has been procured, that he is most likely to be in the way of committing an offence, but during those earlier periods, when, if the insanity is not yet fully developed, it is at least imperfectly observed. It is then that provocations are felt, temptations experienced, and opportunities afforded, and that the medical man who is nearest, and not the one who has studied insanity most, is likely to see and hear things of which he is bound to give not only a full account in a court of justice, but a professional explanation and opinion. I think there is no subject so important to medical men generally, and one which is so little studied by them, as disease affecting the mind; but if there is any part of this subject of which it would seem to be most needful that they should have some knowledge, it is that part of it which accident may bring to them any day, namely, the relations of insanity with crime, and those of insanity with civil disability—the medico-legal relations of insanity, as they have been called, but which, inasmuch as insanity implies medical relations, I prefer to abbreviate into the title of my subject—Insanity in its Legal Relations. The relations of insanity with crime are so much more important and interesting than those of insanity with civil disability, that, in the short time at our disposal, I propose to confine myself to them.

It is a trite but most important observation, that in the question of what constitutes insanity the members of the two great and learned professions of law and medicine entertain essentially different and seemingly irreconcilable views; and that in the question of the irresponsibility of criminals who are supposed to be insane there is a still wider chasm of opinion between them. To a certain extent this is true, and perhaps inevitable; and the reason of it is not difficult to find, namely, that the two professions have to regard insanity and to deal with the insane with different aims and purposes. The physician has to prevent or cure it; and to him therefore the whole, and especially the early, history of the patient, embracing the causes and the development of the changes bodily and mental, and affording perhaps some insight into its pathology, are of preponderating importance. With him the main question is to prevent its interference with the enjoyment and duration of the life of the patient. To the lawyer it matters not how the seed of insanity was sown, nor the growth of the plant, except as confirmatory evidence that the plant is there. With him the sole question is its existence, its degree, and its influence on the conduct—not, therefore, a medical, but a moral one; and if the same mental states were capable of being produced by other conditions than disease, the same amount of irresponsibility would, I think, be recognised, as, indeed is the case in children under seven years old, in whom the law refuses to recognise the responsible knowledge of right and wrong.

But notwithstanding that there is this difference of standpoint, and therefore this divergence of view, from which the two professions generally regard insanity, it appears to me that the antagonism of opinion in individual cases and for specific purposes is unnecessary and dangerous. The physician ought to aid the judge, and the judge ought to accept the aid of the physician, to the utmost extent of his knowledge and ability and within his proper sphere: the judge being the authoritative exponent and administrator of the law; the physician, acting as a witness, being its important but casual instrument, he being simply called upon to recognise by his special knowledge that kind and degree of insanity to which immunity from punishment is attached, as he might be called upon to recognise by medical science that state of infancy to which also the same immunity is accorded.

If a law were to be enacted that a man suffering from typhoid fever, the result of bad local sanitation, should henceforth be exempted from local rates, there would no doubt be great discussion in medical circles as to the wisdom of the enactment, but in the administration of the law the duty of the medical witness would simply be the diagnosis of the particular form of continued fever and its origin; and a similar restriction of duty belongs to the medical witness in criminal trials where insanity is pleaded, namely, the diagnosis of that kind and degree of insanity which carries with it immunity from punishment. But the law of insanity has changed, is changing, and, it may safely be predicted, will continue to change in the slow progress of our knowledge of the subject. The law follows knowledge, and bears, or ought to bear, a definite relation to it, not to hypothesis and speculation, but to the garnered harvest of real information possessed by the community. The knowledge of insanity possessed by our predecessors was but a few years ago only of the gross and palpable forms, and a reference to our older medical authors will show that what appears to be a clumsy law was really moulded upon an extremely narrow basis of medical science. Our medical forefathers had a very distinct notion of what they meant by a madman, and the lawyers had no choice but to apply a coarse test to a rude material. As an example I may refer to that treatise on Mental Derangement, by Dr. Francis Willis, which was founded upon the Goulstonian Lectures delivered in this theatre in 1822, and in which this eminent physician divides the consideration of the nature and origin, the causes and the cure, of mental derangement into that of two conditions or varieties of insanity only—namely, into the High State and the Low State. Compare with this Spartan simplicity our modern systems of classification. Lord Shaftesbury, whose knowledge of insanity in all its relations gives him a grasp both of principle and detail which is astonishing even to the most experienced experts, has not overlooked this point. In his evidence before the Select Committee last year he mentioned a medical man, an excellent man whom he knew very well, and who went to him thinking he had influence in the appointment of Commissioners. "To show his extraordinary knowledge of the subject," said his Lordship, "he gave me a sheet of paper as big as that, with a list of the forms of insanity. I counted them up, and they were forty in number. 'My dear sir,' said I, 'this will never do; if you reduce your principles to practice you will shut up nine-tenths of the people of England.' And so they would! You may depend upon this: if we ever have special doctors, they will shut up people by the score."

Can we wonder, therefore, if this be the practical commonsense view of the Chairman of the Lunacy Commission on the unexciting subject of the certification of lunatics, if the judges of the land, in the discharge of their terribly practical and onerous duty of repressing crime, should oppose themselves to the recognition and acceptance of these nosological refinements, which would seem likely to make nine-tenths of the people of England irresponsible for their conduct? No doubt the extension of the meaning of insanity, as understood by medical men, has been due in great measure to more laborious and accurate methods of

observation, resulting in actual discovery and increase of knowledge, and also to a more enlightened estimate of the correlation of insanity with other nervous diseases, but also, as it seems to me, it has gained an impulse from the adoption of hypotheses which have no direct relation to the actual existence of mental disease, and which, however admissible and even useful in the theoretical conception and in the practical study of the causation of insanity, are completely out of place in the investigation of such questions as whether a criminal is, or is not, insane.

As a type of this kind of hypothesis, I may cite what is called the insane neurosis; being, if I understand it aright, the condition of a man who is more liable than other men to become insane, but who has hitherto shown no signs of the actual presence of the disease itself. No doubt there is such a condition, and there is also such a condition as a criminal neurosis. It is the Hegelian condition of *becoming*; and we are all becoming something which we are not. But the inquiries of criminal courts are restricted to actual events of the past; and if these forty-fold forms of insanity, this tendency to comprehend all nervous disease within the pale of insanity, these speculative views as to the inherited existence of insanity which shows no sign, are in any way reflected in the evidence of medical witnesses, no wonder if our legal fellow-labourers, in the interests of truth and justice and the welfare of society, should take a stand which may be nothing more than the conservatism of common sense.

But when medical witnesses not only extend the meaning of insanity far beyond the possibility of practical recognition —when they venture to instruct the courts in what the law regarding criminals ought to be, and the punishments to which they ought not to be subjected, then I think it is quite possible that the opposition of the administrators of the law may take a tinge of hostility towards men who seem so glaringly to transgress their proper province.

I remember a physician stating in a court of law that he never had given, and never would give, evidence which might tend to bring a man to the scaffold; and a recent writer on the subject says—"Abolish capital punishment, and the dispute between lawyers and doctors ceases to be of practical importance."

Now, a physician maintaining this position might be compelled, in the witness-box, to admit the following proposition:—If you intend to punish the prisoner, if found guilty, in a certain manner, it is my opinion that he is irresponsible; but if you intend to punish him in a certain other manner, then, in my opinion, he is responsible. In his evidence before the Capital Punishment Commission, Mr. Denman, then, I think, counsel to this College, and now a judge, said: "In cases of capital punishment it seems as if almost everybody was in a sort of conspiracy in favour of the prisoner. That applies very strongly to medical witnesses. You find that medical witnesses are induced to give opinions which are perfectly startling to judge and counsel, in cases where you can attribute it to nothing but the existence of capital punishment."—(A 793.)

It ought to be superfluous in this place to say that medical witnesses have nothing whatever to do with the consideration whether an accused person will or will not be punished, or how he will be punished, their duty being simply to aid the court in determining the state of a man's mind at a certain time. But at the present time we are not in the witness-box, and I think we may usefully consider what I must call the predicament into which the judges appear to have been led in regard to this question.

The law of insanity is, as we all know, part of the common law, and, as such, it was liable to be adapted to the opinions of the time by judicial decisions based upon particular circumstances. Whatever may have been the case in barbarous ages, modifications of the penal common law have not in modern times preceded those changes in public opinion which have resulted from the greater humanity of an improving civilisation. Still less have they anticipated the teaching of science. In the last century, when physicians treated their insane patients as if they were wild beasts, Mr. Justice Tracy, in Arnold's trial, 1723, told the jury that "it must be a man that is totally deprived of his understanding and memory, and doth not know what he is doing no more than an infant or a brute or a wild beast: such a one is never the object of punishment."

A seeming advance was made from this state of the law, to that which was laid down by Chief Justice Mansfield at Bellingham's trial in 1812, when, having referred to the delusions of persecution entertained by Bellingham, this celebrated judge said—"If such a person were capable in other respects of distinguishing right from wrong, there was no excuse for any atrocity which he might commit under this description of deraugement. It must be proved beyond all doubt that at the time he committed the atrocious act he did not consider that murder was a crime against the laws of God and man."

From this most stringent application of the general knowledge of right and wrong without reference to the particular act, there is a great change in the application of the same test in the law, as it was stated in the reply of the judges to the House of Lords, after the trial of McNaughten in 1843, and in which the absence of the knowledge of right and wrong which shall be sufficient to establish a defence on the ground of insanity, is altered from the general knowledge of right and wrong to the knowledge that the particular act itself is right or wrong at the time of doing it.

Lord Wensleydale, in his evidence before the Royal Commission on Capital Punishment, in reply to Mr. Waddington's question 362—"You do not think that the sort of insanity which exempts a person from capital punishment in case of murder could be more accurately defined to the jury than it is in the resolutions of the judges in McNaughten's case?"—said, "I do not think it can. I entirely concurred in that judgment, and took a share in the preparation of it with my late excellent friend Chief Justice Tindal, who took very great pains, I know, to lay down the law most correctly. I have always acted upon it, and think it quite right. Whether it could be improved in any respect I am not prepared to say, until the objection shall be made and discussed."

This last sentence reads as if Lord Wensleydale felt that the subject would bear discussion—which indeed it has been much exposed to ever since the judges' statement was made to the House of Lords, where it appears to abide, blocking the way to those modifications which would probably have been made by the judges themselves if they had not so positively committed themselves in a body to this formulary, which is neither common law, statute law, nor case law, and to which it is difficult even to give an appropriate name; for I find in the Report of the Capital Punishment Commission that Dr. Tuke, Lord Stanley, and Mr. Waddington severally spoke of it in three consecutive sentences as "the celebrated *dictum* of the twelve judges," "the *definition* of the law of insanity," and as "the *resolutions* of the judges in McNaughten's case." Lord Wensleydale also called it a *judgment*; and Lord Justice Blackburn calls it more accurately *an extra-judicial opinion*. But whatever it ought rightly to be called, this statement of the law has ever since been referred to by individual judges as the Law of Insanity; and it has since, no doubt, received abundance of sanction from their decisions on the bench. I do not propose to spend our time now by argument of my own against it. I have long ago made known my reasons for objection elsewhere; the conclusion at which I arrived being briefly stated as follows:—"Responsibility depends upon power, and not upon knowledge and feeling; and a man is responsible to do that which he can do, not that which he feels or knows it right to do."

But of infinitely more importance than any argument which I could adduce would be evidence that dissatisfaction exists in the best legal minds in regard to this law of insanity, which has been fixed like a rubric on the judicature. And the first witness I shall call will be an unwilling one, though he be a distinguished judge, remarkable for his fair-mindedness, his strong common sense, and the resolution with which he does his duty.

Lord Justice Bramwell told the Select Committee on the Homicide Bill—"I think that, although the present law lays down such a definition of madness that nobody is hardly ever really mad enough to be within it, yet it is a logical and a good definition." Summed up in this brief sentence is, perhaps, embodied the reason of the lawyer's adhesion to this law, and the physician's objection to it. It is a logical definition, and therefore the reasoning mind which does not come into direct contact with the facts accepts it. But it does not include the concrete instances which it ought to include, and is therefore most unsatisfactory to those who come into actual contact with the real madmen who ought to be, but are not, within it.

Before the Capital Punishment Commission this great judge made admissions which seem to be still more adversely critical:—

Q. 150. Mr. Neate asked, "I observe that, in your last letter to the Commissioners, as the result of your experience you use these words—'Six prisoners in six cases were acquitted on the ground of insanity, and rightly. I do not mean that the prisoners were as insane as the law requires.' I observe that you say they were rightly acquitted, although they hardly came within the limits of legal insanity. Have you any alteration to suggest in the legal definition of insanity?" Lord Justice Bramwell replied, "No, I think that the legal definition is perfectly right."

Q. 151. "But you say they were rightly acquitted, although their insanity was not to the extent which the law requires?—A. I will explain that observation, which is, no doubt, an apparent contradiction. What I mean is, that, according to the practice of juries which has met with the sanction of judges, or which has been without any reprobation from the judges, and which is in accordance with public feeling, those prisoners were rightly acquitted."

Q. 152. "Then would it not be possible to bring the law upon that point into harmony with public feeling, and with what you seem to admit to be right public feeling and right judgment?—A. I am not so sure that the public feeling is right upon it."

The Judge then proceeds to explain the law, expressing the opinion already quoted, that "there are very few persons who are so mad as to be within either of those two categories, in my opinion." He says that, in his opinion, the law is right, because it may deter many insane persons from crime by the threat of punishment. We have no statistics, he remarks, of the number of people who are so prevented from committing crimes. And elsewhere he says, "If you can find out what man's mind is accessible to the influence of fear, you can find out the man you should punish." This seems to be quite a new test—not of insanity, but of punishability,—with which I think physicians would feel that they have no professional concern; although some of us, as members of the community, may consider that some atrocious criminals ought to be punished, notwithstanding that they come within the technical limits of mental unsoundness.

(To be continued.)

LECTURES
ON THE PROGNOSIS AND TREATMENT OF CERTAIN VARIETIES OF CONSUMPTION.

DELIVERED AT THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

By JAMES EDWARD POLLOCK, M.D., F.R.C.P.,
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LECTURE II.

GENTLEMEN,—In my last lecture I considered the pathological conditions which modify the course and results of chronic phthisis. Each form of disease has its own peculiar tendencies, and the issue is to be calculated mainly by our knowledge of the progressive degenerations which deposits in the lung undergo—some resulting, as in acute croupous pneumonia, in a rapid break-up of that which has blocked the alveoli, without destruction of the pulmonary tissues; and others involving the surrounding parts in ulceration. In the croupous form a cure is the early termination; but in catarrhal, strumous, and fibroid varieties a more or less permanent alteration in all the lung structures takes place, and on the quicker or more slow destruction of these latter the chronicity of the case largely depends. You will remember that I pointed out that the *localisation* of the disease has also a great influence, and that a certain continuity of diseased structure formed a marked feature of progressive phthisis. Thus, so long as disease is massed in one apex, and fairly limited to that part, even although a rapid degeneration has occurred, and a cavity been formed, the patient might recover a fair amount of health up to the time when secondary infections take place, with new deposits in the lower portions of lung. But when adjacent parts of the pulmonary structures are infiltrated, a continuous line of ulcerative destruction is set up; and these form a large proportion of our worst cases. Again, I dwelt much on the conservative agency of fibroid alterations, hardening, contracting, and tying down portions of diseased lung, limiting the vascular supply by obliterating vessels, and thus preventing hæmorrhages and pneumothorax, two of the most formidable incidents in chronic phthisis. I showed you that the *stage* of disease was of little importance, and exhibited patients in fair condition with large cavity in the lung, while others with less destruction of tissue were wasting under the hectic of a progressive destructive ulceration.

In estimating the danger of any case of phthisis, the period of transition from one stage to another is that which is fraught with most peril to the patient; and at this time no sure prognosis can be formed, because the local disease is advancing, and we cannot say with certainty when or where it will stop. By-and-by, if the case is to become chronic, if it assume any form but that of progressive phthisis, there will occur a pause, when the local disease is quiescent, the fever ceases, and Nature puts forth her reparative powers. It is then that we can take a review of our case, its ancestry, antecedents, and present condition, and estimate its probable progress and result. But while the temperature is high and waste is progressing, while the physical signs indicate a large tract of lung threatened or absolutely diseased, when moist sounds of the crepitant order replace the merely dry and harsh breathing, no prophecy for the future should be offered. It will not do to condemn a patient in this condition, for we daily witness a marked improvement in all these symptoms; nor, on the other hand, should we be hasty in prognosticating an improvement which may not take place. We can, however, be watchful and cheerful; and, after a large experience of phthisis, I advise a leaning to the brighter side of the picture, the vast majority of cases undergoing periods, more or less long, of considerable improvement both in the condition of the lung and in bodily health.

Let us examine now a case of chronic phthisis, and contrast the favourable with the unfavourable conditions. We will take the physical state of the lung and the symptoms. We may say, then, that disease, in whatever stage, which is massed in one apex, of well-defined extent and limit—that is, with clearly healthy lung-tissue (evidenced by percussion and breath-sounds) underneath it—is favourable even if there be much dulness and induration of lung. Spreading disease, with moist crepitant sounds, does not generally give much dulness. Favourable again if the heart or opposite lung be already displaced, and a portion of the chest flattened or contracted, for that shows that the disease has already become chronic, and fibrous contractile changes have commenced. The temperature should be moderate, the pulse quiet, waste not progressive, the digestion sound, and there should be no secondary complications, as laryngeal or intestinal irritation. In this case it does not much matter, for prognostic purposes, whether there be a small cavity in the apex, or whether there are only blocked alveoli, and whether moist crepitant sounds are heard: only let the diseased condition be limited, and fever absent. Now, I am giving you rules to judge by, but no rule can be absolute; and there are cases of advancing disease, with absence of fever and increasing weight, but they are slow, and, on the whole, not unfavourable cases, and they are rare. Another favourable condition is a sparse, diffused deposit, extending over a rather large extent of lung without much dulness, and with but slightly impaired movements. It is generally observed in persons of well-built chests, and produces but slight emaciation, and fever is often absent, and the patient may go on for years with but few symptoms. I believe the physical condition to be a surface disease—that is, not involving the whole thickness of the lung,—and it therefore does not readily run into cavity; nor, again, does such a lung become fibrous.

You must consider, also, among the favourable signs in chronic phthisis what I may call the *changing conditions*—increasing contraction of the side, and progressive displacements of heart or opposite lung, and a gradual transition from moist to dry sounds, from humid crepitus to dry crackle and even leathery creaking.

Contrast with this the unfavourable variety. The local signs are of large extent, without evidence of limit; the dulness not probably very marked, but very extensive. Perhaps both lungs are engaged, or the base of the affected lung is not clear; and there is much more extensive disease, and in a more advanced stage, at the back of the lung than

in front. There are no displacements, for no fibroid changes have been undergone. The heart is not drawn up, nor the opposite lung drawn over, nor the chest contracted materially. There are sounds of mixed origin heard over the affected lung, indicating pleural, bronchial, and pulmonary irritation. They are hard to define—not exactly *râles*, nor frictions, nor crepitations, but a mixture of all; and they are of evil import. The temperature is 100°-101° every evening. There may be a severe exacerbation at 11 a.m., and profuse sweatings harass the patient in early morning, or when he sleeps in the day. There is progressive waste, high pulse, perhaps red tongue, vomiting, diarrhœa, probably laryngeal soreness and hoarse voice. The *changing* signs, too, are from dry to moist, from large crepitus to gurgle, and they progressively increase towards the base of the lung, where patches of dulness, and tubular breath-sounds and voice reveal a newly infected area of disease, which will soon break up. But I need not pursue the picture further. You see I have asked you to study physical signs and symptoms together, and to take a common-sense view of your cases, and not to be led away by mere stethoscopic sounds, or artificial classifications of disease not true to nature. Let your prognosis be founded on large views of the history, antecedents, and the actual state, physical and general, of your patient. Be not content with stethoscopes or varied instruments of measurement: the hand, the eye, the ear, are the finest instruments, and most capable of adaptation to their use, and therefore of accurate defining power. The living machine is one which has never been, and never will be, rivalled by any calculating implement or nicely adjusted mechanism, for it is the perfected work of the Highest Maker.

There is much danger in using the gauges which we have applied to the human body for the measuring of its pulses and the movements of its machinery, lest we should forget the simpler modes; and although the former are adjuvants to precise science, they can never replace the natural gifts which made Shakespeare exclaim,

> "What a piece of work is man!
> In form and moving how express and admirable!"

But, apart from the actual condition of your patient, there are other agents which may materially influence the progress of his disease, and modify your opinion as to its result. Such are age, sex, heredity, and complications with other diseases; and these we will briefly consider. And first of age.

There are forms of disease belonging to certain ages. Acute tuberculosis, acute struma, the external glandular and joint affections, and the abdominal, as well as pulmonary scrofulous affections, belong mostly to early life. So also phthisis originating in zymotic disease. Hæmoptysis is very rare in early life, and also extensive fibrous changes in the lung.

To early adult life belong ordinary progressive phthisis, catarrhal pneumonia, phthisis with hæmoptysis as an early symptom, the gastric and laryngeal complications, unresolved pneumonias, and pleurisy originating phthisis.

To middle life belong the chronic single cavity, chronic basic disease, and that diffused deposit in the lung which I have described; so also the dust-impaction cases from mines, stone-dust, collieries, and workshops; fibroid alterations of the lung associated with some of these conditions; and the more extreme instances of contracted side with displaced viscera, and secondary dilatation of the larger bronchi.

In old age we find very chronic cavities, fibroid change, the chalky-gouty degenerations, and the combination of bronchitis, emphysema, and phthisis. Old age, like childhood, is rarely subject to hæmoptysis.

As regards *sex*, the results of many thousands of observations have shown me some interesting facts. In *males* there are many more cases of phthisis at puberty; they are more subject to *profuse hæmoptysis* in the proportion of 267 to 84 females. An *arrest of phthisis* occurred in 45 males, but in 23 females only. Chronic dry cavity in 122 males to 84 females; chronic second stage in 147 males to 119 females; chronic strumous phthisis in 155 males to 130 females. In phthisis occurring after forty-five years of age, 174 were males, and only one-third were females. The combination of rheumatism, heart disease, or gout with phthisis is more common in males, as 92 to 50. Slow senile phthisis in 100 males to 21 females. In females, the first stage was observed to be more prolonged, and *slight* hæmoptysis is more frequent. The influence of pregnancy and lactation should be remembered in considering sex. Pregnancy appears to suspend phthisis, which is commonly precipitated after labour, but lactation accelerates it.

I will not detain you over the large subject of the hereditary nature of phthisis, but it is worth noticing how individual cases are modified by hereditary tendencies. It is a common observation that hereditary cases do worse, as a rule, than phthisis which we call accidental—that is, disease acquired by habits or injurious influences, as trades, etc. *Concentrated heredity—e.g.*, the intermarriage of two consumptive people, or the transmission through parents of hereditary disease from an ancestor on both sides—generally produces a *rapid form* of disease. Often, in childhood, tubercular disease of bone, glands, mesentery, brain, comes from this source; but if the individual live long enough the lungs suffer. Again, *forms* of disease are transmitted, as very slow phthisis in parents and their children, of which I know many instances. There are families who cannot outlive a certain age, but die off of phthisis at twenty-one or twenty-five.

Of course these remarks about age, sex, and heredity have only a general meaning, but they do often apply to individual cases, and the scientific physician will do well to remember them in estimating every case brought before him. Thus, upon the whole, it is likely that phthisis will be more tolerated, and disease run a longer course, in males than in females, cavities will be less likely to break up, and the extension of disease be more slow, and its localisation more limited. After the age of forty-five the tendency to chronicity will be much increased, and notably more so in males, and many men live to old age with ulcerated and broken-down lungs, while comparatively few women survive to advanced life with similar affections.

The dangers of hæmoptysis are less in infancy and in old age, at the two extremes of life. Few females die of profuse bleedings from the lung, but many suffer from its milder forms. Chronicity, slowness in destructive processes, attaches to advancing years; while the rapid forms are found at the age of growth and development.

There are many interesting considerations arising out of the study of the complications of chronic phthisis, and I request your attention to some of these. *Whatever diverts phthisis from its usual course adds prolongation.*

Phthisis is a great monopoliser of the system. The phthisical escape epidemics, have rarely any skin disease, and their vital incidents belong to a category on which few other disorders intrude. Cancer, for instance, aneurism, tumours, are rare in our wards. But when affections other than phthisis are mixed up with it, they modify its course and retard its result. Take emphysema, for instance, which means dilatation of the air-cells, with gradually increasing loss of their elasticity. We can understand this, when we remember that phthisis means a blocking of the alveoli, an increase and thickening of the inter-alveolar tissues, and final destruction of the alveolar walls. *Emphysema* is found in persons with large rounded chest and deep antero-posterior measurements, and implies distension of respiratory space. Hæmorrhage is a rare occurrence, and is of venous origin. There is a stasis of pulmonary circulation, often resulting in dilatation of the cardiac chambers. *Phthisis* is found in persons of flat, long chest; the antero-posterior measurements are small; there is contraction of breath-space, and permanent retraction of the chest-walls. Hæmorrhage is frequent, and of aërated blood, while the heart is found feeble and atrophied. From this survey you can judge of the so-called antagonism between emphysema of the lung and chronic phthisis. In practice it has been found that the union of the two is rare in the same individual, and the duration of life is increased. Taking twenty-four months as the observed duration of ordinary phthisis, it rose in this combination to forty-nine months. In ancestral predisposition it was observed that the hereditary tendency was to phthisis, but the deaths were more frequently due to cardiac causes, as dilatation. You are not to confuse the compensatory dilatation of the opposite lung (or occasionally of the same lung), which takes place in phthisis, with emphysema, which means not only dilatation, but loss of elasticity as well. If one lung enlarges in phthisis to occupy more than its normal space, because the other is diseased, the air-cells do not lose their contractile power. They do, in fact, effect more breathing, but they are capable of returning to the same volume when the neces-

sity for this extra work has ceased. But in emphysema the opposite is the case, and the power of contractility is gradually lost. In phthisis with compensatory dilatation of air-cells the phthisis has preceded the dilatation; but in phthisis with emphysema the phthisis has been secondary.

(To be continued.)

ORIGINAL COMMUNICATIONS.

ON ANTISEPTIC OVARIOTOMY.

REPORT OF TWO CASES.

By HEYWOOD SMITH, M.A., M.D. Oxon.,
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THE antiseptic method of operating has wrought such a revolution in surgery, lessening the mortality in so many hitherto dangerous operations, that it is not to be wondered at that gynæcologists have eagerly adopted it; and although abdominal operations present peculiar difficulties in the complete carrying out of the process, and the surface exposed to septic mischief is greater than in any other operative procedure, yet the results have proved successful almost beyond expectation. Since the introduction of chloroform nothing has done more to save life than the discovery of Professor Lister.

I have brought forward these two cases as a contribution to the literature of this subject, because in the one case there existed a dangerous condition of chronic peritonitis, and, although the antiseptic method employed was but imperfect, the result was eminently successful, the temperature-chart showing a remarkable absence of rise; and in the other case a like result was obtained, in the face of complications that, without antiseptic precautions, would in all probability have led to a fatal termination.

Case 1.—M. A., aged twenty-nine, married eleven years. Had six children, the youngest born October 30, 1877. Catamenia commenced at sixteen, and has been regular. Pain of a smarting character came on three months before her confinement on the right side of the abdomen, and after her confinement she noticed herself still large. She could lie more easily on the right side. I was asked to see her by Mr. Liddard, of Notting-hill, about seven weeks after delivery, and found her suffering from an ovarian cyst, but advised her to wait until after complete involution of the uterus before having anything done. She presented herself as out-patient at the Hospital for Women, January 14, 1878. The umbilical girth was thirty inches and a quarter. The abdominal tumour was dull, with hardness on the right side; the flanks were resonant; and the uterus measured three inches and a half. She was admitted as in-patient on January 19. The hereditary history was good. Three months before her last confinement she received a blow on the left side of the abdomen, and has had pain there ever since. Complains of debility, and has lost flesh. Appetite good; bowels regular; urine clear, no albumen; no bearing-down; no leucorrhœa. The countenance is pinched; the expression anxious; dark under the eyes; pulse 60, full, compressible; temperature 98·4° in morning, 99° at night; perspires freely. The abdomen is enlarged, but not tense; the left flank more resonant than the right. The tumour is globular, fluctuates indistinctly, and extends to midway between umbilicus and ensiform cartilage. In some places small rounded nodules are felt through the abdominal walls. Umbilical girth thirty-two inches and a half. January 31: The temperature has been *below* normal for the last seven or eight days.

Operation.—January 31, 2 p.m.: The patient having been placed under chloroform, a free incision was made through the abdominal walls until the peritoneum was reached. On opening the peritoneal cavity there was an escape of viscid gelatinous material, giving rise to the supposition that the cyst had been laid open. The wound was then prolonged to above the umbilicus, but on further examination it was found that the gelatinous substance was in the peritoneal cavity. The peritoneum was thickened, like translucent wash-leather, and was throughout its entire surface covered with lymph from chronic peritonitis. A trocar failing to evacuate the tumour, it was with care turned out whole. There were considerable adhesions to the omentum, which was also thickened, vascular, and gelatinous; there were also innumerable fine shreddy adhesions on all sides of the tumour in the pelvis, flakes of lymph were floating about everywhere in the abdomen, and the peritoneum covering the abdominal organs and the intestines was thickened and roughened with spotty granulations. The adhesions to the omentum were peeled off, and the tumour springing from the left side was attached by a pedicle that consisted of a thin fold of membrane containing two large vessels. This was tied in two portions with silk, and the tumour removed. A considerable portion of the omentum that had been adherent was tied and cut off. The peritoneal cavity was then well sponged out, and a pint and a half of carbolised water (one in forty), at a temperature of 100° Fahr., was poured into the abdomen, producing a considerable amount of collapse; the abdominal cavity was then sponged dry. The wound was rapidly closed with twelve carbolised silk sutures, dressed with protective, dry lint, strapping, and bandage. The tumour was found to be mutilocular, with thin walls. The contents of the cysts were viscid and gelatinous, varying in colour, as albumen, light green, yellow, and curdy white. Under the microscope the contents were clear and structureless. The curdy portion exhibited an immense number of small spherical particles, like oil globules, strongly refractive; a smaller number of similar particles were in the green. A small cyst was found containing a quantity of light brown hair matted together with fat. The tumour weighed ten pounds. A suppository of half a grain of morphia was introduced. Pulse after the operation 56. Some opium was given from time to time to relieve pain. There was some little sickness for a day, and on the day following the operation the pulse rose to 108, but it soon subsided and did not again rise.

On February 2, the temperature being 100·4° and the pulse 104, the ice-cap was put on, when the temperature fell to 99·8°, and the pulse to 88. The sutures were removed on the fourth day; the wound was slightly offensive, and the temperature 97·8°. After this she rapidly improved, and left the hospital on March 2. Appended is the temperature-chart:—

	Temperature. Morning.	Temperature. Evening.	Pulse. Morning.	Pulse. Evening.
January 22	98·4°	98·2°	72	64
,, 23	98·0	98·4	70	64
,, 24	98·0	98·0	64	—
,, 25	97·6	97·6	62	—
,, 26	97·8	97·5	70	—
,, 27	97·6	98·0	68	—
,, 28	97·7	97·4	58	—
,, 29	97·4	97·6	56	—
,, 30	97·6	98·0	64	—
,, 31(a)	97·6	98·0	56	—
February 1	98·4	98·6	100	108
,, 2	99·4	100·4	92	88
,, 3	98·4	99·0	88	70
,, 4	97·6	98·4	62	58
,, 5	98·0	98·0	64	66
,, 6	98·0	98·4	70	62
,, 7	97·6	98·0	62	—
,, 8	98·2	98·6	78	70
,, 9	97·4	98·2	74	72
,, 10	98·0	97·6	66	—
,, 11	98·0	97·6	70	74
,, 12	97·6	97·4	68	—
,, 13	97·4	97·8	70	74
,, 14	97·6	98·4	74	—
,, 15	98·2	99·0	80	88
,, 16	98·4	98·4	80	82
,, 17	97·6	98·4	82	84
,, 18	97·4	98·0	80	—
,, 19	97·6	98·0	78	—

	Temperature. Morn.	Temperature. Even.		Temperature. Morn.	Temperature. Even.
Feb. 20	98·4°	98·0°	Feb. 25	97·6°	97·4°
,, 21	98·0	98·0	,, 26	98·4	98·4
,, 22	97·4	98·4	,, 27	97·4	98·4
,, 23	98·0	98·4	,, 28	98·0	98·0
,, 24	98·0	98·0	Mar. 1	98·4	98·6

The remarkable feature about this case is the low temperature and pulse, though the patient had evidently been suffering from chronic peritonitis. Doubtless some of the viscid and gelatinous material in the abdomen might have

(a) The day on which the operation was performed.

been due to a rupture of one or more of the cysts; but much of the lymph was evidently the result of the inflammation. This agrees with the observations of some, that in some cases of low peritonitis that have proved fatal the temperature has shown a marked tendency to keep low. I attribute the success partly to the operation itself removing the cause of the mischief, and partly to the washing out of the peritoneal cavity with the solution of carbolic acid.

Case 2.—S. A. D., aged thirty-four, married thirteen years. Has had six children, the last three years ago. She became out-patient at the Hospital for Women, January 29, 1877. Has complained of pain in the left side for four months. Has noticed the abdomen swollen for twelve months. Was seen by Mr. Fordham, of Mile-end, who advised her to go to a hospital. There was a large abdominal tumour extending above the umbilicus. Resonance in flanks not very clear. Uterus measured three inches. Treatment tonic. She was admitted as in-patient, February 20, 1878. In August, 1877, noticed an umbilical hernia. Tumour began to increase more rapidly in November, and latterly much more so. Very little pain, but great sense of weight. Umbilical girth, forty-five inches and a half. The abdomen is very greatly distended, the walls œdematous, the veins distended. Right flank clearly resonant, left only over the colon. A distinct sulcus passes obliquely across the abdomen just below the umbilicus. Fluctuation fairly marked. Liver and heart pushed upwards. Tumour reaches to the ensiform cartilage. There is an umbilical hernia the size of a small orange. February 27: Operation performed antiseptically. Anæsthesia induced with bichloride of methylene. Lister's steam spray employed, and all the instruments, sponges, etc., kept in carbolic acid solution (one in forty). The incision reached from above the umbilicus to the pubes. The abdominal walls were thick and vascular; the peritoneum thickened and adherent over the anterior portion of the tumour, so intimately that a portion of peritoneum was stripped off the abdominal wall. At the sulcus, however, the cavity of the peritoneum was found and opened. There were further adhesions to the omentum, and some very thick and firm on the left side of the abdomen, which had to be ligatured and cut through in order to liberate the tumour. The fluid was thick, and there was much solidity from small secondary cysts. The pedicle was small, and was transfixed and tied with silk; it sprang from the left ovary. The right ovary was found to contain a cyst the size of a large filbert; half of this was cut off with a pair of scissors. Part of the omentum that had been adherent was ligatured and cut away. Some ligatures were also applied to bleeding points on the abdominal wall. The skin forming the umbilical hernia was then removed, and the wound closed with thirteen carbolised silk sutures; the loose flap of peritoneum, which had been detached, being taken up into the wound, and a portion cut off. The wound was dressed with protective and gauze. Fluid removed, twenty-seven pints. Tumour weighed nine pounds and a half. Vomited five times. The urine showed a remarkable gradation of colour, commencing with a dark greenish-brown, gradually fading off in two or three days; specific gravity 1030, acid, albuminous, and afterwards for a few days loaded with lithates. She made an uninterrupted recovery, and left the hospital on March 26. On dressing the wound the fifth day under the carbolic spray, the dressings were found stained with grumous exudation, as were also the sutures, showing that the condition was such as formerly would have given rise to septic mischief; but the antiseptic method of operating entirely prevented any ill result.

After such results as these, and similar ones in the hands of other operators, it surely would be wrong to operate ever afterwards otherwise than by the antiseptic method.

THERAPEUTIC NOTE ON HYDATIDS.

By NORMAN CHEVERS, M.D.

The recent observations on hydatids by Ranke and Volkmann,(a) and by Drs. Dougan Bird(b) and J. Lindsay Miller,(c) suggest the following note.

Many years ago I saw a considerable number of cases of hydatids in London. In many, the liver was the seat of mischief; but I do not recollect any case in which the nature of the disease was recognised previous to the appearance of outward bulging. It was rather frequently noticed in the post-mortem room at Guy's that nature appears to have a very summary mode of killing the parasites, and thus of effecting a spontaneous cure. Here it would appear that, as the cyst enlarges, a minute bile-duct is opened and bile escapes into the cavity; the fluid is absorbed, the cyst undergoes gradual and very great contraction, and often cretaceous deposit, and the dead and empty parasites are closely compressed into a solid laminated mass, markedly stained throughout by yellow pigment. Having received this plain therapeutic hint from nature, I took it to India, fully intending to try the injection of a small quantity of ox-gall in such cases; but I believe that it has not been proved that this disease occurs indigenously in any part of India. It is true that, in the museum of the Medical College at Calcutta, a solitary preparation (No. 334) is marked, "Two acephalocysts from the spleen of a patient in the Native Hospital." This isolated instance, however, occurring in a port whose native sailors and others go to all parts of the world, does not at all tend to prove that the disease can originate in India. It is to be borne in mind that nature's bile-cure does not appear to be attended with certain success, as in some instances, where the cyst is opened and the case ends unfavourably, the hydatid fluid or pus is more or less coloured with bile. Bile appears to act best when it is applied early in the disease. The ease with which such cases are now diagnosed, especially in Australia, enables the surgeon to act promptly.

London Hospital Medical College.

(a) Cited in *London Medical Record* of August 15, 1877.
(b) *Medical Times and Gazette*, December 1, 1877.
(c) *Glasgow Medical Journal* for March 1, 1877.

THE ACTION OF MALARIA AND ITS INFLUENCE ON THE SPLEEN.

By JOHN SULLIVAN M.D., M.R.C.P. Lond.

(*Continued from page* 505.)

Amongst the many very valuable contributions to medical science published by the justly celebrated Professor Baccelli, of Rome, none appears to me of more interest and importance than an essay read by him before the International Conference held in Geneva, 1877, "On the Condition of the Spleen under Malaria, its Peculiar Venous Circulation, and its Special Function." The view of this special function of the spleen, as essential towards the process of digestion, taken by Professor Baccelli, although not exactly original, still, as based on the influence of malaria, is worthy of great consideration. Professor Baccelli directs our attention to two notable facts connected with the digestive function of the stomach.

At the commencement of an attack of marsh fever we frequently observe that the patient has a voracious appetite, whereas when the action of malaria is repeated or continued, as in marsh cachexia, there is loss of appetite and an obstinate dyspepsia. In the first case the engorged and swollen spleen is soft, and the hyperæmia disappears altogether. In the second case the congested condition of the spleen is permanent, or varies but slightly. During the first few days the increase of appetite is conspicuous, and the dyspepsia which succeeds is ascribed by Baccelli, not to any increase of size in the neighbouring organs, or to any pressure of the stomach impeding its movements, but rather to some chemical alteration in the process of digestion from an altered condition of the spleen.

Cachectic patients have a great aversion for nitrogenous albuminoid substances. If what is rejected be carefully examined by a lens, the fleshy fibres will be found unchanged, even although they may have existed in the stomach two or three days. Baccelli is of opinion that the spleen, with its peculiar gastro-splenic circulation, has much to do with this perversion of taste, this longing after substances which do not require a great co-operation of the gastric juice in order to be utilised as food. He therefore arrives at the conclusion that the spleen, with its attendant short veins, is to the cells of the pepsine glands what the system of the vena portæ is to the cells of the hepatic glands.

The large curvature of the stomach is connected to the spleen by five or six straight venous canals; these intercommunicate by means of minute little veins, disposed vertically

and obliquely behind them. The absence of valves and of any coercive contrivance enables the blood to move on in a double inverse current, and to halt at a given moment either in the stomach, the spleen, or the intermediate vascular system. The veins which pass from the spleen to the stomach penetrate deeply, and the capillaries when injected unite in myriads, especially around the pepsine glands. All this special gastro-splenic venous circle opens into an angle formed by the splenic and left coronary vein. The vein thus formed by their junction passes downwards, then ascends, and, after having been joined by several branches, empties itself into the trunk of the vena portæ as it enters into the liver. The pepsine glands abound in that part of the stomach towards which the veins converge, and appear to be connected exclusively with the venous system.

Injections passed into the large and small venous tracts admirably illustrate the nature of this circle. Whenever an injection has been practised at the junction of the left coronary and anterior splenic vein, the venæ breves and their little branches were seen to be injected at one and the same time; and the fluid would have passed to the pyloric extremity of the stomach if it had not been prevented by a ligature. But if the injection was passed into one of the venæ breves it never took this course; it merely passed, if strong pressure were applied, into another vena brevis. Therefore, the venous blood passes from the spleen to the capillaries of the stomach: from the capillaries of the stomach to the left coronary vein; from the capillaries of the spleen to the anterior splenic vein; and from the anterior splenic and left coronary vein into the main trunk, which opens into the vena portæ.

When the capillaries are well injected they are seen to wind round the pepsine glands, exactly in the same way as the capillaries of the vena portæ wind round the clustered hepatic cells. You might fancy you were examining in the stomach, with the aid of the microscope—examining the exact preparation practised by the late Claude Bernard on the capillaries of the liver.

Carbon enters largely into the composition of pepsine; and this carbon must be derived from venous blood. It therefore would appear that one of the most important functions of the spleen is to supply to these glands, through the venæ breves, the elements best suited for the preparation of a material so essential towards the process of digestion.

Such being the case, we can understand how the various lesions of the spleen must give rise to various forms of dyspepsia. Although the absence of pepsine may not have an injurious effect upon such alimentary substances as do not need to be dissolved by the gastric juice, but merely to be submitted to the action of the saliva, in order to be fitted to enter the circulation. The study of this gastro-splenic circulation not only illustrates the function of the spleen, but also furnishes a proof of the existence, according to Baccelli, of a small abdominal circulation, the function of which is antagonistic to that of the small pulmonary circulation. If you raise the stomach and disclose the pancreas in its entire extent, and draw it down, you will see the large vein which runs horizontally over it; this receives numerous subsidiary branches, and passes directly from the left side of the spleen. This vein is about half the size in diameter of the vena cava, and forms by its position almost two right angles with the vertebral column. It lies behind the stomach, has no valves, and is liable to be compressed when the stomach is distended. Now, all these wise arrangements are necessary in order to protect the vein from pressure against the vertebral column. The large vein having received some branches from the duodenum, runs on and forms part of the portal system. It therefore unites transversely the liver and the spleen as it passes over the pancreas, and thus is completed the small abdominal circulation. The vein which is formed by the junction of the anterior splenic and left coronary vein enters the liver. This portion of the circle is connected with that which unites the liver, the pancreas, and the spleen, and so a complete venous circle is formed.

Thus Professor Baccelli is induced to teach that, in accordance with the laws of anatomy, physiology, and chemistry, there exists a small abdominal circulation, the function of which appears to be to utilise all the hydrocarbon materials for the organs connected with it.

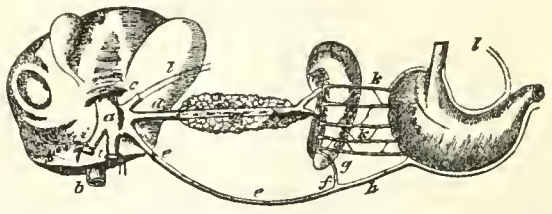
In the same way as it is the function of the pulmonary circulation to eliminate superfluous hydrogen and carbon, in order to fix the oxygen on which the quality of the blood depends, that it might be fitted for the office of combustion, or, to use the words of Baccelli, "of progressive oxidation of the elements on which rests the law of molecular changes and of the process of nutrition." If we examine the secretions special to the organs to which this venous circle is annexed, we find how large is the quantity of hydrocarbons they contain.

The pancreatic vein, as it passes between the liver and spleen, is exposed to pressure from its position between the vertebral column and the stomach when in a state of distension. But the spleen covers over one-third of the pancreas anteriorly, which then dips down, and is situated posteriorly, and thus a mechanical contrivance of great interest is obtained, to favour, and yet to protect from, pressure. This contrivance is well ordained in order to supply these organs with a copious supply of blood. The spleen becomes more congested, the better to supply the glands of the stomach through the venæ breves.

The pancreas remains stationary, the numerous venous canals are unable to open into the large vein, and the liver being incapable of receiving any blood from it, there will naturally accumulate the blood which it receives from the vein formed by the junction of the left coronary and anterior splenic veins. And thus the different organs become well supplied with blood for the performance of their different functions. When these offices are completed, then the pressure of the distended stomach upon the spleno-hepatic vein is diminished, and the circulation is equalised. This small abdominal circulation is intended to fix in the above organs all the hydrocarbonised materials required for their respective functions, just as the small thoracic circulation serves to eliminate certain chemical products, and fix the oxygen for the purification of the blood. In the liver, kidneys, and intestinal canal there is a depurative apparatus, formed as well from arteries as from veins, in which but a small proportion of hydrocarbons is formed, derived from venous blood only.

In this abdominal circle Baccelli does not include the mesenteric and superior vena cava, as they properly belong to the system of the vena portæ; therefore, starting from the spleen, this circle may be divided into an anterior section connecting the stomach, spleen, and liver, and a posterior connecting the spleen, pancreas, and liver.

Such is an outline of what Professor Baccelli calls the "little abdominal circulation," which I have seen demonstrated by him on two occasions on the dead body in the Hospital of Santo Espiritu in Rome, and of his views respecting the function of the spleen as necessary towards the process of digestion. (A copy of the Professor's diagram I append.) From these views we are led to conclude that



a, trunk of vena portæ; *b*, inferior vena cava; *c*, coronary vein; *d*, spleno-pancreat. hepat. vein; *e*, trunk formed by branch of anterior splenic and branch of left coronary veins; *f*, point of union of same; *g*, branch of anterior splenic; *h*, branch of left anterior coronary; *i*, mesenteric veins (tied); *k*, venæ breves and communicating branches; *l*, outline superior coronary vein; *m*, mouths of pancreatic veins emptying into large vein.

whatever cause may tend to impair the texture of the spleen will interfere with its peculiar function, destined to supply to the pepsine glands the materials required for their special secretion. Now, whereas the spleen is specially involved in the morbid process of malarial fever, so is dyspepsia most pronounced when, by the continued and persistent influence of malaria, the texture of the spleen becomes damaged; and in the changes which it undergoes by this action, consist some of the essential characters of fever and ague. The reaction of the system against the infection of malaria generates a periodical non-inflammatory morbid process, the fundamental character of which is intermittence. And as this essential character of fever and ague has been defended and insisted upon by Torti, Lancisi, and former Italian

writers, so it is in the present day by the no less distinguished Professor Baccelli, of Rome.

When the founders of medicine—Hippocrates, Celsus, Galenus, etc.—these profound interpreters of nature, defined marsh fever to be intermittent, they must have been guided by their vast powers of observation and experience. And if malarial fever be essentially intermittent by its nature, it cannot be remittent or continued. Still, this intermittence may be obscured and masked, and the fever may take on the semblance of remittent or continued, but it is only sub-continued or pseudo-continued.

The paroxysms which mark intermittence may run one into the other, one scarcely ending before another begins. Or, again, the sub-continued form may arise from an increase in the number of paroxysms in a given time. Or, again, an intermittent may acquire an apparent continuity by the extension of the paroxysms, so that if a paroxysm of fever be longer than usual the cold stage of the next access will interrupt or overtake the sweating stage of the preceding one. Thus intermittence may be interrupted or obscured by reason of the intensity or the degree of the poison, by some peculiarity in the individual constitution, or by the complication of some vital organ influenced by climate, locality, and season of the year.

The different modes and combinations in the administration of quinine in the hospitals in Rome depend on the nature of the malarial complication. Arsenic and camphor are considered to be capable of counteracting the paralysed condition of the ganglionic nervous system; iron, as well as quinine, as useful for the restoration of the red corpuscles of the blood.

In some autumnal malarial fevers Professor Baccelli recommends to an acid solution of quinine the addition of ferri pot. tart. and of arsenious acid. In the pneumonic form of malarial fever he prescribes quinine, with some mild preparation of antimony with camphor and henbane. But in the treatment of a disease which manifests itself under forms so varied and so treacherous, much will depend on the judgment and experience of the physician.

The British Islands are providentially free from the many pernicious forms of marsh fever. However, when we reflect how malaria in its worst forms rages in many countries in Europe, in the East and West Indies, in the Northern and Southern States of America; how the records of the medical history of the late civil war in America demonstrate that there occurred in the army, of malarial diseases alone, near upon 1,500,000 cases, with more than 46,000 deaths, we cannot fail in arriving at the conclusion that the study of malarial disease, both as to its origin, its nature, and its treatment, should be regarded as a duty of the utmost importance.

London.

University College Hospital.—Mr. John Eric Erichsen, F.R.S., will preside at the annual festival in aid of the funds of the above Hospital, to be held at Willis's Rooms, King-street, St. James's, on Tuesday next, at 6.30 p.m., when it is hoped that old students will liberally support him.

Sanitary Authorities and their Liabilities.—A case of some interest to sanitary authorities was heard before the magistrates sitting in petty sessions at Hampton last week. Application was made by the Vicar of St. James's, New Hampton, and the trustees of the schools, for an order to enforce payment of upwards of £19 from the Kingston Rural Sanitary Authority. It appears that scarlatina prevailed in Hampton last autumn, and the applicants then took necessary precautions, even to disinfecting their schools, voluntarily. In January last, when there was only one case known among the cottagers, and that imported, the trustees were required, by letter from the Clerk to the Local Authority, to close the schools for six weeks and to disinfect the premises. Immediate compliance therewith followed, and the medical officer subsequently stated that the schools need no longer be closed. The trustees then applied to the Sanitary Authority for reimbursement of the expenses of the disinfection, and also for the school-fees lost. The sum of about £30 was at first demanded, but to bring the matter within the jurisdiction of the petty sessions it was reduced. The general grounds of the defence urged were non-liability, but the magistrates ordered the payment of the amount of school-fees lost and the costs of the present application.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

CASES OF HEMIPLEGIA.

ROYAL INFIRMARY, MANCHESTER.

Case 1.—*Crossed Hemiplegia, dependent on Hæmorrhage into the Pons, in a Child—Death due to General Tuberculosis and Tubercular Pericarditis.*

(Under the care of Dr. DRESCHFELD.)

Alice H., aged two years and six months, was brought to my out-patient room on January 3, 1878, suffering from right facial palsy and paralysis of left leg.

Previous History.—Is the youngest of six children, three of whom died when young from chest affection; the father died from consumption at the age of forty-three; the eldest sister is an out-patient suffering from incipient phthisis. The patient herself had measles when eighteen months old, from which she recovered rapidly, and remained in perfect health up to December 23, 1877, when she fell suddenly to the ground whilst playing, and was unconscious for a very short time. Soon after this attack the mother noticed that the face of the little patient was drawn to the left. She walked and talked, however, soon after the occurrence; and only two days after, when the child got up in the morning, did the mother notice the paralysis of the left leg, for when attempting to walk the child tumbled, and when led by the hand the left leg "seemed powerless." In all other respects the child appeared to be well; its appetite and sleep were undisturbed. There had never been any vomiting or convulsions. The condition of the paralysed parts had remained the same up to the time of admission.

Present Condition.—A bright and intelligent child, well developed and fairly nourished; of pale complexion; head somewhat large; teeth well formed; no enlarged glands; no signs of rickets; fontanelles closed. There is marked facial paralysis of right side, of the "peripheric" type; the palpebral, frontal, and labial branches are affected, for the child cannot wrinkle the forehead on right side, is unable to close the right eye, and sleeps with that eye open, the right angle of the mouth depressed; the tongue is put out straight; the uvula is drawn a little to the left, but moves freely. To the electric currents the right facial nerve behaves exactly as in peripheric paralysis, showing degenerative reaction (*Entartungs-reaction*, Erb); it responds but slightly to a powerful faradic current, whilst ten cells of Weiss's battery produce marked contractions on right side of face, though they produce no reaction when applied to the left. The hearing on the right side seems diminished; but about this point I cannot be positive. All the other cerebral nerves are found intact: vision is good, fundus of the eyes normal, pupils equal and react well to the light; no oculo-motor paralysis; sensibility of face intact; the speech has not been affected by the attacks, nor does there seem to be any trouble in swallowing. Both upper extremities are normal as regards nutrition, motion, and sensibility. The right leg is in a normal condition, the left leg paralysed. The child is unable to walk, but can stand by herself; when led by the hand the left leg is dragged along; the toes and ankle of left leg, however, can be moved a little. The two legs are of the same length; there is increased reflex irritability on left leg, and the "tendon-reflex" is increased on that side; there is no atrophy of left leg to the faradic and galvanic currents; both legs answer alike as regards electro-sensibility and electro-contractility; to the hand the temperature on the two sides seems equal. The examination of the organs of chest and abdomen reveals nothing but normal relations. There is no cough. The urine contains no albumen.

Diagnosis.—The existence of the alternating or crossed paralysis made us at once think of a lesion of the pons, and the peripheric character of the facial paralysis made it evident that, if such was the case, the lesion must be situated at the lower part of the right side of the pons, close to the roots of the right facial nerve. This diagnosis could, however, only be made with some reserve, as the left upper extremity was not at all affected, and the paralysis of the left leg appeared only two days after the apoplectic attack; there was, therefore, the

possibility that we had two separate affections—a paralysis of the right facial nerve and of peripheric nature, and a separate affection in the lumbar part of the spinal cord, producing the paralysis of left leg, such as is observed in infantile paralysis. Against this view, however, we had to set the following facts:—The sudden and apoplectic nature of the attack; the absence of atrophy, and the response to the electric current on the left side; and, moreover, that, whatever the lesion was, it could only be slight in extent, and it would therefore be quite conceivable that only such a portion of the upper part of the medulla was affected as contained the motor tract of the left lower extremity. As regards the nature of the lesion, we could not decide between a small tumour (tubercular, to judge from the family history) or slight hæmorrhage. The progress of the case, however, made us decide in favour of hæmorrhage.

Treatment.—Syr. ferri iodidi, ol. morrhuæ āā ℥ij., ℥j. bis die. Application of the constant current (few cells) three times a week.

Course.—The child progressed markedly. The facial palsy was the first to diminish, and by the middle of February the labial branches of the facial were the only ones affected. The left leg also improved; the child would walk a few steps, but dragged the left leg very much. The general condition was satisfactory. On March 21 the patient was brought to me suffering from an attack of acute capillary bronchitis. Pulse 130; temperature 102°; respirations 40 in the minute. The examination of the chest showed the existence of sub-crepitant râles in both bases; no dulness on percussion; fremitus equal on both sides. The child had refused food. Considering the family history of the little patient, I formed a grave prognosis, and requested to have the child admitted as an in-patient, but this her mother refused, and I had only once the opportunity of seeing the child again during life—to wit, on March 28, when the child seemed much better: she was more cheerful, began to take her food, but there was still marked fever and capillary bronchitis. On April 5 (according to the mother's account) the child took suddenly worse, became very restless, suffered a good deal from difficulty of breathing, had many convulsions affecting the whole body, and eventually died on April 17.

Post-mortem, twenty-four hours after death, made in my presence by Mr. Wood, one of my clinical clerks. No rigor mortis. The cerebral sinuses filled with dark fluid blood. The membranes of the brain perfectly healthy; the lateral ventricles distended by clear serum; the quantity of cerebro-spinal fluid very much increased; the substance of cerebrum and cerebellum normal. The pons and upper portion of the medulla, with the pia mater and vessels covering them, were taken away, in order to allow of a more thorough examination. On lifting up the pia mater from the under surface of the pons and medulla, a marked contrast between the right and left halves was seen—while the left half was perfectly normal, the right was studded over on its basal surface by numerous small hæmorrhagic spots, of the size of a pin's head and smaller. These spots were particularly numerous at the lowest portion of the pons, close to the facial nerve, and extended along the anterior and lateral tract of the medulla, chiefly round the olivary body; these hæmorrhagic spots did not penetrate beyond a line or two into the substance of the pons and medulla. The nerve-tissue surrounding these spots was of reddish tinge, but otherwise the pons, both as regards consistence and colour, seemed perfectly healthy. The pia mater covering the affected part showed a corresponding staining on its under surface. On examining now the vessels, the basilar artery was found normal, but the right superior cerebellar artery was found to be converted into a solid rod, and totally impervious. All the other vessels at the base of the brain, as far as they had been preserved, were found normal. A microscopic examination of the hæmorrhagic spots showed that these were really small extravasations, extending beyond the lymph-sheath, and not miliary aneurisms after the type described by Bouchard and Charcot. Transverse sections of the thrombosed artery showed the walls of the artery not thickened, nor in any way altered, while the thrombus was found to consist of firm and organised fibrine. The absence of miliary tubercles in the pia mater was likewise confirmed microscopically. Of the other organs, the lungs contained a small quantity of scattered miliary tubercles, chiefly in the upper lobes; both lungs were congested, and the bronchi contained a good deal of frothy mucus. There were no pleural adhesions nor tubercles on pleural surfaces. The heart was with difficulty separated from the pericardial sac, to which it was adherent by many small fibrous threads and freshly organised exudation. When removed it was found that the parietal and visceral layers of the pericardium were literally covered by a mass of miliary tubercles on the pericardial surface of the heart; especially near the base there were layers of organised lymph, which could be easily detached. The valves of the heart perfectly healthy. The other organs, especially the peritoneum, contained many miliary tubercles. The bronchial glands were found slightly enlarged, but no caseous masses or suppurating centres could be found.

Remarks.—The above narrated case has many features of interest. Cerebral hæmorrhage in children is altogether rare, and of hæmorrhage into the pons in children I cannot find any record (Larcher, "Pathologie de la Protuberance Annulaire," Paris, 1868). The form of hæmorrhage in the above case is also peculiar, and as to the cause I cannot at all be positive. There was no doubt complete closure of the right superior cerebellar artery; but considering the width of lumen of the basilar artery, and also the fact that both posterior cerebral arteries were pervious, it is scarcely conceivable that the blocking up of so small a vessel should give rise to such considerable blood-tension as to cause hæmorrhage. I am equally at a loss to explain the cause of the thrombosis; the heart's valves were perfectly normal, and the walls of the vessel in which the thrombus was found were equally intact. I may be permitted to quote the following cases which bear upon the foregoing one:—Ogle (*Pathological Transactions*, vol. xii., 1860) gives the history of a man aged forty, who fell in the street in a fit, and was brought to the hospital suffering from right facial palsy and left hemiplegia. Post-mortem showed softening of the pons and total occlusion of one of the cerebellar arteries. The basilar artery was atheromatous, the heart's valves free. Darolles (*Bull. de la Soc. Anat. de Paris*, 1875) records a case of softening of right half of pons, due to the obliteration of the basilar artery, in a patient aged thirty-eight, the heart's valves being normal. Another interesting point in the case is the appearance of the two pericardial surfaces. The presence of newly organised exudation material makes it evident that during the last few days of life there was pericarditis, and it is highly probable that this led to the excessive and very unusual deposit of miliary tubercles; in fact, a condition of things resembling that found in tubercular peritonitis. Before concluding, I will only just mention the absence of tubercles in the brain and its membranes, and the absence of a caseous or suppurating focus—at least, as far as our examination went.

CLEVELAND-STREET ASYLUM.

Case 2.—Right Hemiplegia—Exophthalmos—Thrombosis of Cerebral Sinuses.

(Under the care of Dr. LEDIARD.)

E. F., porter, aged thirty-one, was admitted June 21, 1877. Stated that he had had a cough for two months, but had never spat blood; had been losing flesh for two months. The history was not clear or full, from the patient being dull and uncommunicative. There were coppery stains about the legs. His skin was dark, rough, scabbed, and filthy; hands eczematous and scabbed; the scalp was in the same foul state, and his head was shaved immediately. There was some dulness under the left collar-bone. Subsequently he stated that he had had pain in the head for two days before he came in. No albumen in urine. His eyes were examined with the ophthalmoscope; discs found of a pink colour in the centre, but irregular and white at the entire circumference; some knots on the retinal vessels, here and there, and a few white patches of probably choroidal atrophy. The eyes were large, prominent, and staring. He was ordered tonic medicine and a generous diet.

July 2.—For the last few days he has been in a drowsy condition, lying on the right side, and complaining of pain when moved, and is now passing motions and urine involuntarily. Tongue is sticky, and the mouth clogged; no thirst complained of; no heat of surface; no sweating.

4th.—Did not have a good night; was restless; got out of bed several times, and screams when touched. Passes plenty of water. Eyes look larger and more staring than ever; is drowsy; will not protrude his tongue or answer questions. Had a rigor this morning at 9 a.m. Is thin, and takes very

little food. Seems to use the left arm much more than the right, the fingers of the right hand being flexed, and the arm lying across the stomach. Sensation and reflex action in feet good and equal. The face is drawn to the left side.

6th.—Swallows better. Can speak now but indistinctly and in a slovenly manner. Is still drowsy, but is more intelligent. The tongue is directed to the left side. Can move the right arm a little.

8th.—Is not so well; more delirium; tongue foul. Eyes are turned up, and rather to the left; they are still vacant, large; he looks bewildered. There is pallor and anæmia. Takes nothing solid; no sickness; cannot be induced to answer questions.

9th.—Inequality of the pupils, the left being much the smaller, the right being natural. The same dreamy, semi-unconscious condition; some diarrhœa present; eyeballs prominent.

10th.—Is dying. Eyes are fixed, and turned to the right; pupils small; balls very prominent.

Post-mortem Examination.—Skull-cap thin; no traces of injury; dura mater natural in appearance. Brain two pounds and three-quarters; anæmic; a good deal of watery fluid in ventricles; no clot, no softening; vessels healthy-looking. (All parts of the brain were carefully examined for lesion.) The dura mater was removed, and found to present an unusual state; the superior longitudinal and lateral sinuses containing firm adherent thrombi of a light red-brown colour, showing no tendency to break down. The thrombus on each side seemed to tail off as the jugular fossa was reached. The breasts were much enlarged, especially the left one. The left testis was in the inguinal canal, the right one being in the scrotum. There was an abscess-cavity in the upper part of the right lung, and scattered consolidations, which were seen also in the left lung. The remaining organs were healthy.

Remarks.—I was much struck with the remarkable and persistent prominence of the eyeballs in this case—a feature which was not observed at the post-mortem examination. The want of definiteness of the symptoms left the diagnosis an open one.

ST. PETER'S HOSPITAL.

RECURRENT STONE IN THE BLADDER, SIX YEARS AND A HALF AFTER LITHOTRITY—LITHOTRITY—CURE.

(Under the care of Mr. TEEVAN.)

Edwin E., a plumber, aged thirty-one, in fair health, was admitted into the hospital on March 16, 1878. Six years and a half ago the patient was an inmate of the hospital for a stone nearly the size of a walnut, of which he was completely cured by lithotrity. The details of the case are to be found in the *Medical Times and Gazette* for July 20, 1872, page 69. Since then he has been perfectly well and at work till a few weeks ago. About a month past he began to suffer from a recurrence of some of his old symptoms, and not getting better, he applied at the hospital for relief. He stated that he was obliged to make water very frequently, and that he experienced considerable pain at the tip of the penis at the end of micturition. On several occasions he had passed a few drops of blood. All his symptoms were aggravated by exercise. Every now and then whilst urinating the stream of water would suddenly stop, and he had to change his position to remove the stoppage. Urine contains a good deal of mucus. Mr. Teevan examined him, and found a small stone.

On March 18, at 3 p.m., Mr. Teevan passed a slender lithotrite, caught the stone (which was the size of a hazel-nut), and crushed it. The patient did not take any anæsthetic, complained of no pain, and passed no blood. At 9 p.m. the same evening he was quite comfortable. The pulse and temperature were normal.

19th.—Patient has passed a good deal of *débris*, several portions of which were of hard uric acid.

23rd.—To-day Mr. Teevan crushed several fragments. At 9 p.m. the patient complained of a good deal of pain, and said he felt as if there were a piece impacted in the urethra.

24th.—Has passed a great deal of *débris*.

25th.—Some more small pieces have come away to-day.

28th.—Patient says he thinks he is well. Examined with the lithotrite, but nothing was found.

30th.—Is only called up once in the night, and in the day-time holds water for four hours. Says that he feels quite well in all respects. Sounded, but nothing could be found.

31st.—Left the hospital to-day.

April 22.—Patient called to report himself. Is quite well, and has been at work ever since he left the hospital. Urine clear, acid, no albumen or mucus; specific gravity 1014. The stone was phosphatic, with an oxalate of lime nucleus.

Mr. Teevan observed that in this case it was very clear that the second calculus was a fresh formation, for after the first operation the patient had enjoyed many years of perfect health, and complete freedom from all the symptoms of stone. One of the inestimable advantages conferred by the introduction of lithotrity was that it robbed a second operation of its terrors. No patient who had been cut for stone need ever again be subjected to such an operation, unless through his own neglect or his doctor's failure to discover the calculus sufficiently early while it was yet within the range of lithotrity. Patients who had been operated upon for stone were often very anxious to learn what were their chances of being troubled with a recurrent one. They could be assured that there was but a slight chance of such an occurrence after lithotomy or lithotrity, and that they need never apprehend anything more disagreeable than one introduction of the lithotrite if they would only apply early enough for advice. In the present instance the patient had applied—not indeed on the first intimation of trouble, but after its existence for one month only, so that he was quickly and completely cured of his complaint, with but little discomfort to himself, and without running any risk to life.

The Demonstrations at the Paris Morgue.—The *Gazette Hebdomadaire* (April 19) states that Prof. Brouardel's course of lectures, delivered at the Morgue at the suggestion of M. Devergie, has just been concluded for this year, having met with great success. More than forty admissions were issued, and the students have attended the course most regularly. The magistracy has encouraged the experiment, so that there has been no want of subjects whatever, numerous cases of drowning and infanticide having furnished ample material for good practical demonstrations. The Morgue itself gives very poor accommodation for the lecturer and his audience; but if its utility and importance in this respect can be shown, there seems no doubt that the authorities will soon rectify this defect.

The New Maternity at Brussels.—Cases of puerperal fever having broken out in the lying-in wards of the St. Jean Hospital, which compelled these being closed, the hospital administration, in place of at once erecting a new, expensive edifice, has utilised seventeen separate but contiguous houses which it possesses in an adjoining street. Seven of these houses have been devoted to the obstetrical clinic for medical students. The walls separating their courtyards have been pulled down, but otherwise there is no communication between any of the houses, which, being surrounded by open streets, are easily ventilated. Each house contains six chambers, only communicating with, and well ventilated by, a central staircase. Each room is furnished in the simplest manner, the bedstead as well as the infant's cradle being of iron. There is also an electric bell which summons assistance at any hour of the day or night. Each room accommodates but one woman, who is delivered in the room itself. Prof. Pigeolet and Dr. Charlier have the direction of the service, assisted by two *internes*, whose service lasts for ten days each (about twelve deliveries taking place in this time), during which period they are interdicted from going to the hospitals or amphitheatres. They are lodged and boarded in the establishment. They alone are authorised to make examinations (having first dipped their fingers in carbolised oil and brushed the nails), and they complete the delivery when necessary. On the tenth day the woman is discharged, and her room is disinfected and left empty for about a month, all the linen, bedding, etc., being cleansed and disinfected. When any woman exhibits the slightest symptom of peritonitis she is taken to the adjoining hospital and her room is disinfected. No cooking is allowed in the rooms, all food being prepared in the hospital kitchen. Another group of these houses is employed for the instruction of midwives.—*Presse Méd. Belge*, May 5.

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Medical Times and Gazette.

SATURDAY, MAY 18, 1878.

A SCOTTISH MEDICO-LEGAL CASE.

Towards the end of last week there was concluded a case tried in Edinburgh, which in many ways recalls the memory of such *causes célèbres* as those of Palmer, De la Pommerais, and Pritchard, for the accused, who was found guilty, was, like these, a man who had gone through a course of medical training, and, it is said, had graduated in France. M. Chantrelle, however, did not remain in his own country; he came to what its inhabitants are fond of calling the "Modern Athens," or the "Northern Capital," and there he settled as a teacher of the French language. He was clever, versatile, and in a certain way accomplished, and he rapidly succeeded in securing a valuable and extensive connexion in Edinburgh. Unfortunately, he had brought with him something more or less than the attributes just referred to, for he seduced one of his pupils whilst yet a girl, he married her, ill-treated her, and went steadily to the dogs. Their married life lasted twelve years, during which period several children were born. Chantrelle himself seems to have gone persistently wrong: all his fine connexion was lost, he was no longer in a position to maintain himself as a teacher, and he had recourse to other means. He applied for the post of agent to an accident assurance society; and he was careful to institute inquiries as to what exactly constituted an accidental death. Next, he insured his wife's life for £1000—not in that office, but in another of the same kind. Creditors were urgent; and the prosecution assumed that this insurance was deliberately made, against his wife's wish, with a view to a speedy realisation. Madame Chantrelle feebly objected, for her husband had often threatened to poison her, "in such a manner," said he, "that no one could ever detect the poison"; and she even expressed the belief that she would not long survive the effecting of the insurance. Nor were her fears without grounds, for on January 2 this year she died of opium-poisoning.

The whole case is so intricate from a medico-legal point of view that it must be carefully examined; and in this connexion it is meanwhile hardly possible to do so. But the case is fruitful of instruction, and not least in the mode of its conduct. Supposing such a case had occurred in England, what would have been done? In all probability the nearest practitioner or the regular family attendant would have been called in. Possibly he might have asked some one else to see the case; possibly not. The patient would, we take it, have died under any circumstances. But again, in England there might or there might not have been a coroner's inquest, and there might or there might not have been a regular judicial investigation thereafter. But in this case we find a very different mode of procedure. First, Dr. Carmichael was called in. He had known Chantrelle, but had not attended the family. Chantrelle suggested that the cause of his wife's illness was gas-poisoning, and Dr. Carmichael sent for Dr. Littlejohn to see the case. Their suspicions were aroused, and the patient was sent off to the Royal Infirmary, out of all reach of further mischief. Here she was received by Dr. Douglas Maclagan, who at once diagnosed narcotic, not gas, poisoning. Dr. Maclagan is a well-known toxicologist, and he is Professor of Medical Jurisprudence in the University of Edinburgh. Dr. Littlejohn occupies a similar position in the Extramural School of Medicine, and is moreover, Adviser in Medico-Legal Affairs to the Crown in Scotland. In the hands of these gentlemen rested the case of the dying woman up to the time of her death, and under their superintendence the post-mortem examination was made. The analysis was made by Dr. Crum-Brown, Professor of Chemistry, and Dr. Fraser, the Professor of Materia Medica (and successor to that Nestor of Physic, Sir Robert Christison), in the University of Edinburgh. The whole investigation and prosecution were conducted by the Crown authorities, the prosecutor on the occasion of the trial being the Lord Advocate himself, the highest legal functionary in Scotland. Of course we do not imply that every case is carried out in this fashion, but we fully believe that, wherever possible, the same mode of procedure, if not the same individuals, would be employed.

In vivid contrast to such a manner of conducting medico-legal investigations, two cases promptly recall themselves to our minds. Take the Bravo case and the so-called Penge "mystery." In both cases there was an element of filth which made them to be eagerly devoured and discussed by the public; both were, however, marked by a display of incompetence well-nigh unequalled. Instance the discovery of the matters vomited by Mr. Bravo many hours after his sudden illness, the destruction of all other vomited matters, and the consequent imperfect analysis; above all, the behaviour of the coroner. Or shall we turn to Penge. Notes lost, supplemented, added on to at a consultation. Finally, a woman condemned to death for adultery, and subsequently receiving a free pardon for a crime she had never committed!

Is it not time we tried a little more of the Scottish system in England? The newspapers might have fewer "sensations," but would the public suffer from that?

We shall revert to the scientific aspects of the case on another occasion.

OUT-PATIENT REFORM.

By common consent the out-patient departments of our hospitals need reform. How this may be best effected is the difficulty. Can changes be made which will take away the evils of the system, and keep all that is good in it? To answer this question we must look at it from the point of view both of the patients who come there and of the medical men who have to see them. The problem can be perfectly solved only by the proof of experience, but we shall try to

point out the principles to which we ought to keep in dealing with it.

The patients come there for advice and treatment; but they come in such numbers that it is impossible for any medical man to see them all properly in the allotted time: hence the great majority are asked a few hasty questions, hurriedly examined, and ordered medicine; and on their later visits seen even faster, and often by a different person. It is therefore obvious that, in the interests of the patients themselves, their numbers should be only such that the physician or surgeon may have time to go into each case.

The first change, then, must be to lower the numbers. This being granted, we want to find what is the best principle on which to select some and exclude others. First, there is what may be called the fiscal plan—to make it the duty of some official to inquire into the patients' means, and reject those who seem to be well off. This, at first glance, looks well. But, first, the out-patient departments of general hospitals in poor districts really receive but a small proportion of those who are actually not fit persons, so that for them a further means of selection is wanted. Next, the task of deciding whether a patient's means are adequate or not to pay medical charges is a most difficult one. Not only the income of the patient, but the number of claims upon it, the degree to which the disease is disabling, its chronicity, and the cost of the treatment it requires, must all be thought of; and to do this properly calls for the nicest tact and discretion. And there is another objection—that this system takes no account of certain medical aspects of the case, which we shall show to be highly important.

Looking at out-patients therapeutically, we may put them in three groups—first, those whose ailments are such that medication simply, with such slight operative procedures as can be safely done in the out-patient room, will wholly cure them; second, those whom the measures we have mentioned will do no more than relieve, cure being possible only under altered conditions of life; third, those chronic and incurable cases for whom little or nothing can be done, and who get harm from the journey to and from the hospital, and the weary hours of waiting to be seen. Plainly, the latter class should be got rid of. The attendance of the second class is of doubtful service to themselves, for too often they trust in the bottle of physic, instead of following the advice given with it. It is the first class alone who really get good. To some of these it might be cheaper to go to a general practitioner, than to incur the long waiting, followed by the short examination, of the hospital out-patient room. Were these, together with those we have put in our second and third classes, eliminated, then we think the out-patients would be reduced to manageable numbers. A weeding based on this classification is obviously the best. The objection to it is, that the labour it entails falls upon the doctor, who must diagnose the case before he can say it is an unfit one.

But we ought not forget to consider out-patients from the scientific side. For a physician to advance much in knowledge and skill from out-patient practice, as at present conducted, is almost impossible. It is so, because the hurry prevents accuracy, and because verification is not possible. Now and then a worker of unusual zeal can hunt up a few cases so as to get at the sequel, but it is only by an expenditure of time and trouble impossible to a man at all fully occupied. Surgical cases can be seen more quickly, and precision is easier than in medical cases; hence the evil is not so great there. The chief advantage which a large out-patient practice has for a physician is, that it affords to one working at a special subject an immense field for selection. If such a one can command the beds as well, then the larger the numbers, the better for his purpose.

Here, then, are the ways in which an out-patient department may be of the greatest use. We want to keep for the scientific worker as large a field for selection as we can, and to secure the attendance, as long as he requires, of those cases the course of which he wishes to observe. We want also, in the interests of the public, to retain those to whom good can be done by the simple means available in the out-patient room. And this done, we want to get rid of all the rest.

To make a selection on these principles is out of the power of any lay official; it must be done by a medical man. The obvious way of doing it is to let no patient attend twice, except by the order of the medical officer. Let him be requested to enjoin the attendance of all such as he can (by out-patient treatment alone) *cure*; and let it be understood, also, that he continues the attendance of patients in whom he takes an interest. Such a rule as this would place the out-patient physicians and surgeons of our great hospitals in their proper position of consultants at the hospital, as well as in private, instead of making them, as at present, a kind of gratuitous substitute for the general practitioner.

For most places we think this would be a measure radical enough. There is, however, one contingency in which it would fail to work; that is, when the number of new attendances is so great that the physicians cannot even make a selection properly. For such a plethora there are but two remedies. One is to augment the medical staff—a measure often followed by a corresponding increase in the number of applicants for treatment. The more time and trouble taken with the patients, the more popular the department will be with them, and the more will they crowd to it. The other is to diminish the number of patients, either by employing lay officials to inquire into their circumstances, or by throwing the duty of inquiry on the subscribers, by issuing fewer letters for a subscription, and therefore obliging those who have them to distribute to exercise greater discrimination. The former will be the most effective. We imagine it would quickly make the well-to-do anticipate the verdict of the inquirer by stopping away, and thus reduce his work to a minimum. Which is better for the funds of the hospital is another question, which we have not space to fully discuss. But we think that efficiency in the work that hospitals have to do is the first and chiefest consideration; and we believe that the hospital which fulfils its duty the most thoroughly will, in the long run, get the steadiest support from the public, even should strictness of administration alienate a subscriber here and there. The medical aspect of the question is the one which, chiefly at least, concerns us, and which we are fittest to treat of; and we therefore, while fully conscious that there are other considerations, make no apology for giving that the most prominent place in our remarks.

THE WEEK.

TOPICS OF THE DAY.

In spite of the utter failure of the short-service scheme as applied to the Medical Department of the Army, the authorities appear determined to apply it generally throughout the service. Thus the Royal Warrant which has just been issued to rearrange the conditions of service in the Veterinary Department in the Army is based on a similar system. The services of veterinary surgeons hereafter appointed are to be dispensed with on the completion of ten years' service, unless they be specially selected for further employment, and each will receive on his enforced retirement a sum of £800. If disqualified for duty through ill-health before the expiration of five years' service, a veterinary surgeon may receive half-pay for six months, and remain on

the half-pay list without pay for six months more, when, if still unfit for duty, his services will be dispensed with. Those who retire from ill-health after five years' service will receive a proportion of the £800 allowance. Every year the Commander-in-Chief may, on the recommendation of the Principal Veterinary Surgeon, and with the approval of the Secretary of State for War, select four veterinary surgeons to be retained in the service. Promotion will commence at twelve years, based on merit, ability, and foreign service. Veterinary surgeons will have a right to retire after twenty years on retired pay, and all except the Principal Veterinary Surgeon will be compelled to retire at the age of fifty-five years.

The thirtieth anniversary festival of the City of London Hospital for Diseases of the Chest was held last week, under the presidency of Mr. John Holms, M.P. It will be remembered that the present building in Victoria-park was opened by the late Prince Consort in 1855. During the past year 773 in-patients were admitted, and relief was afforded to 14,485 out-patients. The chairman, in his address, impressed upon his hearers the important fact that an additional sum of £1300 annually is required in order to enable the charity to accommodate its full complement of inmates. The subscriptions announced upon the occasion amounted to the sum of £2916.

The Sanitary Institute of Great Britain have obtained the permission of the Kew Committee of the Royal Society to conduct experiments with the ventilators exhibited at Leamington in October last, at the "Experimental House," Kew Observatory. Scientific gentlemen desirous of inspecting the ventilators at work will be furnished with tickets of admission as soon as the arrangements are completed, on making application to the Registrar of the Sanitary Institute. It is further announced that an examination of local surveyors and inspectors of nuisances by the Council of the Institute will be held at the rooms of the Medical Society of London, commencing on June 4 next.

It will be gratifying to those English surgeons who have suffered so much, and laboured so hard in their efforts to relieve the sick and wounded of Turkey, to hear that their services have been appreciated in high quarters. The Sultan recently received Mr. Barrington Kennett, the Stafford House Commissioner, and, in thanking him very cordially, desired that it might be made known how deeply grateful he felt to the British nation for all it had done for his suffering people and soldiers, and to all who had taken the lead in charitable efforts. His Majesty asked for a list of the Stafford House surgeons, and specially requested that they might each be thanked in his name. A more substantial recognition of their services, in the shape of the bestowal of a cross or order upon each gentleman, might not have been out of place; perhaps the demand for a list of their names may foreshadow something of this sort.

At the last weekly meeting of the Metropolitan Board of Works, presided over by Sir J. M. Hogg, M.P., the Works Committee recommended that, having regard to the state of the business in the House of Commons, the chairman should be requested to take steps to stay further proceedings on the two Bills relating to the water-supply of the metropolis. Mr. Runtz, who moved the adoption of the recommendation, recapitulated the history of the movement since 1868, and pointed out that over one hundred provincial towns now administered their own water-supply. The chairman admitted that there was not the slightest chance of the Purchase Bill being read a second time this session, and the recommendation of the committee was ultimately agreed to.

An opposition to the proposed new University of Manchester has been commenced at Nottingham. The Town Council there has forwarded a memorial to the Privy Council, stating that the Nottingham Corporation are now spending no less a sum than £60,000 in the erection of university buildings, and reporting that they have already received considerable endowments. The memorial further advances an opinion that it is not desirable to increase the number of universities conferring degrees, except under extraordinary circumstances, and prays the Privy Council to carefully inquire whether such circumstances exist in any case where the charter of a university is asked for, also to see that the strictest guarantee shall be taken that the standard of degree shall not deteriorate, but shall be made sufficiently stringent to heighten the tone of education throughout the country. In the present instance it is desired to be shown that no sufficient cause has been made out for the establishment of a Northern University, neither have sufficient guarantees been given that such an establishment would prove a success; and that the present memorialists would take no part in the proposed Northern College, inasmuch as they are acting with the University of Cambridge.

An influential meeting has been held in the parish of St. Marylebone to consider the advisability of converting the disused burial-grounds in Paddington-street into a garden for the people. The scheme has received the approval of the rector and the clergy of the parish, and as neither the graves nor the coffins are to be disturbed, and all monuments bearing legible inscriptions are to be carefully preserved, there is no reason to assume that any opposition will be offered to such a sensible improvement. A resolution in favour of the proposed object was unanimously carried at the meeting, and no doubt the faculty for carrying out the necessary works will be at once applied for.

The new dietary tables for prisons in England and Wales, which came into operation on the 15th inst., have been made public by the Home Secretary. The report of the Committee appointed by the House of Commons to inquire into the subject of prison dietary fixed the basis on which the present tables are formed. The report itself is too long to notice in detail, but it may be mentioned that the present scale admits a greater variety of food than has hitherto been customary, the quantities allowed not being materially altered. The dietary now consists of four classes, the fifth class which has hitherto existed not being considered necessary. At many prisons cooking for the Sunday's dinner had, up to the introduction of the new dietary, been avoided by giving bread and cheese, or milk and bread, but now boiled potatoes and suet pudding are given. Cheese has been expunged from the new list, also Indian meal pudding; for this latter stir-about has been substituted, every pint and a half of which contains three ounces of Indian meal and three ounces of oatmeal. The bread used is made of whole meal, and the Governor may occasionally order specified quantities of colonial beef or mutton preserved by heat, American or other foreign beef preserved by cold, beans and fat bacon, fresh fish, salt meat, or salt fish, to take the place of English beef. In fact, the criminal population has little real reason to complain of the food provided for it, which is vastly superior to that obtainable by a large section of the honest working classes.

The monthly return of the Registrar-General for Scotland for April last shows that the deaths of 2837 persons were registered in the eight principal towns during that period. Allowing for increase of population, this is four above the average number for April during the last ten years, and 240 above the number recorded in the previous month. Of the 2837 deaths, 1222, or 43 per cent., were of children under five years of age. The zymotic class of diseases proved fatal to 450 persons, constituting 15·9 per cent. of the whole

mortality. The prevalence and fatality of whooping-cough in Glasgow and in Aberdeen, of measles in Edinburgh and Dundee, and of measles and diarrhœa in Leith, caused the above rate to be exceeded in each of these towns.

The probable success of the movement for establishing home hospitals for the middle class is evidenced by the fact that thirty-two governorships (of fifty guineas each) have been taken up by the most important banking and financial firms in London. The amount realised up to the present time exceeds the sum of £8600.

DEATHS AFTER THE ADMINISTRATION OF ETHER AND CHLOROFORM.

A DEATH has occurred under the administration of ether at the London Hospital. The subject of this accident was admitted into the Hospital on Friday evening, the 10th inst., suffering from a strangulated hernia. The symptoms—constipation (dating from the previous Tuesday), dragging pain, and stercoraceous vomiting—continuing, although the patient had himself reduced the hernia before his admission, it was decided to anæsthetise the man in order to more fully examine him, and with the view, if necessary, to operate. Ether was administered by one of the house-surgeons; the patient was readily brought under its influence. There were no untoward symptoms of any kind; the examination was proceeded with. The man breathed quietly and regularly for a few minutes, and then gave one sudden catching effort at inspiration, and died in spite of every effort to save him. It is noteworthy that his pulse continued to beat for about thirty seconds after breathing had ceased. At the autopsy the heart was found firmly contracted. There was no strangulation, though the gut showed marked traces of having been tightly constricted.

A recent death from the administration of chloroform was investigated on Saturday last by the Coroner for West Middlesex. Mr. John Good, a dentist of Kensington, stated that on the 9th inst. Mrs. Dormer brought her daughter, aged ten, for the purpose of having some teeth taken out, and at the special request of the mother an anæsthetic was administered by Mr. Thrupp, who always assisted him. No examination was made as to the physical condition of the child previous to the operation, and Mrs. Dormer was not in the room. A mixture of ether and chloroform was used, and the child did not struggle at all. As soon as she became sufficiently affected by the anæsthetic, three teeth were removed. A shadow was then seen to pass over the child's face. The usual remedies were immediately applied for restoring her, but without avail, as she died in a few minutes. Mr. J. G. Thrupp, of Kensington, a medical man, deposed that he had made the administration of anæsthetics his particular study, having administered them officially at St. George's Hospital for some years. The child appeared to be perfectly healthy, the heat of the body being normal. No examination was made by thermometer. About a drachm and a half of the anæsthetic was administered, and the child was reduced to a state of total insensibility. After the operation was finished a change came over the child, and witness knew by the symptoms that she was either going to vomit or die. The circulation of the blood suddenly failed, and death immediately ensued. The jury returned a verdict that death was caused by syncope from the administration of chloroform, and that the death was due to misadventure.

THE BRITISH MEDICAL ASSOCIATION AND THE MEDICAL AMENDMENT ACT.

AT a meeting of the Metropolitan Counties Branch of the British Medical Association, held at the house of the Medical Society of London, on Wednesday, May 15, Mr. Septimus Sibley, President, in the chair (Dr. Waters, of Chester, and Dr. Haughton, of Dublin, being present as visitors), resolutions to the following effect were submitted to the meeting, and adopted with some slight verbal alterations:—"1. That an amendment of the law is required in order to prevent the assumption of medical titles by unqualified persons; and that the Branch regards with satisfaction the proposals to amend Section 40 of the Medical Act for this purpose. 2. That every person placed on the Medical Register should have a qualification in both medicine and surgery, so that the fact of registration may be a guarantee to the public that the individual possesses at least a minimum (and at the same time sufficient) qualification to practise all branches of the medical art; and that, in order to insure this, it is desirable that the formation of conjoint examining boards should be made compulsory in each division of the kingdom. 3. That it is desirable that the Medical Council should have the power of removing from the Register the names of the holders of colonial or foreign diplomas or degrees, in the same way as the medical corporate bodies possess such power with regard to their fellows and members. 4. That it is desirable that the voice of the profession should be expressed in the Council by means of direct representation. 5. That it is not expedient to oppose the progress of any Bill which may contain satisfactory provisions (1) for the establishment of conjoint examining boards, (2) for the amendment of the penal section of the Medical Act, and (3) for the registration, under proper supervision, of foreign and colonial degrees and diplomas, on account of its not including provision for the direct representation of the profession in the Medical Council."

MYELOGENIC LEUCOCYTHÆMIA.

As the result of a long discussion of cases and opinions (*Berliner Klin. Wochenschrift*, Nos. 6, 7, 9, 10, 1878), Professor Neumann, of Königsberg, points out that the following conclusions are warranted as to the connexion between leukæmia and changes in the marrow of the bones:—1. There are cases of leukæmia, for the development of which no cause can be assigned but disease of the bone-marrow. Hence they may be considered as examples of pure myelogenous leukæmia. 2. No case of leukæmia has as yet been described, in which on examination the marrow of the bones has been found normal. Hence there is no objection to the view that leukæmia is *constantly* associated with a pathological alteration of the marrow. 3. The ordinary view that a leukæmia can originate in disease of the spleen or lymphatic glands requires to be re-examined and tested, since the proofs formerly adduced in favour of it took no account of the marrow of the bones. Of late, not a single case has been observed in which the possibility of disease of the bone-marrow could be excluded, and the leukæmia proved to be of purely splenic or lymphatic origin, with the same certainty as has been done for the bone-marrow in a case of Dr. Litten's, of Berlin, where there was not a trace of disease in the spleen or lymphatic glands. Professor Neumann regards the bone-marrow as "an organ which in every case of anæmia becomes the seat of important alterations which disturb its physiological equilibrium." These alterations, he thinks, consist in a sort of compensatory increase of its physiological hæmatopoietic function, so that the deficiency of red blood-corpuscles in the general circulation is filled up by an excessive development of white cells in the marrow; the final result being, if the anæmia persist, a pathological hyperplasia. "Thus," he says, "it is possible that the transition of a variety of anæmic conditions into leukæmia may be brought about through the medium of the bone-marrow." Of course there is at present but a small basis in fact for this hypothesis, but it may nevertheless direct

attention to a new line of investigation which may eventually prove fruitful in results.

ZYMOTIC DISEASES IN LEICESTER.

The Assistant Officer of Health for the borough of Leicester, Dr. William Johnston, F.G.S., has presented to the Sanitary Committee of the Leicester Town Council a report on the principal zymotic diseases which prevailed in that district during the year 1877. This report is most exhaustive in all its details, and is accompanied by carefully prepared charts and plans showing the distribution throughout the town of the deaths resulting from these diseases. It is to be gathered from this report that, in Dr. Johnston's opinion, the whole system of sewerage is of insufficient capacity to meet the daily requirements of the town; the main outfall sewer is running full during the day, and little or no means of ventilation exist for the sewers in the greater part of the town. The "summer" diarrhœa, prevalent in Leicester, may therefore, in his opinion, be said to be dependent upon the pollution of the air by the escape of sewage gas from the hastily devised, badly constructed, non-ventilated, and unamended system of sewers at present in existence there. Dr. Johnston further points out that the sewerage of Bristol is excellent, and constructed on a plan that not only secures self-cleansing sewers, but also admits of the least degree of tension being reached by the contained gases; as a consequence, this town takes precedence of other large English towns for its low death-rate from summer diarrhœa. The report, which, from the amount of labour expended on it, is undoubtedly a valuable one, should stimulate the local sanitary authorities to amend some at least of the more prominent defects made public by Dr. Johnston.

THE GROSVENOR GALLERY.

We do not here refer to the collection of pictures and drawings Sir Coutts Lindsay has got together, but rather to the accommodation provided for dinner parties under his roof in Grosvenor-street. On Tuesday evening the members of the Pharmaceutical Society and their friends dined there. At the last moment there was a great influx of unexpected guests, and the eating department of the Grosvenor Gallery completely collapsed. Thereafter there was something like a scramble among the waiters each for the chance of getting something for his own table, and many guests were kept waiting in vain for what they desired in the way of food. Such accidents as a sudden influx of guests are sure to happen now and again at public dinners. With a view to such a contingency in future, we would strongly advise a thorough reorganisation of the dining arrangements at the Grosvenor Gallery before another such task is undertaken.

THE MEDICAL ACTS AMENDMENT BILL.

In the House of Lords, this week, Lord Winmarleigh presented a petition from medical practitioners of Cheadle and neighbourhood, praying that no Bill may pass regulating the medical profession unless provision be made in it for the direct representation of the profession in general in the Medical Council, and for the compulsory establishment of joint boards of examination on the principle of equal fees and equal examinations in each division of the kingdom; and Lord Aberdare presented a petition for certain amendments in the Medical Bill.

COLLEGIATE ELECTION.

It is understood that at the annual election of Fellows into the Council of the College of Surgeons, in July next, the retiring members, Messrs. Erasmus Wilson, Henry Lee, and Barnard Holt, will offer themselves for re-election; the following candidates will also be brought forward, viz. (taking them in seniority of fellowship):—Mr. Joseph Lister, F.R.S., of King's College, December 9, 1852; Sir Henry Thompson, of University College, November 10, 1853; Mr. John Wood, F.R.S., of King's College, May 11, 1854; Mr. Henry Power, of St. Bartholomew's, December 1, 1854; Mr. Edward Lund, of the Manchester Infirmary, June 12, 1863; and Mr. John Gay, of the Great Northern Hospital, a late member of the Council. Another probable candidate has been mentioned. We believe this is the largest number ever started.

THE THRUSTON SPEECH IN COMMEMORATION OF DR. CAIUS.

DELIVERED IN THE CHAPEL OF CAIUS COLLEGE, CAMBRIDGE, ON MAY 11.

By LEWIS SHAPTER, M.D. Cantab.,
Physician to the Devon and Exeter Hospital; Consulting Physician to Wonford House Hospital for the Insane, Exeter.

It becomes part of our duty on this occasion to consider the progress of medical science since the time of Caius—the founder of this College,—and with a due respect for the memory of one, the brief inscription, "*Fui Caius*," upon whose monument in our midst appears to be constantly speaking of a certain instructive simplicity of character, we shall do well to recall the period in which he as a physician practised, and so learn the manner in which his life—earnest and sincere as it was in the pursuit of knowledge—not only stamped the age in which he lived with an incentive to further advancement and progress, but also gave it that tone of scholarly thought which might serve as an example for all ages.

Caius lived in an era not altogether fortunate for himself or for the profession to which he belonged; but he and his predecessor Linacre may be said to have paved the way for the great discoveries of Harvey and those that followed. Linacre, the Oxford physician, and Fellow of All Souls, was born in the year 1460. He commenced his professional career in a time when the power of licensing practitioners of medicine was confined to the bishops in their several dioceses, and when, as a consequence, the whole practice of physics was confined to favoured empirics, and oftentimes to illiterate vendors of herbs. Linacre set himself to strike at the root of this evil, and in the year 1518 he obtained, through his interest with Cardinal Wolsey, letters patent from Henry VIII., constituting a corporate body of Physicians in London, in whom should reside the sole privilege of admitting persons to practise within that city and seven miles round. Thus was established the Royal College of Physicians of London, with Linacre for its first President; and through this means the status of physicians, and indirectly the whole of the medical profession, was raised to a position which it is the business of the present day to strengthen and ennoble. Linacre, however, did not stop here; his measures for advancing the social status of the profession would have been of little avail had he not also promoted means for the instruction of those who were in future to practise the medical sciences. Linacre himself gave temporary lectures on Physic at Oxford; and before the regular foundation of a professorship of Greek, by Cardinal Wolsey, he also taught the Greek language in that University. There can be no doubt that his attainments as a scholar contributed largely to his eminence as a physician; and he not only employed the wealth and influence which his success at the courts of Henry VII. and Henry VIII. afforded him to promote the interests of science, but he also finally endowed two medical lectureships at Merton College, Oxford, and one at St. John's College, Cambridge, to perpetuate the work which he had so nobly begun. Linacre, an upright and humane physician and a munificent patron of letters, died on October 20, 1524, and a monument was erected to his memory in St. Paul's Cathedral by his ardent admirer and successor in fame, Dr. Caius.

Caius or Key, who must have risen to eminence soon after the death of Linacre, appears to have moulded his character

after his self-chosen preceptor. From his favour with Queen Mary he continued the work of Linacre in the advancement of learning, by obtaining a licence to advance Gonville Hall into a college, and he endowed it with fellowships and scholarships. Like Linacre, he was a Court physician, and enjoyed this honour during the successive reigns of Edward VI., Queen Mary, and Queen Elizabeth. He was a man, perhaps, of more versatile learning and deeper thought than Linacre; his works testify to his thoughtful labour; and, in the language of a German contemporary, he was a man of consummate erudition, judgment, fidelity, and diligence, and the most learned physician of his age. Like Linacre, he became President of the Royal College of Physicians, and was untiring in his zeal for the maintenance of its rights and privileges. It is interesting to note that this zeal of Caius in upholding the bodies in which he was incorporate was exemplified not only in respect of the College of Physicians, of which he was President, but also in the College in which we now are, of which he was Master. A difference appears to have arisen in the reign of Queen Elizabeth between the physicians and surgeons of the day, as to the right of a surgeon to administer internal remedies in sciatica and other kindred diseases. Caius was summoned to appear before the Lord Mayor and the Queen's delegates, and it is recorded that he defended the rights of his College so learnedly, even against the opinions of the Bishop of London and the Master of the Rolls, that it was unanimously agreed by the Queen's Commissioners that it was unlawful for the surgeons to practise in such cases.

It also fell to his lot to defend the University of Cambridge against the claim of Oxford to a greater antiquity. With all the forms of antiquarian precision he established the foundation of his University by one Cantaber, 394 years before Christ. He granted the University of Oxford their claim to an origin as far back as Alfred, but he refuted their claim to priority of origin, and established a prior existence for Cambridge of over 1000 years. For his College, of which he was Master, he clearly had a high regard; he enlarged it by the erection of a new square, and the low gate "Humilitatis," the larger portico "Virtutis," and the gate leading to the schools "Honoris" illustrate to this day his quaintness and originality of character.

It is instructive and interesting to record the versatile talent, scholarly influence, and jealous regard for the interests of others, which accrued to the characters of the two great physicians of this time. Caius and Linacre did not live to add any new or great discovery to the medical sciences, which might have been destined to mould professional thought for the future; but they upheld the science of medicine and made it respected; they made the professors of medicine the leaders of Court and public opinion, and they may be even said to have laid the foundation-stone for the pillar of progress which after-generations laboured and are labouring to complete.

How, then, since the time of Linacre and Caius, has the science of medicine progressed? and how has it maintained the principles upon which its former benefactors so nobly dwelt and fearlessly acted? The names of such men as Harvey, Sydenham, and Jenner speak for themselves. The death of Caius in 1573 may be said to have closed an epoch of medical history when medical practice was carried out of the region of vain superstition and out of the hands of ignorant practitioners into the boundaries of a science and a scholarly profession. At the same time, the vital mechanism of the human body remained a mystery, and cultivated observation could only result in hypothetical treatment and empiricism. Harvey dissipated the cloud by his discovery of the circulation of the blood, and we know now how to value this discovery so much the more when we can gather conclusions as to the treatment of disease by the state of tension or relaxation of the arterial pulse and wave. Sydenham's life was a triumph of good sense over vague hypothesis. He followed the guidance of nature and experience, and he held up to the physicians of his time the practical lessons of skilful research. Jenner, by his discoveries on vaccination, supplied an impulse to preventive medicine, irrespective of the world-wide value of the doctrine itself. In our own day the germ-theory of disease is slowly taking root, and sanitarians are striving to teach the world how to stamp out typhoid fever and that large class of diseases that thrive only from overcrowding, want of light, want of air, want of ventilation, defective drainage, and unwholesome food and drink, as eagerly and conscientiously as Jenner in his day sought to destroy small-pox. It remains for society at large to accept this teaching, and for learned societies and seats of learning to promulgate it; and to this end may we hope that the medical profession and the State may again rise to such close relationship as existed between them from the time of Henry VII. to the reign of Queen Elizabeth, through the scholarly influence of Linacre and Caius.

If, then, our knowledge of the human frame has increased, if pathologists have taught us new lessons as to the progress and origin of disease, and if mechanical ingenuity has illumined portions of the living frame, which before were unknown, it can scarcely be wondered at that our resources for treatment have also increased. Where previously there was empiricism, supported by hypothesis, there is now scientific certainty in the handling of drugs. Where previously the modes of administering medicines were primitive, now the means are various and more effective. Where previously a combination of drugs in a medicinal potion was looked upon with a kind of longing regard for the marvellous, now a confidence in increased knowledge bids us sweep away mystery, and adopt clearness, legibility, distinctness, and simplicity in prescribing.

The age indeed since the time of Caius has not only been stamped with great discoveries, each of which may be said to have founded a new era of medical thought, but, more than this, we must admit the growing existence of a general desire for a scientific basis of observation. Where a few years since the value of a physician was tested by what was termed "experience," or, in other words, a mere practical acquaintance with the varying and often misleading phenomena of disease, now the physician must be tested by his thorough acquaintance with pathology, by his acceptance of modern thought, and by his preliminary knowledge of the structures of the body in health, as well as the proved or unproved multiple causes of disease. It is in times such as these that the cultivated mind must be looked to to grasp the progressive state of the age; and in memory of such men as Caius, and his predecessor Linacre, we look to the universities to guard their interests and promote their usefulness, not only as licensing bodies, but more especially as teaching and educating centres, and as moulders of thought. We ask the classical scholar to study the times of which I have spoken, and we ask those who are acquainted with university traditions to remember that attempts are being made to shake and depreciate the value of university graduation, by throwing open the medical degrees and now existing certificates of proficiency, without insisting upon the education guarantee of prior university training. Amidst, therefore, the progress of the times, it is not without reason that I have ventured to place before you Caius—the scholar, the physician, and the scientific investigator—a physician above the time in which he lived, a conqueror of prejudice, and a defender of principles. As a physician he united the science of physic to the scholastic attainments of the university, and handed down to posterity a trust generously founded and zealously guarded. In his memory may the same liberality of view, tempered with a jealous regard for corporate interests, stamp the progress of our own time, and tend to make this University a revered although an extended field for the cherished cultivation of the medical sciences.

MEAT SUPPLIES FROM SOUTH AMERICA.—So much attention has lately been directed to the supply of foreign meat to the country, and considerable enterprise has been shown by many persons in the promotion of schemes (often involving great loss) which have failed to attain the object in view, that it may be of some practical utility to take notice of the result of a large consignment of carcases of sheep from the River Plate to Havre. The steamer *Paraguay* left South America in October last, but was obliged to put in on her way home for repairs, and only recently arrived at Havre; but, notwithstanding the prolonged time occupied in transit, the carcases of the sheep were found, on delivery at Havre, to be in a perfect state of preservation. The meat when thawed differs little in either flavour or appearance from that of animals lately killed. So much interest has been felt in reference to this case in France, that a Government Commission from the departments for War, Marine, Agriculture, and Commerce has been appointed to inquire into the facts and report thereon.

FROM ABROAD.

Causes of Puerperal Poisoning.

In a lecture at the Maternité (*Gaz. des Hop.*, April 18), on "Some of the Causes of Puerperal Intoxication," Dr. Hervieux, after alluding to the reality of contagion, observed that another well-marked cause was overcrowding (*encombrement*), as shown by the different mortality observed in hospital and town practice. Of the operation of this cause he had had frequent proofs at the Maternité; for although M. Besnier, in his reports on the Paris hospital mortality, shows that for more than ten years the sanitary state of the Maternité has been excellent, this is entirely dependent upon the condition that all the beds of a ward shall not be occupied. Whenever, from circumstances, this condition has not been observed, puerperal accidents of more or less severity have invariably manifested themselves within from twenty-four to forty-eight hours. On the other hand, whenever the patients are isolated, a notable amelioration of their condition is as invariably produced; as is also the case when a patient is taken from a crowded place to one that is not so. We may establish a fundamental distinction between the effects of overcrowding and contagion. To overcrowding Dr. Hervieux attributes the generative power, and to contagion the propagative power. This opinion is quite as admissible as the theory of germs; for germs exist everywhere, while puerperal poisoning does not prevail everywhere. Overcrowding only exists in certain restricted localities, and it is in such that puerperal epidemics arise.

Another cause of propagation is the practice of post-mortem examinations. When, in 1860, M. Hervieux assumed the direction of the Maternité, imbued with the doctrines generally admitted at that period, he believed in the existence of an essential fever of a most mysterious and impenetrable origin, and pursued post-mortem examinations with ardour. But the more laboriously he worked in this direction, the more violent were the epidemics which broke out in the wards. In the belief that the autopsies might have something to do with this frightful mortality, he abandoned their performance, and a sensible amelioration ensued. But other reforms having been put into force at the time of the autopsies being given up, he thought that possibly he might have been mistaken in attributing these ill effects to them. He accordingly resumed them; but although they were accompanied by every available precaution, new catastrophes followed their resumption, as they also did on other occasions, when, at the solicitation of his *internes*, he had sanctioned them. The statistics of Prof. Spaeth, of Vienna, quite confirm this view of the poisonous effects of post-mortems; for while at the maternity of that city, where there are medical students, the deaths were 5·32 per cent., at the maternity for midwives they were only 3·47, the practising of autopsies being the only difference in the conditions of the two establishments.

M. Hervieux does not believe in the existence of true epidemic constitution as regards puerperal disease. There are, in fact, no puerperal epidemics in the literal sense of the word, it being entirely a question of locality. This is seen by the statistics of puerperal mortality occurring in the different hospitals of Paris during 1873-76, showing that no parallelism whatever exists. For example, in 1873, while at St. Antoine, it was 6·56 per cent., 8·65 at Les Cliniques, 8·88 at the Hôtel-Dieu, and 9·81 at the Necker, it was only 3·19 at La Charité, 2·91 at Beaujon, 2·38 at St. Louis, 2·09 at the Pitié, and 1·93 at the Maternité, and at the *bureaux de bienfaisance* it was only 0·29, and at the residence of midwives 0·93. These so-called epidemics are all questions of locality, independent of atmospheric vicissitudes, ozone, electricity, direction of winds, etc. They are dependent on the measures of internal organisation, hospital hygiene, and persons; and these causes, so far from being occult and mysterious, and beyond our comprehension, are material, comprehensible, and removable. The following are the rules which Dr. Hervieux has followed since his appointment to the Maternité, and by the observation of which he has secured such favourable conditions:—1. Surround the *accouchées* by plenty of space, disseminating them as much as possible. 2. Spare them all examinations that are not rigorously necessary. 3. Isolate *accouchées* who are ill from those who are well; and those of them who are dangerously ill from those who are only slightly so. 4. Suppress all autopsies. 5. Prefer to the alternate occupation of the wards their continuous occupation, with as much dispersion of patients as possible. 6. Appoint special attendants for those who are dangerously ill. 7. Whenever an epidemic seems about to manifest itself, restrict the admissions, or even close the service.

Eserine and Pilocarpine in Diseases of the Eye.

Dr. Henry Williams, Professor of Ophthalmology in Harvard University, states (*Boston Med. and Surg. Journal*, March 14) that during the last two years he has made extensive use of eserine (the active principle of the Calabar bean) in the treatment of ulcer of the cornea, of which he meets with a great number of cases both in hospital and private practice. The modern treatment of this affection in young children has consisted largely in local applications of solutions of atropia, under the idea that this acted as a sedative to the parts, and prevented hernia of the iris on the occurrence of perforation. Of its sedative action Prof. Williams is very sceptical; and there are strong objections to the use of this substance. The wide dilatation of the pupil admits a strong glare of light, which increases the photophobia, and, by increasing the spasmodic contractions, tends to keep up the morbid processes by the friction and close pressure of the lids upon the ulcerated cornea. Eserine, by its strong contractile action on the pupil limiting the amount of light admitted, might be expected to lessen the reflex action causing the spasmodic contractions; and the results of numerous trials prove that this is the case.

"In strumous corneal ulceration in children there is little chance that the iris will be involved by contiguity; therefore no objection exists to the use of eserine so far as any fear might be entertained of closure of the pupil by effused lymph, except where perforation of the cornea has occurred or is imminent. Even then, if the ulcer is at the margin of the cornea, eserine would be indicated, as it would draw the iris away from the perforation, and lessen the danger of hernia. If the ulceration is central, eserine may be still used as a curative means, being replaced at any moment by atropia in case of perforation being threatened."

There seems to be no doubt that sedative action often follows its application; and its employment causes little or no pain. A drop of a solution of sulphate of eserine (two grains to the ounce) may be placed on the eye in the morning, when the photophobia is greatest, and in about fifteen minutes the pupil contracts very strongly. The effect continues for about eight hours, and the drop may be repeated if required in the afternoon. A solution of eight or ten grains of borax to the ounce of water may be used also twice a day for lubricating and soothing the inflamed surface. In phlyctenular or herpetic eruptions of the conjunctiva or of the epithelial layer of the cornea, eserine is of service, especially when there is photophobia, and is far preferable to atropia, which is much too generally used. In traumatic or gonorrhœal ulceration, in ulcerations in advanced life or following exhaustive disease, and in creeping ulcer, eserine is useful; and the pain above or around the orbit, so often accompanying these, undergoes marked relief when the remedy has had time to act.

In the paralysis of accommodation and mydriasis often resulting from diphtheria, and sometimes from measles and scarlatina, eserine is very effective in abridging the duration of this abnormal condition. In cases of paralysis of the ciliary branch of the third pair resulting from exposure to cold it is similarly useful. In paralysis of this nerve from traumatic and other causes it is sometimes curative, sometimes only palliative; but, even when only the latter, its application every day or two affords much relief in lessening the amount of light, or in other cases, by reducing the size of the widely dilated pupil, gives much satisfaction to the patient from its cosmetic effect. In hysterical photophobia, which sometimes causes exclusion from light even for years, eserine forms an important part of the treatment. From the fact of its lessening previously existing injection of the ciliary region—a fact which he regards as important—Dr. Williams hopes that it may be found of use in the commencement of sympathetic irritation of one eye after traumatic injury of the other; but it should be used only after

proper means have been taken for the removal of the source of sympathetic mischief.

After alluding to the recent researches upon the mode of action of this substance and of pilocarpine, the alkaloid of jaborandi, which have been made in Germany, Dr. Williams thus terminates his paper :—

"In my own experiments with the chlorhydrate of pilocarpine, the results have differed a little from those produced by eserine, in the facts that less conjunctival irritation, less supra-orbital pain, and less spasm of the accommodative power, seemed to be induced, while the contraction of the pupil and the temporary myopia corresponded in degree with those following the use of eserine. In these respects pilocarpine offers great advantage over eserine. It is, moreover, at present less costly, and does not, like eserine, deliquesce in keeping. We have, therefore, unquestionably, two myotic agents capable of rendering immense services in ocular affections, and probably of use in other diseases, especially of the nervous system. It is needless to say that these, as all other remedies, have their limits of usefulness. In iritis, for instance, they would doubtless be highly injurious, as tending to congest the already distended vessels, and as favouring the formation of adhesions between the iris and the capsule of the crystalline."

Removal of an Enormous Lipoma.

Dr. Wolfler, one of Prof. Billroth's assistants, narrates (*Wiener Med. Woch.*, March 16) an interesting case of operation for a large lipoma which was performed in that surgeon's Klinik. A man aged seventy-one having entered the Klinik, August, 1877, with the desire that a large tumour should be removed, the question was raised whether, in a person of his age, it would be prudent to undertake such an operation. The great substance and breadth of the pedicle of the tumour in this case added to the usually unfavourable view taken of removing very large tumours. On the other hand—(1) the patient ardently desired to be rid of his malady; (2) he suffered much from the weight of the tumour, and from the excoriation, eczema, and ulcerations which its friction against the skin of the back induced; (3) the appearance and bodily condition of the patient were very favourable, in spite of his thirty years' endurance of his calamity; (4) the employment of antiseptic treatment held out the hope that the danger of exposing so large a surface would be reduced to a minimum. The tumour hung down from the shoulders to the upper part of the sacrum, covering the nates to a breadth of sixty-nine centimetres. In length it measured one metre fifteen centimetres, and its greatest breadth reached one metre thirty centimetres. Its pedicle, which for the most part sprang from the skin of the left shoulder and nape, measured fifty-eight centimetres in breadth, and at its left edge a pulsating artery could be felt, the calibre of which corresponded to that of the brachial artery. Near this a vein was seen of the thickness of the vena cava, which towards the neck separated into two branches, one seeming to join the external jugular, and the other pursuing its course towards the subclavian vein. The tumour itself consisted of two parts—a middle portion which felt soft and lobulated like a lipoma, and was covered by movable skin; and of a much more dense peripheric portion, which was intimately united with the thick, tumefied skin, and conveyed the impression of a fibroma molluscum. The pedicle of the tumour, although so very thick, scarcely seemed able to sustain the great weight of the tumour, so that its left edge was ruptured to the extent of three centimetres.

The operation was performed under carbolic acid spray on the day after admission. The large quantity of blood which the tumour contained was forced back into the body by four elastic bandages, and an elastic tubing was then applied around the pedicle, and prevented slipping away by means of long pins, which were inserted into the pedicle in front of the tube. The operation was then executed with ease, an anterior flap being first formed from the skin of the pedicle, and afterwards, on the tumour being raised by two strong assistants, a posterior flap. The large vessels which coursed through the œdematous and hypertrophied subcutaneous tissue were secured by double ligatures, and divided between these. The fasciæ of the tumour were next divided, and the tumour removed. On the removal of the tubing, which had done such good service, there was only a little bleeding from the periphery; thirty-five catgut ligatures were applied. The retraction of the skin of the neck, which had been anticipated, did not take place; and the flaps which had been made, being too large, had to be much diminished. The wound was united by thirty-five sutures, drainage-tubes were inserted, and an antiseptic bandage applied. The operation occupied two hours.

The tumour weighed twenty-five kilogrammes (between fifty and sixty pounds avoirdupois), and about a third part of it consisted of a lipoma, which was easily separable from surrounding parts. The remainder of the tumour was composed of an extraordinary hypertrophy of the connective tissue, very œdematous, and containing a gelatinous infiltration, covered by a cutis which was thickened as in elephantiasis. The wound healed so promptly that the man was dismissed on the eighteenth day after the operation; and when he was last heard of, in November, the cure continued complete.

REVIEWS.

An Atlas of Human Anatomy. With Explanatory Text. By Rickman J. Godlee, B.A., M.B., M.S., F.R.C.S. Parts III. and IV. London: J. and A. Churchill.

Mr. Godlee's Atlas continues to appear with most commendable regularity. The last two parts fully maintain the reputation which the preceding numbers have gained for this work. Various dissections of the pharynx and larynx bring the anatomy of the head and neck to a close. The series of plates gives a very lucid and practical idea of this most difficult and important part of the human body. In Part IV. the anatomy of the abdomen is commenced.

The Freedom of Science in the Modern State. By Rudolph Virchow, M.D., Professor in the University of Berlin, etc. Translated from the German, and revised by the author. London: John Murray. 1878.

This little work is the substance of a discourse delivered at the Conference of German Naturalists at Munich, on September 22, 1877. It has been already referred to by the *Times* and other periodicals in this country, and hence we need not speak of it at great length. It is a protest on Professor Virchow's part against generalisation on too large a scale (the generalisation he is specially referring to being the Darwinian theory of the descent of man), and against such generalisations from insufficient data being introduced into schools and taught to the rising generation as if—as Professor Haeckel affirms of the theory of evolution—they were facts. Professor Virchow says science has no right to teach as facts anything but facts. If she does so with regard to the Darwinian theory she will come into collision with the doctrines of the Church, and the result is sure to be that the agitation thus produced will be dangerous to the liberty of science, and destructive of the *freedom of inquiry* which scientific men so earnestly desire. Hence Professor Virchow strongly urges that "objective and actual knowledge" shall be the only authoritative teaching of science, and that hypotheses shall be indicated as such, and not elevated into facts. This is his main argument, which all lovers of truth and science must agree with. The interest of his discourse, which we advise everyone to read, is in the way Professor Virchow makes good this argument. Whether teachers, and especially teachers of science, can totally abstain from reference to Darwinian theories, is nevertheless doubtful. Can the anatomist explain the existence of "rudimentary" organs, or of a large number of anatomical irregularities, without the idea of common descent? Can the zoologist explain the peculiarities of the faunæ of island groups without the idea of variations from an original type accumulated in a certain direction owing to the longer or shorter isolation of the species by geological changes? Lastly, can the conscientious scientific botanist refuse to tell his hearers how much light the theory of evolution and natural selection has thrown on the fertilisation of plants, and on a number of other obscure points in the vegetable economy?

The translator has appended a preface to the discourse, explaining the circumstances which led to its delivery; and has also exercised his ingenuity in producing a table of contents, five pages long, with headings summarising nearly every one of the sixty-five pages of the discourse! With

so much spare time at his disposal, he might have corrected such misprints as "medcinishen," "clinische," and "teleogy."

In conclusion, does not Professor Virchow exceed the limit of "objective" knowledge when he says (page 27) that "we have ascertained that diphtheria is a disease caused by particular organisms"?

An Introduction to Pathology and Morbid Anatomy. By T. Henry Green, M.D., F.R.C.P., Physician to Charing-cross Hospital, Lecturer on Pathology and Morbid Anatomy in the Charing-cross Hospital Medical School, and Assistant-Physician to the Brompton Hospital for Consumption and Diseases of the Chest. Fourth edition. Pp. 440. London: Henry Renshaw. 1878.

We gladly welcome a new edition of this excellent text-book. As it has now reached the fourth edition, it may be considered to have passed almost beyond the pale of criticism. In the present issue the author has contrived, without adding many pages to the volume, to incorporate with the text the most recent additions to our pathological knowledge—such as the researches of Dr. Klein on scarlatinal kidney, and of Dr. Burdon-Sanderson on the processes of inflammation and infection. The number of woodcuts has been increased, and the text will be found to have received alterations and additions, chiefly under the following heads:—The Fatty Degeneration of Capillaries; the Muscular Changes in Typhoid Fever; Infective, Scrofulous, Fibrinous, and Croupous Inflammations; Pyæmia and Septicæmia; Syphilitic Changes in Arteries; Scarlatinal Nephritis; Pneumonia and Pulmonary Phthisis. The classification of tumours has been re-arranged, and some new matter added under the various groups, especially under the Fibromata and Sarcomata.

Annual Report on the Lock Hospitals of the Madras Presidency for the Year 1876. (Published by authority.) Madras: Printed by E. Keys, at the Government Press. 1877.

It is to be gathered from the tables contained in the foregoing Report, that, during the year 1876, 1418 patients were admitted to the nine military lock hospitals in the Presidency, that the average daily sick amounted to 99·12, and that the average stay in hospital was 24·18 days; all these aggregates being less than those of 1875, the two latter being the lowest recorded since 1871 inclusive. The ratio per 1000 of strength of admission from all venereal diseases among British troops is for 1876, 179·27; this ratio is lower than those of 1874 and 1875, but higher than those of 1871, 1872, and 1873.

The conclusion at which the Report arrives is, that when registration is efficient and the detective agency sufficient, the following results may be looked for: a gradual diminunution in the number of registered prostitutes, and in the number of brothels; an abandonment of the station by registered prostitutes, in greater or less numbers; an increase of clandestine prostitution; a diminution in the amount and severity of syphilis, both primary and secondary, among the registered, with an increase generally of gonorrhœa; and an increase in the amount and severity of syphilis, primary and secondary, among the unregistered. If the operation of the Act be still more vigorously carried out, clandestine prostitution with its evils will be still further reduced. In proportion to the efficiency of the measures for repressing disease amongst prostitutes, there will result a diminution in the amount and severity of syphilis, both primary and secondary, among British soldiers, an increase generally of gonorrhœal affections, and a diminution in the occurrence of specific constitutional taint among their children. Surgeon-General Gordon reports that, in 1875, out of 2962 children only one admission from syphilitic disease took place; and he adds what must be considered a most remarkable fact, that hereditary syphilis does not exist among the children in British regiments serving in India.

The Report also shows that syphilis and venereal affections generally have their times of increase, and from tables given it would appear that since the year 1868 there have been periods of maxima and of minima every fourth year. The Report adduces some interesting information on syphilitic diseases in India. These, it states, are very common, not only in towns, but among the native population of rural districts. They are not uncommon diseases of domestic life, and are not looked upon with the same feelings of abhorrence with which they are regarded in this country. The worst cases of syphilis in females which are admitted to hospital come from country districts, and occur in the persons of married women, or of widows who are not prostitutes: hence the fear of disseminating disease amidst the agricultural community by the eliminating process of the Contagious Diseases Act applied to towns in England does not hold in India, where town and country are alike tainted. In India prostitution is a recognised and not always despised trade; it is a form of religious consecration, and, in the shape of concubinage, is a common feature of native life. Prostitutes in India are not the social outcasts they are in England. These and other points must, therefore, be weighed before the experience of India can be compared with that of England. In the Madras Presidency, at least, and as far as the health of the European soldier is concerned, Contagious Diseases Acts and lock hospitals are absolutely necessary. If they fail at any station, the failure is due to preventable causes alone; half measures will not do in India, and the repressive policy is impossible. There remains, therefore, only the policy of recognition and of forcible registration; and such a policy, if strictly carried out, will certainly succeed, though not perhaps to the extent of completely stamping out syphilis.

FOREIGN AND COLONIAL CORRESPONDENCE.

AMERICA.

Philadelphia, March 25.

The New York Homœopathic Society and "Diluted" Homœopathy—The Subject Catalogue of the National Medical Library, Washington — Dialysed Iron—The Late Dr. Peaslee—Transactions of the National and State Medical Associations—Medical Women in America.

The followers of the homœopathic faith must have been a good deal startled recently by the action of the New York Homœopathic Society, having the effect of a virtual abandonment of some of their cherished principles. They resolved that, in common with other existing associations which have for their object investigations and other labours which may contribute to the promotion of medical science, they fully believe the principle "*Similia similibus curantur*" to constitute the best general guide in the selection of remedies, and intend to carry out this principle to the best of their ability. This belief did not debar them from recognising and making use of the results of any experience. They therefore claimed the right to enjoy and defend the inviolable privilege of every educated physician to make practical use of any established principle in medical science, or of any therapeutical facts founded on experiments, and verified by experience, so far as, in his individual judgment, they shall tend to promote the welfare of those under his professional care. It is said that there are about 180 members of this Society, and that of this number only three practise the real, original, venerable, exclusive "*Similia similibus*" doctrine of Hahnemann. Some indignation has been expressed by the few opponents of this latest innovation, one of whom declared that every member of this school who does not practise the homœopathic principles to their full extent is a "living lie." Certainly there is very little honesty in the action of those of that creed who, in large numbers, profess to treat the sick according to its teachings, but habitually prescribe the active principles of potent drugs as they are employed by regular practitioners. A non-medical contemporary, in speaking of this action of the Homœopathic Society, says, if all these statements that the homœopaths make about themselves are true, there must be just 177 "living lies" in that Society; and that if the three referred to are pure homœopathists, and the others depart from the dogma in various proportions, they may have it, as they do their little pills, to the 177th dilution—which is pretty thin. And yet, upon an immutable principle of their own theory, the man who has homœopathy in the 177th degree—the feeblest dilution—is the best

homœopathist of all! This is on the principle, it states, that if a small dose is more effective than a large one, a still smaller must be more effective than that small one, and so on *ad infinitum*. If Hahnemann, when he was giving pills of the millionth dilution, found them ineffective, he always knew immediately that it was because they were too strong. He substituted for them, in such cases, anything up to the ten-millionth dilution, and his patients immediately got well. This principle ought to be as good in its application to doctors themselves as to their pills, and the effort to apply it is what is now exciting those of that ilk. The peculiar interest in it all to the public at large, says our contemporary, is the fact that it shows that the homœopathic practitioners themselves are of opinion that homœopathy is a delusion, and in many instances a fraud. We are disposed, however, to believe that this movement of their Society is with the view of placing themselves on a higher footing, from which at some future day they can honestly take a step forward and still upward into the ranks of the regular practitioners of medicine.

The National Medical Library at Washington, which was formerly known as the Library of the Surgeon-General's Office, has almost ready for the press the catalogue of its valuable medical treasures of books and pamphlets. The additional step, however, in its publication cannot be taken without the appropriation of money for the purpose by Congress. It will not be for want of proper action on the part of the profession if its publication should be long delayed, for the various medical associations throughout the country are actively petitioning in favour of such an expenditure. They take the ground that the vast literary wealth of this library, contained in nearly a hundred thousand volumes and pamphlets, is for the most part inaccessible to literary men, who, in order to work progressively and advantageously, have to search for and utilise accumulated scientific material; and that the subject catalogue, prepared by Dr. Billings, will, by its publication, place the buried wealth of the medical literature of all countries at the easy and ready disposal of scientific workers.

With us, as, I suppose, with the medical practitioners of Great Britain, the list of new remedies is being gradually extended by additional introductions, and their value tested by personal experience. Jaborandi, eucalyptus, salicylic acid, and a score of other articles of modern suggestion or employment, have given the profession abundant material for practical experimentation; and the results have been duly recorded in the medical journals. Dialysed iron is one of the latest of these, and the verdict thus far seems eminently favourable to it. Certainly it is now a fashionable tonic—"easy to give and easy to take," as an enthusiastic medical friend remarked to me. It seems to have other virtues than those of a tonic merely. Thus early in its career it is reported, in dessertspoonful doses, to be an antidote to arsenical poisoning; and at the Pennsylvania Hospital, Professor Da Costa has treated a typical case of chlorosis by hypodermic injection of the same solution, without any accompanying irritation or abscess, and without any of the usual after-effects of iron, such as costiveness and disordered digestion. The solution thus employed hypodermically—fifteen minims at a dose—was diluted at first, but afterwards given undiluted, and in larger doses, as thirty drops. He suggests its probable value when administered hypodermically in pernicious anæmia, as the principal objection to the use of iron hitherto in this disease has been the impairment of digestion when the remedy was prescribed by the mouth.

Dr. Brown-Séquard has recently been delivering interesting lectures in some of the Atlantic cities of this country on his favourite specialty of nervous diseases, especially those which implicate the base of the brain. In New York his lectures were given at Bellevue Hospital Medical College, and in Philadelphia at the Jefferson Medical College Hospital—in both instances to large audiences. There was a general desire on the part of the younger members of the profession and of the medical classes to see and hear one of whom they had heard so much.

Death has recently deprived the American medical profession of one of its most distinguished ornaments, Dr. E. R. Peaslee, the eminent physiologist and ovarian pathologist and surgeon. I do not propose to allude to him personally, as the medical journals have dwelt upon the salient points of his character and services; but the event is one that should be made prominent as a warning against excessive labour or overwork. It seems that but a few months since he lifted his own voice in eloquent terms against this pernicious habit, which had caused the death of another valued medical teacher and practitioner; and yet he himself failed to realise the full force of his own convictions, and fell a victim to his neglect of such precautions. Will this warning be heeded, or will it not after a few weeks be forgotten, when the first days of grief at this great loss have passed away?

Many valuable papers of great intrinsic importance to the profession are annually published in the *Transactions of National and State Medical Associations*, but they have only a limited circulation through these channels. There is but little inducement for the best writers or authorities to indulge their pens in this way, when the columns of medical journals are open to them, offering a medium by which they can reach so many thousands of the profession. Of a large State like New York this may be true in a less degree, so far as the circulation of *Transactions* is concerned; but as the journals are not, so far as I know, in a single instance organs of any society, and the regulations of these bodies forbid the publication of their papers in any other shape than the *Transactions*, these original contributions to medical literature very often enjoy a merely transitory existence, and soon fill a neglected and soon forgotten literary grave. The New York State Medical Society publishes a handsome volume annually, neatly bound; but every other State society restricts its expenditure economically to paper-covered *brochures*, which are quietly laid away on the library shelf, for the possibility of a future reference, which is seldom if ever accorded them. To many of the papers contained in the New York and other volumes of *Transactions* we would heartily wish a better fate than this untimely interment. Though occasionally quoted, they are, as a rule, wholly overlooked, or never seen in any other shape whatever.

Although a few women-delegates are present at some of the State society meetings, and even at those of the American Medical Association, as at Chicago last year, their voices are not often heard. It is therefore interesting to note the fact that one of the most frequent and able contributors of practical papers to the literature of New York medical societies, as well as to medical journals, is a woman—Dr. Mary Putnam Jacobi,—whose professional ability is generally recognised and appreciated. There is no doubt that the women are quietly pushing their way into the domain of medical science and practice by their adherence, in this section of country at least, to the regular teachings of the profession, and the adoption of the same principles which govern their brethren in ethics and in correct schools of treatment. The latter may not have arrived, except in occasional instances, at the point of consultation with them in the sick-room, and they may believe that the study and practice of medicine by the sex is a mistake of judgment and policy. But, notwithstanding these views, medical men must accord to them the credit to which they are entitled for the earnestness and zeal with which they enter upon the duties that they believe themselves capable of performing.

Miss de Lisle Allen, daughter of the late Dr. de Lisle Allen, is giving a benefit concert at the Langham Hall, Great Portland-street, W., on Saturday morning, May 25, at three o'clock, for which she has secured the valuable assistance of some of the most eminent *artistes*. We wish her every success in this her commencement of the musical profession, for which, we hear, she is well qualified.

Epidemic of Lead-Poisoning.—M. Rouzier-Joly has published a very interesting account of an epidemic of lead-poisoning which has occurred in the arrondissement of Beziers, in the department of Hérault. In August, 1877, a strange form of disease was there met with, extending over twenty or thirty kilometres; and although its saturnine origin was suspected, it could not be determined for three months. It was then ascertained that it arose from the subjects of the epidemic having used the flour of a mill in which the mill-stones, having become dilapidated, were repaired by pouring melted lead into the separations of their parts. The number of persons who suffered amounted to 412, occurring in 141 families, consisting of 541 individuals, of whom 129 only escaped. Of the 412 patients thirty died.—*Lyon Méd.*, March 31.

GENERAL CORRESPONDENCE.

THE BRITISH MEDICAL SERVICE.—No. I.

LETTER FROM MR. C. MACNAMARA.

[To the Editor of the Medical Times and Gazette.]

SIR,—It is hardly a matter of surprise, with war looming in the distance, and the collapse of the plans elaborated for improving the British Medical Service, that you have lately received many letters from Army-Surgeons regarding the present and future prospects of the Department to which they belong. Some of these letters have already appeared in your columns, but you have probably been unable to publish the majority of them: not that you fail to appreciate the importance of the subject, or to sympathise with those who have written to you, but, with me, you may perhaps feel that the responsibility is great in taking up a matter of the kind; for so long as the constitutions of Englishmen remain what they now are, a certain number of grumblers will be found in every large service; and it is remarkable how apt men are, who would otherwise be contented with their lot, to discover that they have been badly treated when the conditions under which they live are alleged by others to be faulty. Nevertheless, it is absolutely essential for the well-being of the Army Medical Department that strict discipline and the subordination of self to superior authority should reign paramount among its members. In my opinion the cultivation of this spirit is not likely to be enhanced if medical officers who may happen to have a real or imaginary grievance are too ready to publish their complaints anonymously. I cannot help thinking that in any future rules promulgated for the guidance of Army Surgeons it would be well to inculcate the principle that medical officers entering her Majesty's service should be guarded in publishing complaints against the regulations or orders of the service so long as they remain in the Army; but these rules cannot be too carefully compiled, and their bearing in all that relates to the career of an Army Surgeon should be fully explained during the course of instruction at Netley, so that no young man can enter the Medical Department without a thorough knowledge of the regulations under which he consents to serve.

It appears obviously necessary, before attempting to solve questions connected with the reorganisation of the medical service, that we should turn our attention to the conditions influencing the field from which the ranks of the Department are recruited. There seem to me to be two classes of students who are likely to enter the Army—the first composed of men who, from their surroundings or from an inbred disposition, have acquired a taste for military service. They are men who, had the opportunity offered itself, would probably have gone into the Army as combatant officers. The second class is constituted of those who, having passed their qualifying examinations, look to the Army rather as a commercial speculation; they have no other immediate prospect of success, either in the civil or any other branch of practice, and they calculate that it would therefore pay them to enter her Majesty's Army. Before the introduction of the competitive system most of our Assistant-Surgeons were drawn from the former of these classes; the majority of them were gentlemen by birth and education, but they were by no means the hardest-reading students to be found in our medical schools, their affections being concentrated on the cricket-field more than on the dissecting-room. Nevertheless, the history of the late East India Company, and of the British Medical Service in years gone by, demonstrates the fact that these men not only gained the confidence and goodwill of the officers and soldiers under their charge, but that they often took a high position in the profession. Nor was it their fault that the Medical Department failed during the Crimean War; the system, and not individuals, was then clearly to blame alike in the medical, commissariat, and other departments of the Army. So long as these men formed the working staff of the service there was no want of candidates to fill up the ranks of the Medical Department. The question naturally arises—What has become of these students? Why do they not come forward as heretofore and enter the Army? As to their existence, there are plenty of them to be found in most of our large medical schools, but, as I have before remarked, they are not generally hard-reading men, and if there is one thing they abhor more than another it is an examination. Before they can become qualified they must have undergone at least four such trying ordeals, and voluntarily to enter another struggle is utterly repugnant to their feelings; and moreover they are aware of the fact that they cannot compete in book-learning with harder-reading students.

The second class referred to, on the other hand, revel in competition; the unspeakable monotony of the lecture-room is absolutely pleasant to them; but I doubt if the spirit by which some of them are actuated is that which is best calculated to fit them for the duties of Army Surgeons. I do not for an instant entertain the idea that because a student prefers work to play he is consequently not a thorough gentleman, or is unfit for the Army; but what I do assert is, that so long as the competitive system remains the only portal through which men can gain access into the Army, many of the students best qualified for the service will be barred from entering it, while it is possible that others, who have no innate love for a military life, and who may never have associated with gentlemen, find their way into its ranks. These as surely fail subsequently to gain the companionship and confidence of many of their brother officers, and so become discontented with their position. Nor is this all, for when men of this stamp rise in the service, they are capable of rendering the life of their juniors extremely disagreeable. The Department in this way gets a bad name, and so gentlemen are often, under existing circumstances, prevented from entering it. In fact, I assert, without fear of contradiction by those best acquainted with the matter, that if there is one sphere of action more than another in which medical men must be gentlemen in every sense of the word, it is in their capacity as surgeons in the British Army.

So long as the competitive system is applied to the Medical Department I fear the service will hardly flourish, although the Government were to redress all the special grievances complained of. As a remedy for this evil, I would urge that the principle which, to a limited extent, is allowed for appointments as combatant officers, should be widely extended to the medical profession; and that our universities or examining bodies, in conjunction with the educational authorities in the various medical schools of Great Britain, should nominate the candidates to be sent up to Netley. If any really incompetent men should gain access into that admirable institution, they might even then be refused admission into the Army; but without a personal knowledge of our students it is, I believe, impossible to select from among them the men best qualified to recruit the ranks of the Army Medical Department, and thus to restore it to its former high position.

I am, &c.,

London, May 13. C. MACNAMARA.

THE MEDICAL DEFENCE ASSOCIATION AND THE NEW MEDICAL BILL.

LETTER FROM MR. G. BROWN.

[To the Editor of the Medical Times and Gazette.]

SIR,—I shall feel obliged if you will permit me to inform your readers that the Duke of Richmond and Gordon, Lord President of the Privy Council, has kindly consented to receive a deputation from the Medical Defence Association on Monday next, in order that the members of the Association may have an opportunity of stating their views on the Bill to amend the Medical Act of 1858, now before the House of Lords.

The Council of the Association having considered the Bill at several meetings, has adopted a memorial to be presented to the Lord President of the Privy Council, in which the chief points requiring further legislation are set forth. Briefly, these are as follows:—

1. That a State Examining Board for each division of the kingdom be instituted. The examinations for the licence to practise be full and complete in medicine, surgery, and obstetrics.

2. That existing corporations retain the power to grant degrees and diplomas, but these should be regarded as honorary distinctions only.

3. The General Medical Council to have the power to register colonial practitioners, provided they produce satis-

factory evidence that they have passed an examination equal to that of the State Examining Board.

4. That no foreign practitioner be admitted to the Medical Register, or be allowed to practise in this country, unless he produces evidence that he is qualified to practise in his own country.

5. That the examinations for women should not be less stringent than those required to be passed by male candidates.

6. That the profession have direct representation on the General Medical Council.

7. That the public be efficiently protected against unqualified practitioners, and that the General Medical Council be required to prosecute those who falsely assume medical titles, or, being unregistered, practise medicine or surgery for gain.

The Council of the Association is of opinion that the above views fairly represent those of the general body of the profession. Should any registered practitioner, although not a member of the Association, wish to join the deputation, I am sure that the President and Council will gladly welcome him. The deputation will meet in the waiting-room at the Privy Council Office, Whitehall, on Monday next, at a quarter to three o'clock. I am, &c., George Brown,

Hon. Sec. Medical Defence Association.

12, Colebrook-row, N., May 15.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, April 23.

Charles West, M.D., F.R.C.P., President, in the Chair.

Transverse Calcareous Film of the Cornea.

Mr. Edward Nettleship read a paper as above. The author said that the disease, a somewhat rare one, has been described by various authors, but chiefly in its local relations. The chief objects of the paper were to draw attention to some points in the natural history of the disease which may throw light on its causation, and to confirm the statements of earlier writers, especially Dixon and Bowman, as to the good results of local treatment in suitable cases. A thin film of crystalline, chiefly calcareous, substance is formed beneath the anterior corneal epithelium; it can be stripped off in little flakes, leaving the underlying cornea clear; it is limited to the parts habitually uncovered by the lids, and when complete it forms a broad nearly transverse stripe, terminating at each end a little within the lateral boundaries of the cornea. The symptoms as a rule are very slight, and there are generally no complications even when the disease is of many years' standing; but sometimes chronic iritis and glaucoma come on, and occasionally ulceration takes place on the diseased patch. It seldom begins in both eyes at the same time, but is almost invariably symmetrical in the end. The film is formed slowly, and may continue to increase for some years. The disease is one of middle and advanced life, and its subjects, almost without exception, are males. Occupation seems to have no direct influence. The morbid tendencies of the patients, so far as they are at present known, lead the author to suggest that, in regard to causation, excess of uric acid in the blood furnishes the most likely explanation from the constitutional side; though local peculiarities, not at present understood, are necessary as determining causes. Several new cases with naked-eye and microscopic drawings were given. The paper was supplemented by abstracts of all the published cases (fifteen in number) known to the author, and in some of which (recorded some years ago by Mr. Fairlie Clarke) the present condition of the patients has been ascertained.

Mr. H. Power had seen several of these cases, and had always considered them gouty. In one there was whitish matter along the lids. Portions of the membrane on the eyeball could be picked off with the point of a knife, like the shell of an egg. This could be done with ease. Little irritation followed. He had also employed glasses with a small central hole in them, but patients did not like the restricted field of vision.

Mr. Hutchinson did not think the cases so closely connected with gout as Mr. Power believed. Probably there were many causes at work, mostly indications of senility. The condition reminded him of Dupuytren's contraction of the palmar fascia, where the exciting causes were numerous, but all probably neurotic. It was a question whether there was not some connexion between that malady and the one now described.

Mr. Nettleship was not aware that gout had been referred to in Messrs. Bowman and Dixon's cases. He had no note of the condition of the palmar fascia. He had, since the paper was written, seen another case in a woman who had only one eye affected. It was of long standing. She was not gouty, but had become hemiplegic.

The Treatment of Punctured Wounds of Throat and Neck.

Mr. W. Harrison Cripps read a paper on the treatment of severe arterial hæmorrhage from punctured wounds of throat and neck, especially considered with regard to ligature of the external carotid artery. The paper discussed the treatment to be adopted in cases of severe arterial bleeding that have resisted all simple means, and in which operative measures became necessary. The class of cases included punctured wounds about the angle of the jaw and through the mouth, hæmorrhage from the tonsils, or from cancer of the tongue or mouth, secondary hæmorrhage after surgical operations, etc. The treatment usually adopted in these circumstances, said the author, has been a ligature upon the common carotid. Upon analysis of a considerable number of cases, it is found that, after this method of treatment, rather more than half the patients die. The causes of their deaths are approximately as follows:—Rather more than 30 per cent. from brain symptoms; rather more than 30 per cent. from recurrence of the bleeding; and 30 per cent. from other causes. It thus appears that one-third of these deaths are directly due to ligature of the carotid, and that in another third the operation had proved useless for arresting the bleeding. The brain symptoms appear to result from the already anæmic brain having a considerable portion of its blood-supply suddenly cut off. Hæmorrhage, occurring from the original wound (after ligature of the common trunk), must either be due to the blood coming as a regurgitant stream brought down the internal carotid, or by blood being brought through the fine anastomoses of the terminal branches. Experiments and facts narrated in the paper showed that in a certain number of instances the bleeding is due to a regurgitant stream through the internal carotid, or to blood brought to the proximal end of the wounded vessel by the inferior thyroid. A table accompanying the paper showed how the bleeding vessel, wounded in the situation described, has most commonly proved to be the external carotid or one of its branches, a wound of the internal carotid being of rare occurrence. Having discussed the cause of the high mortality following ligature of the common carotid, ligature of the external carotid about half an inch from the bifurcation was recommended as likely to prove a safer and more efficient method of controlling the bleeding. The grave danger of cutting off the blood-supply to the brain is avoided by this operation, while at the same time the chance of recurrent hæmorrhage is diminished in proportion to the number of instances in which it occurs as a regurgitant stream. The objections raised to the operation were—firstly, the fear of secondary hæmorrhage from the proximity of large branches; secondly, that, should the wounded vessel prove to be the internal carotid, a ligature upon the external would be a useless operation. The first objection was answered by reference to cases narrated by M. Guyon, showing the rare occurrence of secondary hæmorrhage from the external carotid; the second by the comparatively few instances in which the wounded vessel has proved to be the internal carotid. Moreover, should the mistake occur, it is not beyond remedy, for a ligature might still be placed on the common trunk at its bifurcation; on the other hand, no remedy can be found for a patient dying in a comatose condition, caused by obstructing the internal carotid on account of a wound of the external carotid or one of its branches.

Mr. Holmes only remembered one case where the wound was through the mouth. A child was carrying a pointed stick of some kind when the injury was inflicted. He thought the internal carotid was wounded, and so tied the common carotid. The child did well. These are the cases where

surgeons think it best to tie that vessel. If a tonsillar branch of the external carotid were wounded, then it would be a good plan to tie that vessel, but he could not think it was always so.

Mr. Morrant Baker spoke of a case he had seen where a man was injured by the stem of a tobacco-pipe entering the walls of the mouth near the tonsils. Much bleeding followed, and the man really died of this. He tied the common carotid. In this case tying the external carotid would have been of no use. Still he thought Mr. Cripps's plan seemed a good one.

Mr. Cripps had only collected seven or eight cases of puncture through the mouth. In only one of these was the internal carotid wounded. In most instances the vessel wounded was the tonsillar branch of the facial.

CLINICAL SOCIETY OF LONDON.

Friday, April 26.

George W. Callender, F.R.S., President, in the Chair.

An Anomalous Mottled Rash, accompanied by Pruritus, Factitious Urticaria, and Pigmentation.

Dr. A. Sangster read a paper on this case. C. F., aged two, a healthy, well-nourished boy, came under notice last August, suffering with an obscure skin affection. The trunk and limbs were covered, in some places more thickly than others, with a buff-brown and buff-red coarsely mottled rash. The buff-red mottling was most marked on the thighs and legs; here the disease presented much the appearance of a measles rash. The parts least affected were the backs of the arms and forearms, the loins, and buttocks; the palms and soles were free; the flexures were specially affected. On passing the hand over the surface, some of the diseased patches were felt to be slightly raised, but this was scarcely noticeable. Nowhere, by pinching up the skin, could any increase of substance be made out. On stretching the skin over the redder patches, the red colour disappeared, leaving a pale buff discoloration. There was much pruritus, especially at the flexures. Scratching led to the production of urticaria wheals. The mother stated confidently that the latter never appeared but as a result of irritation by scratching or rubbing. There were no other lesions of the skin, no papules, blood-crusts, or desquamation. The points of interest in the patient's history were, that a grandmother and uncle had psoriasis, that the patient was severely jaundiced in infancy, as was also a younger child, since dead; and that, according to the mother's statement, the patient's skin had always risen in "bumps" upon the slightest irritation. Even handling the child during the process of dressing would cause "the bumps to rise." The eruption had commenced as a red mottled rash on the abdomen when the patient was two months old, and was thought to be measles; however, it persisted, and had gradually spread, first over the trunk, and then to the extremities. As the patches became old they turned brown. The disease had defied treatment, internal and external. In appearance this eruption was similar to some others brought before the Clinical Society by Dr. T. Fox, Dr. Barlow, and Mr. Morrant Baker, and judged by Dr. T. Fox to be allied to xanthelasma; while Mr. Hutchinson considered them to be of the nature of urticaria. The essential feature of the disease above described appeared to be a vaso-motor change in the skin, occurring spontaneously, and also as a result of the most trifling irritation, the above vaso-motor change having a tendency to become permanent, and ultimately leading to pigmentation.

Dr. Tilbury Fox thought the case belonged to the same category as those which Mr. Morrant Baker and he (Dr. Fox) had shown to the Society in 1874, though there was, however, much less, and indeed very slight, elevation of the patches or blotches in Dr. Sangster's instance. In his (Dr. Fox's) Atlas he had figured a patch of the disease, which was flattened and made up simply of apparently dull buff-coloured stains only; and in one of the cases he had recorded, after an interval of five years, the patches had almost subsided, and now only deep-coloured stains remained, so that, under certain circumstances, the patches of the disease were not much elevated. If the Fellows would look at two top figures in plate 60 of Willan's coloured delineations (which he handed round), they would recognise the disease now under discussion; and Willan, in all probability, under what he termed vitiligo, intended to represent this same disease. He spoke of elevations in the early stage subsiding, and leaving the skin chequered in a curious way; and figured the early red irritable and the late dull mottled pigmented aspects of the disease. Dr. Fox did not think the disease could be called urticaria. It was no doubt liable under irritation to become hyperæmic and irritable; but a disease made up of patches, which patches actually remained without much change for years, could scarcely be called urticaria. If the disease were an urticaria, we must completely revolutionise and change our notions of urticaria, as made up of evanescent hyperæmic spots connected with vascular spasm. Further, one knew that microscopic examination had shown that the tissue of the skin, in the disease under consideration, was infiltrated with a new cell-growth, like lupus in character. Then, again, the disease might be congenital. The main practical clinical point about the disease to remember was, that it was liable to be mistaken and treated for syphilis—a considerable error, which might be fraught with evil consequences.

Mr. Hutchinson expressed his pleasure in having seen Dr. Sangster's patient, and heard his clear description. He also congratulated the Society on the fact that it had been the means of bringing under discussion so many examples of such a rare disease. In former sessions, three well-marked cases had been submitted for inspection: one by Dr. Tilbury Fox, one by Mr. Morrant Baker, one by Dr. Barlow: and each case had illustrated a different stage of the disease. The first two were the most severe, the third much less so; and now Dr. Sangster's patient showed it in a comparatively mild and early stage. Taken together, the cases, to anyone who admitted that they all represented the same malady, were most instructive, and not far from conclusive as to its real nature. In Mr. Baker's case the child was covered with brown wheals and ridges, which were in a quiescent state, and from month to month, or even from year to year, underwent but little change; but in Dr. Sangster's case the state of things was different. Here we had the brown stains and some approach to ridges, but scarcely any thickening, and the conditions, although they had lasted long, were constantly undergoing local change; and, above all, we had in addition the very easy production of urticarian wheals. No one who had seen this child's skin, and noticed how the slightest touch sufficed to bring out a wheal, looking exactly like a nettle-sting or a flea-bite, could possibly doubt that, for one thing at least, the child had urticaria. He congratulated the author of the paper on the name employed, "urticaria pigmentosa," for he had no doubt that it came very close to the truth; and, further, that it was applicable not only to this, but to the other cases. It had been objected that we knew nothing of urticaria as a malady lasting for years; but he believed that, in reality, some of the forms known as urticaria perstans were of quite indefinite duration. Besides, it was not quite literally true that in these cases the urticarious stage lasted for many years; it was rather its results in the way of thickening and pigmentation which were so persistent. His theory of the malady was that it was urticaria occurring at an unusually early age, and in connexion with some peculiar condition of pruriginous skin; that it was evoked by local causes, and in the first periods kept up by them; and that in the end the skin became permanently thickened and discoloured by the long persistent inflammation. He would further add, as a conjecture, that the original irritation would in all probability be found to be bites of bugs or fleas, or both. He held that it was almost impossible to allow so wide a range of variation for the consequences of bites. As a rule, young infants were not very much irritated by them, but sometimes they were dreadfully affected, and sometimes the consequences were by no means transitory. In Dr. Barlow's case, which he had been permitted an opportunity of examining in the hospital, he believed that he had identified the results of bites.

Dr. Sangster said that, in reference to Dr. Fox's observations, the eruption had never been more raised than it was at present. In cases of fremitus one might generally suppose the pigmentation of the skin was due to the congestion of the skin produced by scratching. In this case the pigmentation could not be due to that cause, since it began when the child was only two months old. He thought, however, the pigmentation was due to local causes, possibly

to the flannel binder. The child had been in New York, and the mosquito-bites there received did not give rise to any other than the usual effects in the skin. Vaccination also had produced no pruriginous eruption. The child had been jaundiced when very young, and the frequent connexion of disease of the liver with innervation of the skin and skin-disease was suggestive.

The PRESIDENT had not long since seen a gentleman with permanent discoloration of the skin about the face and neck, due to the bites of mosquitoes.

Dr. TILBURY FOX had also witnessed the same thing.

CACOTROPHIA FOLLICULORUM (FOLLICULAR MALNUTRITION).

Dr. TILBURY FOX, in a paper with this title, sought to bring before the profession a disease of the hair-follicles characterised by special features, and clinically distinct from those generally recognised. He had exhibited a drawing of it, with a brief description, at the annual meeting of the British Medical Association at Manchester in 1877; and Mr. Erasmus Wilson had, in his latest course of lectures in January of this year, used the same drawing to illustrate some more detailed and independent remarks. Dr. Fox sketched lightly the pathology of the several papular diseases situated at the hair-follicles, and characterised by retention of exuviæ with secondary congestion by simple follicular torpor, or by primary congestion with its consequences—viz., pityriasis pilaris, lichen pilaris, and scrofulosum, planus, ruber, and simplex; and he argued that the drawing shown illustrated a condition distinct from any of these. At first sight it appeared to him to be nothing more than ordinary but severe lichen pilaris; and in this category, no doubt, it was ordinarily placed, but it differed in its severity, the deeper and more complete affection of the follicles, its congenital nature, its more general distribution, and its obstinacy to treatment. Dr. Fox then considered lichen pilaris more closely, as being the disease in external features most like cacotrophia. Willan described lichen pilaris as a "modification of lichen simplex, the papules appearing only at the roots of the hairs of the skin"—in fact, as an inflammatory state of the follicles. But most modern writers meant either a follicular torpor due to plugging by epithelial exuviæ or altered sebum, or a simple inflammation with exudation into the follicle, especially confined to its upper part, and the consequent formation in both cases of papules pierced by hairs, which remained practically unchanged. It was brought about by many local and general causes, such as uncleanliness, local irritants, and blood and constitutional states. Lichen pilaris was not often seen in the very young; it was an acquired disorder, was more or less localised to particular parts, especially the thigh and outer side of the arm and forearm; and, lastly, it was not notably obstinate. The eruption of cacotrophia folliculorum was made up of solid red papules, the size of a pin's head, which were seen to be situated at almost every hair-follicle, and these papules stood out from a rather reddened base. Though the disease had a special predilection for parts, such as the outer aspect of the arm, the back of the shoulders, the thighs, the trunk, and the sides of the face and forehead, which was sometimes the seat of seborrhœa sicca, still the eruption was of very general and extensive distribution. The hairs had mostly disappeared, those that remained being stunted and twisted, and the interfollicular portion of the skin was reddened, the whole thing often bearing a striking resemblance to xeroderma. In this affection the deepest portions of the hair-follicle, including the papilla, were affected, and the formation of the hair interfered with. It was not an inflammatory condition, but one essentially of defective or indolent nutrition, with plugging of the follicles and some passive congestion. Individuals were affected from the earliest age, or it might be truly congenital, and was not acquired later on in life. A very important point was that the disease occurred in subjects—mostly young women—of a lymphatic, strumous, or phthisical tendency, and was brought into prominence and especially attracted notice about the period of increased physiological activity, viz., puberty. The paper was illustrated with the detailed notes of four well-marked cases.

Mr. HUTCHINSON scarcely knew why these cases should be separated from cases of xeroderma or ichthyosis, which was a congenital cacotrophy of the whole skin; whereas this was simply a cacotrophy of the follicles only.

Dr. WILTSHIRE thought the disease rather common amongst insane children of Mongolian type, with clubbed fingers and blue eyes.

Dr. TILBURY FOX, in reply, said he was quite aware that there was a plugged state of the follicles in connexion with ichthyosis, but that was not the condition he had described in the paper he had read, and it was not very likely that both he and Mr. Erasmus Wilson should have made a blunder upon so simple a point as that. He doubted if Mr. Hutchinson (at least, his remark seemed to show as much) was exactly conversant with the disease under discussion. He (Dr. Fox) did not know of any published account of the condition.

(To be continued.)

MEDICAL NEWS.

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS, EDINBURGH: DOUBLE QUALIFICATION.—The following gentlemen passsed their First Professional Examination during the April and May sittings of the Examiners:—

Anderson, Robert William, Portsmouth.
Bain, William, Caithness.
Boyd, Perceval Crawford, Hobart Town.
Burtton, Arthur, Hyde, Devonshire.
Calder, Marcus, Glasgow.
Cameron, James Murdoch, Edinburgh.
Carruthers, David, Kirkpatrick-Fleming.
Clarke, George Cuthbert, Middlesex.
Clements, Henry Joseph, County Kerry.
Corbett, William Cochrane, County Cork.
Cowan, Wm. Chalmers, Dundee.
Cullin, Richard Blair, Dublin.
Daly, Frederick Herbert, Dublin.
Faulkner, Edwin, Bangalore, India.
Henry, Thomas, County Tyrone.
Jones, Hugh Davies, Anglesey.
Keily, Michael, Limerick.
Kinder, Ralph, Manchester.
M'Nicoll, John, Liverpool.
Martin, Thomas Morgan, Dublin.
Matthews, Thomas, County Down.
Nichol, John Crawhall, County Durham.
Noel, Arthur, Brighton.
Stevenson, William, Stirlingshire.
Thomas, Gerald Fitzgerald, Cork.
Thompson, William Thomas, Worcestershire.
Walsh, David Henry, Bristol.
Waterson, William Thomas, Netherwitton.
Williams, Egbert, Llandilo.
Wilson, Charles Wesley, Ulverstone.

The following gentlemen passed their Final Examination, and were admitted L.R.C.P. Edin. and L.R.C.S. Edin.:—

Ady, James Charles, Moulmein, Burmah.
Anderson, Adam, County Donegal.
Annand, George, Melbourne.
Boe, James Steele, Dunblane.
Brayton, Thomas, Whitehaven.
Burgess, John Thomas, Spilsby.
Burman, Charles Clark, Whitehaven.
Chilton, Maurice Alfred, Wiltshire.
Chestnutt, John, Tralee.
Collie, Mackintosh, Elgin.
Coombs, Samuel Wellesley, Oswestry.
Cream, Thomas Neil, Glasgow.
Cresswell, William George, Berkshire.
Curtin, John O'Brien, West Newcastle.
Dawson, Alfred Stanhope, Croydon.
Dixon, Francis, Derbyshire.
Eakins, James Edwin, Newburgh, Canada.
Elder, William Nicol, Elginshire.
Fraser, John Joyner, Tain.
Gordon, John Joseph, County Sligo.
Hartley, James, Marton.
Honeyman, John Hay, Thurso.
Hosking, James Mithiel Phillips, Cornwall.
Jack, Robert Nelson, Newton-Stewart.
Jack, William George, Dunkeld.
Jee, Charles, Spilsby.
Johnston, Charles Mason, Port Louis, Mauritius.
Lamson, George Henry, New York.
Logan, Robert, Dumfries.
Logie, William Alexander, Kirkwall.
Macaskie, James Griffith, Berwick-on-Tweed.
M'Callum, Edward, Edinburgh.
M'Enery, David, Clonmel.
Maclean, Kenneth, Stornoway, Lewis.
Mallory, Albert Elhanan, Cobourg, Ontario.
Maunsell, Edward Lewis, Edinburgh.
Moore, John Wilson, Drogheda.
Moynihan, Thomas, Cork.
Murray, John James Goodlatte, Dublin.
O'Sullivan, Daniel, Killarney.
Pilgrim, Froster John, Barbadoes.
Reid, Robert Stuart, Dunedin, N.Z.
Robertson, John, Kilmorack, Inverness.
Robertson, William Duncan, Montreal.
Saunders, Herbert, London.
Service, John, Kilwinning.

Simpson, Robert Parkin, Lincolnshire.
Smith, Frederick Aubrey, Manchester.
Somerville, Andrew Thomas, New Brunswick.
Steel, James, Bushmills.
Tant, John Yellowlees, Argyleshire.
Thelwall, Llewellyn, Wrexham.
Vickerstaff, William Henry, Macclesfield.
Williams, Josiah, Cardigan.
Wright, Francis George, Southsea.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 13th inst., and when eligible will be admitted to the pass examination, viz. :—

Archer, Henry E., student of Guy's Hospital.
Clarke, Walter J., of the Birmingham School.
Fenwick, W. Cecil, of Guy's Hospital.
Grayling, Arthur, of St. George's Hospital.
Jennings, C. Egerton, of the London Hospital.
Johnson, G. Lindsay, of St. Bartholomew's Hospital.
Nicholson, Gerald, of King's College Hospital.
Otway, A. Carrol, of Guy's Hospital.
Palmer, E. Talbot, of St. Thomas's Hospital.
Ryves, W. Edgar, of St. Mary's Hospital.
Slater, William, of St. Bartholomew's Hospital.
Torbitt, Charles, of the Birmingham School.

Twelve candidates were rejected. The following gentlemen passed on the 14th inst., viz. :—

Atkinson, Thomas R., student of Guy's Hospital.
Barrow, Roger W., of the Liverpool School.
Campbell, Henry W., of Guy's Hospital.
Elliot, Edmund A. S., of St. Bartholomew's Hospital.
Hearnden, W. Cannington, of Guy's Hospital.
Jones, Thomas W. C., of St. Mary's Hospital.
Prendergast, Joseph M., of Guy's Hospital.
Sharland, Arthur, of the Middlesex Hospital.
Walker, Lawrence N., of the London Hospital.
Wight, Ernest O., of St. Mary's Hospital.
Wilson, George J., of Guy's Hospital.

Thirteen candidates were rejected. The following gentlemen passed on the 15th inst., viz. :—

Chisholm, William, student of University College Hospital.
Clay, Augustus F., of the Birmingham School.
Colledge, Lesley R., of St. George's Hospital.
Crosse, William H., of Guy's Hospital.
Currie, Oswald J., of Guy's Hospital.
Duncan, Duncan, of University College Hospital.
Elliott, Edgar, of Guy's Hospital.
Fasken, E. R. Drummond, of Guy's Hospital.
Gentles, Robert W., of the Middlesex Hospital.
Horn, Richard J., of the Middlesex Hospital.
Houghton, F. E. Caulfield, of King's College Hospital.
Palmer, T. F. Barton, of Guy's Hospital.
Pope, William W., of St. George's Hospital.
Raine, Arthur R., of the London Hospital.
Thornton, Bertram, of St. Mary's Hospital.
Wood, Edward A., of St. Mary's Hospital.
Wood, Louis E., of St. Mary's Hospital.

Thirty-two candidates out of the seventy-two examined having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months.

The following were the questions on Anatomy and Physiology submitted to the candidates (130 in number), at the written examination, when they were required to answer at least four of them, including one of the first two, viz. :— 1. Describe the structure of the bronchial tubes. What purposes are served by the several tissues which are found in them? 2. What is meant by the vaso-motor centre? Give the evidence of its existence. 3. Describe the articulations and ligaments of the seventh rib, and the attachments of muscles to it. 4. Give the dissection required to expose the glutæal and sciatic arteries outside the pelvis. 5. Describe the course and distribution of the ulnar nerve in the palm, and the dissection necessary to expose it. 6. Describe the entire lachrymal apparatus.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen passed their First Professional Examination during the April sittings of the Examiners :—

De Matteville, William Albert Maurice, Berne.
Doughty, William, Shropshire.
Henderson, Alexander, Perthshire.
Thomas, John Tubb, Pontypool.
Williams, Isaac.

The following gentlemen passed their Final Examination, and were admitted L.R.C.S. Edin. :—

Barnes, Raglan Wykeham, Aylesford.
Bestall, Charles Albert, Wicklow.
Bowker, Edward Harwood, Derbyshire.
Cathcart, Charles Walker, Edinburgh.
Collie, David, Edinburgh.
Dickson, Hanmer, Tripoli, N. Africa.
Harley, Henry Ruby, Cork.
Henderson, Alexander, Perthshire.
Mulligan, James, Dromore.
O'Mullane, Eugene Joseph, Mallow.
Scongal, Edward Fowler, Cheltenham.
Walker, Thomas Charles, Linlithgowshire.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 9 :—

Blackwell, Frederick William, Birmingham.
Good, William Ernest, Dorchester.
Mayne, Walter Furlong, Honiton, Devon.
Mellor, Thomas, Bury, Lancashire.
Mistri, Kavasji Hormasji, Bombay.
Thomas, William Frederick, Madras.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

MORGAN, JOHN H., M.A., F.R.C.S.—Assistant-Surgeon to the Hospital for Sick Children, Great Ormond-street, *vice* Haward, resigned.

MORGAN, JOHN H., M.A., F.R.C.S.—Assistant-Surgeon to the Hospital for Hip Disease in Childhood, *vice* Butlin, resigned.

NAVAL, MILITARY, &c., APPOINTMENTS.

WAR OFFICE.—Surgeon-Major Charles Walter Poulton, M.D., retires on half-pay.

BIRTHS.

BROWNRIGG.—On May 12, at Hill View, Streatham-common, the wife of J. Agnesley Brownrigg, M.D., of a daughter.

DALY.—On May 13, at Kingston Bagpuize, Abingdon, the wife of J. H. Daly, M.R.C.S.I., L.R.C.P. Lond., of a daughter.

GRAYSON.—On May 7, at Rayleigh, Essex, the wife of F. Dorrell Grayson, M.R.C.S., of a daughter.

HOLMES.—On May 11, the wife of W. Gordon Holmes, L.R.C.P. Edin., of 27A, Finsbury-square, E.C., of a son.

KEY.—On May 10, at Wilton-place, Belgrave-square, the wife of A. Cooper Key, L.R.C.P. Edin., of a son.

MURRAY.—On May 9, at Edinburgh, the wife of A. D. Murray, M.B., M.C. of a son.

RIDEN.—On May 11, at 8, Montpelier-square, S.W., the wife of Walter Rigden, M.R.C.S., of a daughter.

SLATER.—On May 5, at Evesham, the wife of J. S. Slater, M.R.C.S., of a daughter.

THOMAS.—On May 10, at Pocklington, Yorks, the wife of George H. W. Thomas, M.R.C.S.E., of a son.

THORNHILL.—On May 8, at Montreal Villa, St. Martin's, Guernsey, the wife of T. A. Thornhill, M.B., Surgeon-Major A.M.S., of a daughter.

VINES.—On May 3, at Ferry House, Littlehampton, the wife of H. J. Kendrick Vines, F.R.C.P. Edin., of a son.

WHITINGTON.—On May 8, at Tuxford, Notts, the wife of Charles Edward Whitington, M.R.C.S., of a son.

WOOD.—On May 10, at The Priory, Roehampton, the wife of W. E. Ramsden Wood, M.A., M.B. Cantab., of a daughter.

MARRIAGES.

CAMERON—SHEPHERD.—On April 30, at Lewisham, Charles Hamilton Hoae Cameron, M.R.C.S.E., L.R.C.P.L., of Harlesden, N.W., to Mary Louisa Sairle, fifth daughter of the late Robert Walter Mexborough Shepherd.

MOUAT—MATHEWES.—On May 9, at Madras, George Bridges Mouat, M.D., Surgeon-Major B.M., to Florence, fifth daughter of John Mathewes, of Sutton, Surrey.

ORMEROD—MILNER.—On May 9, at South Dulwich, Joseph Arderne Ormerod, M.A., M.B. Oxon., second son of the late Archdeacon Ormerod, to Mary Ellen, third daughter of Edward Milner, Esq., of Dulwich Wood, Norwood.

THURSTAN—REID.—On May 9, at St. Luke's Church, Paddington, Edward Paget Thurstan, B.A., M.B. Cantab., of Claremont, Ore, Hastings, eldest son of the Rev. J. Thurstan, Hon. Canon of Colombo Cathedral, to Anna Wilhelmina, only daughter of the late Rev. Wm. Reid, of Borgue, Kirkcudbright, N.B.

DEATHS.

BERNARD, JAMES FOGO, M.D., at Clifton, on May 6, aged 71.

COXE, Sir JAMES, M.D., P.R.C.P.E., of Kinellan, Commissioner in Lunacy, Scotland, at Folkestone, on May 9.

LESLIE, WALTER ALEXANDER, Surgeon-Major Madras Army (retired), at 9, Thurlow-road, Hampstead, on May 5, aged 57.

MEADOWS, HENRY MELLO MOLERUS, L.R.C.P. Edin., at 47, Victoria-street, Westminster, on May 8, aged 70.

SCHOOLES, HENRY JAMES, M.D., Deputy Surgeon-General, late of the School of Musketry at Hythe, Kent, on May 12.

THEOBALDS, CHARLOTTE, wife of John Robert Theobalds, M.R.C.S. Eng., Deputy Surgeon-General Madras Army, at Kamptee, C.P., on April 14, aged 35.

WOOD, WILLIAM, M.D., L.R.C.S. Edin., late Fleet-Surgeon Royal Navy at 16, Loudoun-road, St. John's-wood, N.W., on May 9.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

General Infirmary, Hull.—House-Surgeon. Candidates must be Members or Licentiates of the College of Surgeons of England, Edinburgh, or Dublin. They must be qualified as general practitioners, registered, and unmarried. Applications, with testimonials, to the Secretary, on or before June 7.

Kent and Canterbury Hospital.—Physician. Candidates must have been practising as physicians for the space of two years previous to election, and be registered as regular graduates in medicine of some University of Great Britain or Ireland, or Fellows or Members of the Royal College of Physicians of London. Qualifications and testimonials to be sent to the Board of Management on or before June 28.

Manchester Royal Infirmary.—General Superintendent and Secretary. Candidates must be not less than thirty years of age. Applications, with testimonials, to the Chairman of the Board, on or before May 18.

Radcliffe Infirmary, Oxford.—Surgeon. Applications, with testimonials, to the Secretary, on or before June 3.

Royal Hants County Hospital, Winchester.—House-Surgeon and Secretary. Candidates must possess the diploma of the Royal College of Surgeons of England, or surgical diploma of a Royal College or University in Scotland or Ireland; also a licence from the Royal College of Physicians of London, or from the Apothecaries' Society. Applications, with testimonials as to moral character, to the Committee, under cover to the Secretary, before May 27.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population in computed according to the census of 1871.

RESIGNATIONS.

Chorley Union.—Mr. G. C. Rigby has resigned the Workhouse; salary £40 per annum.

Huddersfield Union.—Mr. J. Gardiner has resigned the Kirkheaton District; area 2848; population 8816; salary £20 per annum.

APPOINTMENTS.

Belford Union.—James Millar, M.D. Glasg., L.R.C.S. Edin., to the West District and the Workhouse.

Brecon.—William Morgan, Ph.D., F.C.S., as Analyst for the County.

Cambridge.—James W. Knights as Analyst for the County for one year, and as Analyst for the Borough for one year.

Daventry.—William L. Emmerson, M.D., as Analyst for the Borough.

Hertford.—Charles M. Tidy, M.B., as Analyst for the County for one year.

Huntingdon.—James W. Knights as Analyst for the County for one year.

Isle of Ely.—James W. Knights as Analyst for one year.

Norfolk.—Francis Sutton, F.C.S., as Analyst for the County for one year.

Penzance Union.—Frederick E. Hunt, M.R.C.S. Eng., L.R.C.P. Edin., to the Third District..

Rutland.—William L. Emmerson, M.D., as Analyst for the County for one year.

Shifnal Union.—Justin McCallum McCarthy, M.R.C.S. Eng., L.S.A., to the Priors Lee District.

Teesdale Union.—Joseph Atkinson, L.R.C.S. Ire., L.K.&Q.C.P.I., to the Romaldkirk District.

Totnes.—Alexander W. Blyth, M.D., F.C.S., as Analyst for the Borough.

Towcester Union.—Blaise B. Floyer, M.R.C.S. Eng., L.S.A., to the Blakesley District.

Tregaron Union.—Rowland Rowland, F.R.C.S., L.S.A., to the Workhouse.

Westbury and Whorwellsdown Union.—George C. Tayler, M.D. Lond. Univ., M.R.C.S. Eng., L.R.C.P. Lond., to the Third District.

Wisbech.—James W. Knights as Analyst for the Borough.

The Sewage of Hertford.—The Corporation of this town have placed their works for the purification of the sewage in the hands of the Rivers Purification Association, who, for an annual subsidy of £350, undertake the whole management of the plan, as they have done at Coventry.

The South Devon and East Cornwall Hospital.—The governors of this institution have resolved to purchase three acres of land in the centre of Plymouth, with the view of erecting a new accident and disease hospital and convalescent home, in place of the present building, which is quite inadequate to the requirements of the district at the present time.

The Morgue, Paris, is, by a wise law, to be closed to youths and girls under fifteen years of age. A crowd of children were to be daily seen, returning from school at midday, visiting this ghastly dead-house. The question of identification is important, but the daily exhibition of every form of violent death, in a city like Paris, tended to promote an inclination for morbid spectacles, which should, no doubt, both for their pernicious effects, morally and physically, on the young, be discouraged and stopped.

Russian Killed and Wounded in the late War.—According to the official returns, the number of Russian killed and wounded amounts to 89,304 officers and soldiers. The number of generals among these is ten killed and eleven wounded. One prince of the Imperial family and thirty-four members of the higher Russian nobility died on the fields of battle. Among the wounded, 36,824 have quite recovered, and 10,000 others will leave the hospitals within a few weeks. The number of Russians killed and wounded has been very large in relation to the number of combatants engaged in battle—viz., a sixth part. In the great battles of the Franco-German war the proportion was very much the same. It was a sixth at the battles of Woerth and Spicheren, and one-eighth at those of Vionville and Mars-la-Tour. At Gravelotte it was only an eleventh, and at Wissenbourg a twelfth. The Russian returns show that among the wounded admitted into the hospitals one in eleven died.—*Gazette Méd.*, May 4.

Consumption and Climate.—The Rev. E. Wyatt-Edgell, B.A., has translated the address delivered by Dr. Prosper de Pietra Santa, of Paris, to the Sanitary Institute of Great Britain in July last, on the comparative value of the health-resorts of the South of France, Italy, Egypt, and Madeira, and the same is now published by Marsh and Co., of Fleet-street, in the form of a pamphlet. The information to be derived from it will be found useful in balancing the advantages to be obtained from the different climates and peculiarities of the places described, and as the Doctor has not recommended any particular one in preference to all the rest, the work is free from the suspicion which too often attaches to expositions dated from particular places. In the present day of extended travel it may indeed be said that most of the information which it contains is already well known; still, to those who are unfortunately compelled to avoid encountering the consequences of a winter in this country, it may afford some useful hints in determining the locality where the best chances may be found of arresting incipient disease.

Voillemier and the Charlatans.—The late M. Voillemier, Surgeon to the Hôtel-Dieu, was formerly in the habit of paying visits, clothed in simple garb, to the charlatans of repute of the day, desiring to acquire a knowledge of their procedures on his own person. Pretending an ailment of which he had no trace whatever, he went to one of these quacks who was in great repute. He examined him most carefully, and recognised that there was not the slightest external sign of the affection in question; but he added that the condition of the internal parts was such as to announce to him the imminent danger of approaching accidents. He therefore gave Voillemier a bottle, for which he charged 30 fr. The latter, thinking this was paying rather too dear for the gratification of his scientific curiosity, declared that he was not able to make such a sacrifice. After the surgeon and the charlatan had debated the matter, Voillemier carried off his bottle for 20 fr., and on reaching home found it composed of 1½ part of nitrate of silver to 100 parts of distilled water—a solution evidently more capable of producing than of preventing disease.—*Lyon Méd.*, May 12.

Gonorrhœal Testis.—M. Horand reported to the Lyons National Society of Medicine on 200 cases of hernia humoralis in which he had employed Langlebert's mode of dressing, which he considers as superior to all others that have been hitherto recommended. The dressing or apparatus consists first in the application of a layer of carded cotton, and then over this some caoutchouc cloth, the parts being supported in a suitable suspensory. Not only is immediate relief of pain procured, but the cure of the disease is very complete. The same apparatus may be used after puncture for hydrocele, allowing of the patients being at once sent to their homes. M. Diday stated also that he had applied this bandage in a great number of cases with success; and had he known of it before the publication of his last work, he would have spoken much less in favour of antiphlogistic treatment in gonorrhœal epididymitis. He thinks it advantageous before applying the apparatus to paint the scrotum with tincture of iodine that has been recently prepared. Prof. Rollet observed that it was of great importance to ascertain whether, after treatment, any induration of the epididymis remained, as, when this was the case on both sides, sterility was the result. In order to prevent this he has great faith in leeches, blistering, and purgatives until complete resolution has been obtained; and this apparatus does not dispense with the necessity of leeches. M. Horand maintained that the affection is as effectually cured by this apparatus as by leeching, and he does not agree with Profs. Rollet and Gosselin that sterility follows slight persisting induration. Prof. Rollet, however, observed that he had often examined the semen under this circumstance, and always found the spermatozoa absent.—*Lyon Méd.*, April 14.

PULVERISED SEA-WATER.—Prof. Mantegazza states that he has derived great advantage from the employment of pulverised sea-water in cases of chronic non-specific laryngitis, obstinate chronic pharyngitis, bronchial catarrh from chronic bronchitis with or without bronchial dilatation, the first and second stages of phthisis, caseous pneumonia, and chronic pneumonia of different forms accompanied by profuse bronchial expectoration, and various forms of scrofula. He does not advise it in those forms of phthisis which pursue a rapid course and are accompanied by much febrile action and great bronchial irritation. In all doubtful cases trials may be made of a few inhalations, which, if they do no good, do little or no harm. Pulverisations of sea-water are now executed at several establishments in Italy, but prominent among these is that of Rimini, where they are conducted on so large a scale that twenty persons may receive them at the same time, the pulverisation being effected by means of compressed air and a steam-engine. The *sedute* lasts for half an hour at first, and afterwards for an hour, from thirty to forty of these being required. The patients while respiring the vapour should be encouraged to talk and sing as far as their strength allows. The first effects produced are a pleasant excitement and a return of appetite.—*Gaz. Med. Lombard*, March 30.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Dr. Oaton.—We shall be very happy to receive the papers.

A Collector, Plymouth.—In his "Medical Portrait Gallery," Pettigrew states that the autograph of B. S. Albinus "is of very great rarity," and that "among all the documents belonging to the anatomical collection at Leyden, of which Albinus was so many years the conservator, it is not to be found." On applying to Mr. Chatto, the librarian of the College of Surgeons, that gentleman will show you an original letter of this great anatomist. Mr. Stone, of the same institution, is the fortunate possessor of several, which he obtained from Abernethy.

Annuitant.—Unquestionably in favour of the woman. The rates charged are to be seen in the tables published by authority for Government annuities. Thus, a man aged sixty-five may obtain an immediate annuity of £10 on payment of £88 18s. 4d., and a woman of the same age for £103 9s. 8d. Dr. William Farr, F.R.S., states that the mean lifetime of boys at birth is 39·91 years, and of girls 41·85 years.

Alcoholic Drinks in Workhouses.—At the last Vestry meeting at Llangaveloch, South Wales, a long discussion took place on the use of stimulants at the workhouse, and a strong feeling was expressed that such expenditure "was a great waste of money"; that in many unions no money was spent for alcoholic beverages; and that the Swansea Guardians, in justice to their constituents, the ratepayers, should make an effort to amend the present practice. Ultimately the following resolution was unanimously adopted, the Clerk being directed to request the Guardians of the parish to support the same:—"This Vestry is of opinion that the amount expended in the Swansea Union for alcoholic drinks is more than is necessary; and hereby asks the Board of Guardians to invite their medical officer to co-operate with them in materially reducing this expenditure, and, if possible, to do without it altogether, by the substitution of a small increase to the medical officer's salary to cover the cost of the administration of alcohol as a medicine on his own account."

Owens College, Manchester.—It was announced at the recent half-yearly meeting of the governors that £5000 had been presented for the foundation of certain medical and legal scholarships in the College.

Medical Inspections and Industrial Schools.—The following case is worthy of observation, as it demonstrates the necessity of a medical examination of all children immediately on their admission into industrial schools. An inquest was lately held on the body of a boy, aged eight years, who died suddenly at the St. Joseph's Industrial School, Chorlton-upon-Medlock. About six months ago the deceased was committed by the magistrate to the school, he being without proper guardians. Beyond being delicate, no particular ailment was apparent, and he was treated the same as the other boys. A post-mortem examination of the body, however, showed disease of some standing. As the child was marching to the playground with the rest of the boys of the school, a bloodvessel burst, and death almost immediately ensued. A medical witness stated that if the boy had been medically examined on his admission to the school the condition of his health must have been ascertained.(!) The verdict returned was "Death from the rupture of a bloodvessel in the lungs." A recommendation that arrangements be made for each boy to be medically inspected on his admission to the school, was also forwarded to the proper quarter.

Typhus Fever in Dowlais.—Mr. T. J. Dyke, Medical Officer of Health, reported at the last meeting of the Merthyr Board of Health that typhus fever still had a firm hold upon the population in Irish-row and some of the adjoining streets in Dowlais. He stated that it would be a wise economy to remove *all* the inmates from these infected houses, and to close them until every part thereof and every article therein shall have been thoroughly disinfected and cleansed. They had a number of houses suitable for the purpose, adjoining Bryant's-field Hospital. It was resolved that the officers of the Board do all they could by persuasion to remove such persons into those houses, and to maintain them there, at the expense of the Board, while necessary. In answer to an inquiry as to the excessive death-rate in the Cyfarthfa district, which was stated to be 30 per 1000 in the medical officer's last annual report, it was explained that the high mortality had been amongst children from diseases *brought on from want of food*, consequent on the prolonged strike.

Miles.—The "Harvard" and "Yale" Universities, America, were both founded long before the colonies separated from the British Crown. Harvard was established at Cambridge, near Boston, the capital of New England, in the latter half of the seventeenth century, and received its name from its munificent patron, John Harvard, an English gentleman of wealth and public spirit. Near the end of the seventeenth century, the second college on the Western Continent was founded at Williamsbury, by the cavalier colony which settled in Virginia. The third was Yale, which dates its origin from the commencement of the eighteenth century, and owed its foundation to the colony, which seceded from the Puritans of Massachusetts. It derived its name, as Harvard had done, from a liberal patron, Elihu Yale.

The Mayoress of Crewe.—An elegant épergne of silver, valued at 200 guineas, has been presented to Mrs. Atkinson, Mayoress of Crewe. A daughter having been added to the Mayor's (Dr. James Atkinson's) family in January last, it was decided to follow the time-honoured custom; but his popularity, as first Mayor of the borough, is such, that instead of the gift being made by the members of the Town Council, as usual in similar cases, subscriptions were freely sent in by the whole of the inhabitants.

A Householder.—The Metropolitan Water Companies that are giving a constant supply, under the provisions of the Act of 1871, in portions of their districts, are the Kent, New River, Chelsea, Lambeth, and East London.

An Opium-Eater.—The view expressed on the opium question in Parliament by Sir George Campbell in 1875, and which he repeated in 1876 at the British Association, was—"Opium was one of those things upon which the imposition of a heavy duty enabled us to serve God and Mammon at the same time: doing good to our neighbour by checking its consumption, and raising a large revenue for ourselves. The Gothenburg system, under which the public authorities regulated the liquor traffic so that as little harm as possible should be done to the community, was precisely analogous to the system followed in Bengal with regard to the opium traffic."

Cheap Feminine Boarding-Schools.—Several disclosures of a terrible kind have recently been made of the condition of cheap boarding-schools for girls in various parts of the country. It appears from these revelations that growing girls are not only insufficiently and badly fed and neglected, but the education they receive is of a questionable character morally. Many of these seminaries offer a liberal board and instruction, including almost every branch of female education, for *twenty-five pounds a year.* No comment is required as to what could be expected from such a scale of remuneration and terms. Parents and guardians entrusting their children to such establishments must prepare themselves for consequences which caution and discretion would undoubtedly anticipate. It may be asked whether such schools as these should not be under some sort of Government control.

William Harvey, the Great Physician.—*A propos* of the Harvey Tercentenary Memorial Fund, the following entry from the sixth report of the Historical Manuscripts Commission may be, at the present time, interesting to our readers. It is recorded in the Calendar of Papers of the House of Lords, and is the petition, dated November 24, 1646, "of William Harvey, Doctor of Physic, and one of his Majesty's principal physicians-in-ordinary, and sets forth that he has for many years attended his Majesty, and is desirous to continue his attendance, especially as he understands there is no one (sworn in ordinary) now with his Majesty, and prays for a post for himself, with three servants, and four horses, to go to Newcastle, or elsewhere, to attend his Majesty, and to return as his service shall require."

Thomas Williams, Guy's.—The late Dr. Richard Bright was born in Bristol. It was his eldest brother who represented that city in three successive Parliaments. Dr. Bright died of the disease so well known in connexion with his name.

Olfactory.—According to Humboldt, the Peruvian Indians in the darkest night can perceive through their scent the approach of a stranger whilst yet far distant. And it is said that the Araba of the Sahara can recognise the smell of a fire thirty or forty miles distant. The smell acquires an acuteness rivalling that of the lower animals, among races of men whose existence depends upon such discriminative power.

COMMUNICATIONS have been received from—

Mr. J. Chatto, London; Dr. Robert Hunter Semele, London; Mr. B. R. Wheatley, London; Dr J. Mitchell Bruce, London; Mr. T. M. Stone, London; Mr. R. W. Parker, London; Dr. Haywood Smith, London; Dr. N. Chevéas, London; Dr. Shingleton Smith, Bristol; The Registrar of the Royal College of Physicians, London; The Secretary of the Epidemiological Society, London; The Hon. Secretary of the Society of Medical Officers of Health, London; The Registrar of Apothecaries' Hall, London; The Hon. Secretary of the Queekett Micoscopical Club; Mr. George Gasgoin, London; Mr. R. C. Cagft, London; The Secretary of the Royal College of Surgeons, Edinburgh; Mr. T. C. Brown, Clevedon; Messrs. J. C. and J. Field, London; Messrs. G. Stagbt and Co., London; Dr. R. Caton, Liverpool; Messrs. Salt and Son, Birmingham; "Punoans," Plymouth; Dr. L. Snapter, Exeter; Mr. G. Baows, London; Mr. S. Newman, London; Mr. M. Becusa, London; Mr. J. Knowsley Thornton, London; Mr. A. T. Norton, London; Mr. Marsh, London; Mrs. De Lisle Allen, London; Dr. B. Howard, London.

BOOKS AND PAMPHLETS RECEIVED—

J. B. Berkart, M.D., On Asthma; its Pathology and Treatment—George Granville Bantock, M.D., F.R.C.S. Edin., On the Treatment of Rupture of the Female Perineum—Daniel Hack Tuke, M.D., Insanity in Ancient and Modern Times, with chapters on its Prevention—Geo. Chas. Coles, M.R.C.S., Temperature-Charts—Jonathan Hutchinson, F.R.C.S., Illustrations of Clinical Surgery, fasciculus xi.—Smellie's Treatise on the Theory and Practice of Midwifery, edited by Alfred H. M'Clintock; vol. iii.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Medicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Pantiles Papers—Dublin Journal of Medical Science—Glasgow Medical Journal Nordiskt Medicinskt Arkiv—New York Medical Journal—Boston Journal of Chemistry—North Carolina Medical Journal—Chemist and Druggist—Canada Lancet.

APPOINTMENTS FOR THE WEEK.

May 18. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Henry Morley, "On Richard Steele."

20. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Society of Arts, 8 p.m. Dr. B. W. Richardson, "Some Researches on Putrefactive Changes, and their Results in Relation to the Preservation of Animal Substances." (Cantor Lectures—V.)

21. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Pathological Society, 8½ p.m. Mr. Nettleship—Carcinoma of the Orbit. Dr. Peacock—French Millstone-Maker's Lung. Dr. P. Irvine—Cerebral Aneurisms. Dr. Carley—Cerebral Embolism. Dr. T. Fox—Anatomy of Dysidrosis. Dr. F. Taylor—Cavity in Spinal Cord. Mr. Spencer Watson—1. Polypus from Nose, Antrum, and Orbit; 2. Colloid Cancer of Breast. Mr. Pearce Gould—Aneurism of the Pulmonary Artery. Dr. Leared—Ovarian Cysts from Twin Infants. Mr. Adams—Spontaneous Rupture of the Œsophagus. Dr. Lanchester—Primary Cancer of Lung. Dr. Greenfield (for Dr. Saunders)—Specimens of Biliary Cirrhosis. Dr. S. West—Aneurism of Pulmonary Artery, with Fatal Hæmoptysis. Dr. Murchison (for Dr. Bancroft)—Specimens of Filaria.

22. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern; 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

23. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

24. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Clinical Society, 8½ p.m. The President (for Dr. Day), "Sequel of a Case of Chylous Discharge from Leg." Dr. Farquharson, "A Case of Quinine Rash." Mr. Cripps, "A Case of Gastrotomy for Intestinal Obstruction." Dr. Murchison, "Incubation Period of Scarlet Fever and of some other Diseases." Mr. Bryant, "Sudden Death after Tapping of an Hydatid Cyst of the Liver." Mr. Brown, "Sequel of a Case of Cancer of the Tongue."

Queekett Microscopical Club, 8 p.m. Mr. B. Thompson Lowne, "On the Structure of the Eyes of Insects."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 11, 1878.

BIRTHS.

Births of Boys, 1223; Girls, 1217; Total, 2443.
Average of 10 corresponding years 1868-77, 2235·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	727	656	1383
Average of the ten years 1868-77	719·5	658·1	1377·6
Average corrected to increased population ...	...	...	1474
Deaths of people aged 80 and upwards ...	...	...	40

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	8	5	4	...	18	...	2	1	1
North ...	751729	19	9	5	5	18	...	1	1	3
Central ...	334369	1	2	4	2	13	...	...	1	..
East	639111	5	5	1	1	19	..	2	2	2
South	967692	15	12	10	1	42	1	3	...	1
Total	3254260	48	33	24	9	110	1	8	5	7

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·590 in.
Mean temperature	56·7°
Highest point of thermometer	69·1°
Lowest point of thermometer	44·4°
Mean dew-point temperature	50·0°
General direction of wind	Variable.
Whole amount of rain in the week	2·10 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 11, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending May 11.	Deaths Registered during the week ending May 11.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2443	1383	69·1	44·4	56·7	13·72	2·10	5·33
Brighton	103923	44·1	49	26	68·7	43·0	54·8	12·67	0·79	2·01
Portsmouth ...	129461	28·9	92	62	...	...	...	...	...	...
Norwich	84620	11·3	61	21	69·0	43·0	52·7	11·50	1·51	3·84
Plymouth	73599	52·8	45	33	62·5	41·0	52·7	11·50	1·25	3·17
Bristol	206419	46·4	127	84	70·1	35·6	53·7	12·06	1·61	4·09
Wolverhampton ..	74240	21·9	64	23	66·6	38·8	51·3	10·73	3·36	8·53
Birmingham ...	383117	45·6	337	129	...	...	...	...	...	...
Leicester	121473	38·0	101	37	71·8	41·8	53·6	12·01	2·05	5·21
Nottingham ...	165267	16·6	109	62	70·6	38·9	52·5	11·39	1·62	4·11
Liverpool	532681	102·2	464	251	66·6	43·2	52·4	11·33	1·36	3·45
Manchester ...	360514	84·0	304	209	...	...	...	...	...	...
Salford	170251	32·9	133	73	71·5	37·5	51·5	10·84	1·27	3·23
Oldham	107366	23·0	98	51	...	...	...	...	...	...
Bradford	185088	25·6	132	95	67·6	41·0	50·7	10·39	0·79	2·01
Leeds	304948	14·1	256	128	67·0	42·0	51·1	10·62	0·91	2·31
Sheffield	289537	14·7	193	128	68·0	41·0	50·4	10·22	1·69	4·29
Hull	143139	39·4	118	43	67·0	43·0	49·9	9·94	1·00	2·54
Sunderland ...	112459	34·0	92	62	68·0	44·0	49·8	9·89	0·73	1·85
Newcastle-on-Tyne	144570	26·9	97	60	...	...	...	...	...	...
Edinburgh	222371	53·1	153	93	71·5	33·5	49·8	9·89	0·98	2·49
Glasgow	566940	94·0	416	251	67·5	37·7	51·0	10·56	0·91	2·39
Dublin	314666	31·3	+178	+197	...	...	...	...	...	...
Total of 23 Towns in United Kingdom	8373953	37·9	6061	3507	71·8	33·5	52·0	11·11	1·41	3·58

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·59 in. The highest reading was 29·95 in. at the beginning of the week, and the lowest 29·41 in. on Saturday morning.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

+ The return from Dublin not having come to hand, averages of the numbers in recent weeks have been inserted in order to make up a total for the twenty-three towns.

ORIGINAL LECTURES.

THE LUMLEIAN LECTURES
ON
INSANITY IN ITS LEGAL RELATIONS.

Delivered at the Royal College of Physicians, London.

By J. C. BUCKNILL, M.D., F.R.C.P., F.R.S.,
Late Lord Chancellor's Visitor in Lunacy, and Medical Superintendent of Devon County Asylum.

LECTURE I.

(*Concluded from page 529.*)

I SHALL next adduce the opinions of Lord Justice Blackburn, as given before the Select Committee on the Homicide Bill, who said: "On the question 'What amounts to insanity that would prevent a person being punishable or not?' I have read every definition which I ever could meet with, and never was satisfied with one of them, and have endeavoured in vain to make one satisfactory to myself. I verily believe that it is not in human power to do it. You must take it that *in every individual case* you must *look at the circumstances*, and do the best you can to say whether it was the *disease* of the mind which was the *cause* of the crime, or the *party's criminal will*." Referring to what he called the "extra-judicial opinions of the judges in the House of Lords," he proceeded to remark: "But we cannot fail to see that there are cases where the person is clearly not responsible, and yet knew right from wrong. I can give you an instance which shows what I held deliberately." He then proceeds to give somewhat in detail the case of a woman whom he tried, who, being evidently in a state of mental depression, had killed one child, and was about to kill another, when the girl, hearing a noise, looked up, and said, "What are you doing?" "I have killed Olivia, and I am going to kill you," was the answer. The child, fortunately, instead of screaming, threw her arms round her mother's neck, and said, "No, I know you would not hurt your darling little Mopsy!" The woman dropped the child, went downstairs, and went into a neighbour's house, told her what she had done, that she had killed Olivia, and was going to kill Mary, "but when the darling threw its arms round my neck, I had not the heart to do it." "She clearly knew right from wrong, and knew the character of her act; for some little time after that she talked rationally enough, but before night she was sent to a lunatic asylum, raving mad, and, having recovered, she was brought to be tried before me at a subsequent assizes. On the definition in Macnaughten's case, she did know right from wrong. She did know the quality of her act, and was quite aware of what she had done; but I felt it impossible to say that she should be punished. If I had read the definition in Macnaughten's case, and said, 'Do you bring her within that?' the jury would have taken the bit in their own teeth, and said 'Not guilty, on the ground of insanity.' I did not do that; I told them that there were exceptional cases, and on that the jury found her not guilty, on the ground of insanity, and I think rightly." On this definition I think you would be obliged to say that woman was guilty.

This is very remarkable evidence, considering the source of it, and well deserves to be carefully pondered in the minds of those who are adverse to any attempt to make the law of insanity more conformable than it is with medical science. Lord Justice Blackburn clearly sees the incongruities and deficiencies of the present law, but he expresses some apprehension that to deal with each individual case according to the circumstances would be "leaving the thing at large." "But I fear a general rule of this sort, making it a question for the jury, whether the disease was the efficient cause of the Act, would be *leaving the thing at large*. I have never been able to assign a definition satisfactory to my own mind, and will not pretend to do so."

And this brings me to the consideration of the only earnest and serious attempt which has been made to amend this stereotyped fragment of the common law—namely, the portion relating to insanity of Sir Fitzjames Stephen's Homicide Bill, which was the subject of the Select Committee in 1874.

Sir Fitzjames Stephen's attempt to codify this most difficult part of the law was conceived in the following terms:—

"24. Homicide is not criminal, if the person by whom it is committed is, at the time when he commits it, prevented by any disease affecting his mind—*a*. From knowing the nature of the act done by him; *b*. From knowing that it is forbidden by law; *c*. From knowing that it is morally wrong; or, *d*. From controlling his own conduct. But homicide is criminal, although the mind of the person committing it is affected by disease, if such disease does not in fact produce some one of the effects aforesaid in reference to the act by which death is caused, or if the inability to control his conduct is not produced exclusively by such disease. If a person is proved to have been labouring under any insane delusion at the time when he committed homicide, it shall be presumed, unless the contrary appears or is proved, that he did not possess the degree of knowledge or self-control hereinbefore specified."

It is evident that the pith and substance of this scheme of laws is comprised in its fourth section, which, like Aaron's rod, turned into a serpent, swallows up all the others. One is apt to be confused by this plan of arranging several endings of a sentence under one head, but if we complete each sentence my meaning will be apparent. The full expression of exemption *a* ought clearly to be as follows:—"Homicide is not criminal if the person by whom it is committed is, at the time when he commits it, *prevented* by any disease affecting his mind from knowing the nature of the act done by him, *and therefore controlling his own conduct*." For unless the last clause be added, the idea conveyed of the exemption is most incomplete. Between the not knowing and the doing there is a great gulf fixed, which can only be bridged by words conveying the idea of motive; the words used—"prevention of control"—being most convenient.

An angry idiot splits the skull of a child with a spade, not knowing the fatal nature of the act. If he were not angry he would not strike, however ignorant he might be; but being diseased, ignorant, and angry, he does not control the muscular movements which express his mental condition—that is to say, his conduct. From this consideration it appears to me demonstrable that clause *d* of the proposed code virtually includes all the others, and is sufficient in itself: "Homicide is not criminal if the person by whom it is committed is, at the time when he commits it, prevented by any disease affecting his mind from controlling his own conduct."

What more can be wanted than this comprehensive declaration, which would seem in itself to furnish a succinct and complete statement of the law of irresponsibility on account of disease affecting the mind? and which could scarcely need any further development in terms if it were only wisely acted upon in the full spirit of Lord Justice Blackburn's dictum—that "in every individual case you must look at the circumstances, and do the best you can to say whether it was the disease of the mind which was the cause of the crime, or the party's criminal will."

I have illustrated my argument by the real offence of an idiot in order that I may say that I do not concur with the objection which the Lord Chief Justice makes to Sir Fitzjames Stephen's proposed code, on the ground that "its provisions are confined entirely to insanity as arising from disease. No provision is made for congenital malorganisation; in other words, for idiocy." But the idea connoted by the term "disease" is surely not restricted to conditions acquired subsequent to birth! An infant may be born with small-pox, or with rickets, or with malformed heart, which are neither more nor less diseases than malformed brain.

With the objection, however, to the provision relating to delusions I do concur, not only on the ground that there are absurd opinions which are called delusions which ought not to excuse from punishment, but on the wider ground that delusion, like all other insane states of mind, ought to be judged by its effect on the control of conduct. "The pathology of insanity," says the Lord Chief Justice, "shows that the mind may be subject to delusions which do not in any degree affect the moral sense or the will as regards the power of self-control. The mere existence of mental delusion ought not to affect the decision as to the power of self-control, unless the nature of the delusion be such as legitimately would lead to the inference that the power of self-control was wanting. The question is one which should be decided by all the circumstances, independently of any presumption one way or the other."

Sir Fitzjames Stephen does, however, fully admit, in ex-

plaining this section, that it is not every delusion which ought to excuse a man for murder—the delusion, for instance, that he has five joints in his little finger. But he goes far beyond this point when he asserts that if a lunatic who has various delusions and is shut up in a lunatic asylum gratifies a grudge against one of the keepers by killing him, "that man ought to be hanged just as if he were sane, because the crime is a sane crime." Surely this is riding a principle to death; for how is it possible to predicate sanity in any respect of a man who, plunged in the calamity of madness, and suffering from various delusions, is shut up in a lunatic asylum, where he may be restrained even by bonds if he is thought to be dangerous? The fact that the man is actually under restraint would seem to be evidence that he is known not to be able to control his conduct. Very sure I am that Sir Fitzjames Stephen would be one of the last of men to aid in carrying into effect this strained application of seeming legal consistency. Rather, I think, would he approve that notable expression of Lord Coke's, who says that criminals are punished—"'Ut pœna ad paucos, metus ad omnes perveniat'; but so it is not when a madman is executed, but should be a miserable spectacle both against law and of extreme inhumanity and cruelty, and can be no example to others."

At the Spring Assize, 1876, George Fordham, a lunatic, was convicted and condemned by Mr. Justice Denman for the murder of a keeper by stabbing with a knife while he was confined in Leicester Borough Asylum. Fordham had been removed from the lunatic ward in the workhouse to the asylum because he was dangerous. He was an epileptic, and was destructive in the asylum by breaking windows. He had a grudge against the keeper about his portion of tobacco. The care taken of him was insufficient, the knife being improperly left within his reach. After the act he said he did it "to be avenged; perhaps there will be an inquiry now. Oh, dear! I am sorry he is dead; I did not mean to kill him." The sentence was not carried into effect, and the proceedings did not reflect credit on the administration of the law.

But, notwithstanding that the Lord Chief Justice criticises Sir Fitzjames Stephen's plan of codifying the law of insanity on the lesser points indicated, to the main principle of the proposed change he gives his most cordial concurrence in the following very remarkable passage of his memorandum:—"As the law, as expounded by the judges in the House of Lords, now stands, it is only when mental disease produces incapacity to distinguish between right and wrong that immunity from the penal consequences of crime is admitted. The present Bill introduces a new element, the absence of the power of self-control. I concur most cordially in the proposed alteration of the law, having been always strongly of opinion that, as the pathology of insanity abundantly establishes, there are forms of mental disease in which, though the patient is quite aware he is about to do wrong, the will becomes overpowered by the force of irresistible impulse. The power of self-control, when destroyed or suspended by mental disease, becomes, I think, an essential element of responsibility."

The phraseology of this most important memorandum is not marked with the usual lucidity and precision of the writer, but the intrinsic weight of this opinion can scarcely be overestimated. And it is hard to believe that when Lord Justice Bramwell thinks that hardly any people are so mad as to be included within the existing law; when Lord Justice Blackburn gives it as his solemn judgment that it is not in human power to define what amounts to insanity that would prevent a person being punishable or not; when the Lord Justice's Clerk of Scotland, Lord Moncrieff, says from the Bench that, "in point of fact there are very few lunatics who do not know right from wrong, and much unreasoning inhumanity has been the result of this unscientific maxim"; when so sound a lawyer and a lawmaker as Sir Fitzjames Stephen, whom I have so much criticised because he is so great an authority, has so changed in his opinions between 1863—when he wrote in his "General View of the Criminal Law of England," "The law as it stands allows to every symptom of madness its full weight as evidence that the act done was not a crime"—and 1874, when he drafted and strenuously defended the insanity provisions of the Homicide Bill which we have discussed; and finally, when the Lord Chief Justice of England concurs most cordially in the introduction of a new element into the law, namely, the absence of the power of self-control;—I think we have reasonable grounds for the expectation that this unscientific law, which twenty-four years ago I was one of the first to attack, must soon receive the important modification of which it so urgently stands in need. This needful modification I believe to be simply the introduction of the new element which has the cordial concurrence of the Lord Chief Justice—namely, the absence of self-control produced by disease of the body affecting the mind. This, as it seems to me, is the only philosophic or scientific principle upon which to found the plea of not guilty on the ground of insanity, and which will include within itself the cases of all insane criminals which ought to be so included. For although I cannot agree with Sir Fitzjames Stephen in his opinion that by the word *madness* a lawyer means "conduct of a certain character," it is no doubt quite true that insanity in its legal relations has always reference to conduct—differing in this respect from insanity in its medical sense, which has not necessarily any such reference. The question, therefore, before a criminal court always being that of a man's state of mind during certain intentional muscular movements which we may agree to call "conduct," it seems to me demonstrable that the one fact which must be determined is, whether at the time the man's state of mind was or was not a state of mind produced by disease which enabled him to control such movements. If by ignorance of a certain kind, or by delusion having a certain bearing, he cannot control such movements, even the present law declares that he shall not be found guilty; and if it be proved to the satisfaction of the legislature or of the judicature itself that there are other mental states produced by disease which have the same effect, surely the same immunities cannot be withheld.

I have shown you that evidence to this effect has already satisfied the mind of the Lord Chief Justice of England, who, in words which deserve our most respectful attention, declares the source of his conviction to be the pathology of insanity; differing in this respect from his colleagues, who have come to the same conclusion, not from the scientific, but from the judicial side of observation. This recognition of medical science as a basis of law stands in very remarkable contrast to much that has been said and written by great lawyers. And here again I may refer to Sir Fitzjames Stephen for the best illustration I can find of the lawyer's point of view. In his work already quoted he says: "If the pathological character of madness could be accurately ascertained, the difference [between the lawyer's and the physician's views of madness] would be perfectly clear. Suppose, for example, it were shown to consist in obscure inflammation of the brain, it would obviously be monstrous to set aside a perfectly reasonable will, made with every circumstance of deliberation and reflection, because after the testator's death it was proved by dissection that at the time of executing the will he had obscure inflammation of the brain, yet this would be demonstrative proof that, in the medical sense of the word, he was mad."—(Page 88.)

It is strange that so keen a logician should have failed to see that he was here comparing two impossible contraries. Suppose, instead of madness, we substitute in the argument the condition of death, and say, with Macbeth, that "when the brains are out the man will die" (pathology cannot be far wrong in that),—it would be obviously monstrous to set aside a reasonable will, because after the testator's death it was proved by dissection that at the time of executing the will the man had no brains. The difference between the two ways of putting the argument may possibly be that Sir Fitzjames does not believe in pathology *quoad* madness, but that he does believe in it *quoad* death. The error in his argument therefore would be his assumption that the pathological character of madness was accurately ascertained.

It is of the utmost importance to our credit individually and collectively, and to the public welfare in the administration of justice, that we should advance no claims for knowledge of the pathology of insanity which we do not possess; and also that we should most carefully consider and adjust the bearing of that which we do possess in reference to the question at issue. It is not professionally comforting to see a great judge thus answering a question before the Royal Commission—"I would see first what the medical opinion was worth, because medical men talk a very great deal of nonsense." Not a flattering opinion, but a more discriminating one than we should have expected, seeing that in courts of law the evidence of one medical witness seems to

be thought worth just as much as that of any other; so that Pantagruel's plan of weighing it in a pair of scales might save trouble, and equally well serve the ends of justice. We must, however, beg the judges to understand that the aspiring juniors in our profession are not at all under such good control as they are at the bar; and that we can do nothing to check them in the publication of opinions which we cannot endorse, expressed in language we cannot approve.

This I think I may certainly say on behalf of those who have spent a lifetime in the study of mental pathology: that the greater their experience, the less their inclination becomes to vaunt their knowledge and to express dogmatic opinions. Rather, I think we feel with our greatest philosopher, that we are like men on the shore picking up a pebble of knowledge here and there, while before us lies a whole ocean of truth unexplored. But while with all modesty we admit our deficiencies, let us not forget that immense advantage which even fragments of truth give us over those who do not possess any. I have elsewhere vindicated the grounds of belief in medical evidence touching insanity from that judicial depreciation which would put our scientific opinions out of court, as superfluous, in questions which, it was said, ought to be decided according to the ordinary rules which are applied by ordinary men in daily life; and I have shown how courts of law in questions of this kind are compelled, by the nature of things, to resort to those who possess some knowledge of mental pathology for instruction and guidance. I have endeavoured there to point out the logical basis of our authority, in the always understood syllogism to which we can refer our experience:—

1. All men who present certain groups of signs of mental states are of unsound mind.
2. This man presents one of these groups of signs.
3. Therefore he is of unsound mind.

In affirming the opposite proposition the syllogism will, of course, be:—

1. All men who do not present any one of certain groups of signs of mental states are of sound mind.
2. This man does not present any one of these groups of signs.
3. Therefore he is of sound mind.

It may, perhaps, be needful briefly to explain what I mean by mental pathology, and what, from the context, there can be little doubt that the Lord Chief Justice of England means by it in that most important document which I have quoted. While I most entirely agree with the estimate of our knowledge, or want of knowledge, made with such precision by our admirable Goulstonian Lecturer this year, I must ask you to remember that by the pathology of insanity, of which he says that we are only beginning to learn the rudiments, he really means the pathological anatomy of insanity—or, as he more precisely expresses it, the knowledge of "the subjective equivalents of morbid appearances; or, conversely, the anatomical substrata of subjective states." Of this fundamental science, undoubtedly, we are only beginning to learn the rudiments. And even had we already made great advances, its application to moral questions relating to living men in courts of law would be narrow in comparison to that which I may call the Rational Pathology of Insanity.

Lord Westbury once pointed this out in a remarkable speech. "An evil habit," he said, "had grown into a precedent with judges and juries, of assuming that insanity was a physical disease, and not a subject of moral inquiry, and, therefore, that they were bound to accept medical testimony in reference to it. If there were any processes by which a man's skull could be cut into, and the different coats and linings of the brain exposed, so as to exhibit whether they were too much gorged, or the circulation impeded—there might be something in the plan. But medical science had not attained that pitch of development, and medical men imagined external things to be indices of things unseen."

This argument, which was used in the House of Lords (March 16, 1862), will illustrate the difference I wish to draw between that Anatomical Pathology of which we are beginning to learn the rudiments, and that Rational Pathology of Insanity in which we have made such advancement as to have become indispensable witnesses in courts of law, when difficult questions respecting morbid mental states have to be decided. It is not that "medical men have imagined external things to be the indices of things unseen," but that they certainly are the indices of things unseen, and that all men, whether they be medical or legal, ignorant or expert, must in questions of insanity accept them as such, unless it can be shown that a state of mind can itself be seen.

The pathology of insanity which the Lord Chief Justice declares to have abundantly established the existence of certain forms of mental disease is, and must be, a pathology not based alone upon morbid anatomy, but upon those external things which can be observed while a man is yet alive—upon the operation of causes which have been observed in countless instances to be followed by insanity, and upon physical symptoms which have been found to be the frequent, if not the constant, concomitants of the mental signs. So that, reading the present state of the man by the light of his past history, his pathology can be determined—not, indeed, with the constant certitude we desire and labour to obtain, but with much of probability in most cases, and with all reasonable certitude in others. That experts in insanity are medical men has not arisen from any decisions of the judicature or preference of the judges, but from the action of the legislature, which, having to provide care, treatment, and protection for the insane subjects of the Queen, has made statutory enactments which place all such persons in the hands of the medical profession, which by this means obtains almost a monopoly of the opportunities of acquiring an intimate knowledge of the phenomena of insanity. A great power, a great privilege, and a great responsibility is thus imposed upon us, which, as regards the care, protection, and treatment of the insane, I think the judgment of the community at large will give us credit for having discharged with humanity, skill, and devotion. That many of us have laboured zealously at the increase of the pathological knowledge of insanity, will also, I think, be granted. And if this knowledge often makes but a poor show in courts of law—first we have to plead, in extenuation of our deficiencies, the intrinsic difficulties of the subject, which are further magnified by the imperfect methods of inquiry practised by the courts, that make questions of science the subjects of litigation, and not of calm and thorough investigation—a system which encourages the production not of the most careful and considerate evidence which can be procured, but of that which is the most one-sided, opinionated, and uncompromising; a system, moreover, which systematically commits the error of appearing to make inquiry into the state of a man, without having the man examined as to his state. The fact is, that a criminal trial is a fight, and not an inquiry, and that when the right determination can only be arrived at by methods of inquiry, and not by those of contention, as when lunacy is asserted, the result is oftentimes a matter of the purest accident, decided by what persons have encountered the criminal before and after the offence, and by the casual observations he may have made to them; depending also to a great extent upon whether he has the sinews of war with which to defend himself. The Crown lawyers are not supposed even to know that the plea of insanity will be set up; and even after this has been done they make no investigation as to the mental state of the accused. The governor and the surgeon of the gaol, who, in the needful intercourse with the prisoner, have carefully abstained from asking him compromising questions, are perhaps placed in the witness-box to testify that they have not observed that which they certainly have not looked for; but in no criminal case in our courts can it be said that scientific evidence of sanity is ever produced. And evidence of insanity may be equally absent from the litigation if the accused be poor and friendless. You will remember the case of the epileptic William Drant, who was condemned to be executed for murder in December, 1876, and who was saved by the intervention of London physicians at the Home Office. No medical evidence had been produced at his trial, although the circumstances of the homicide pointed straight to the conclusion that it had been done in an access of epileptic mania. After the reprieve the solicitor for the defence wrote to the *Times* a letter in which he stated—"Before the unhappy man made his first attack upon his mother and her companion, he repeatedly accused them of having been poisoning him for a week past, thereby clearly showing that a wild delusion existed in his mind. I very much regret that, owing to the poverty of the prisoner, he was unable to obtain medical testimony on his behalf."

A not dissimilar case was tried at Warwick during the same assize. The prisoner had drowned a child by throwing it into a canal. There was no medical evidence provided, but my friend Dr. Parsey, who was present at the trial,

on hearing the evidence of the mother of the prisoner, passed a slip to the counsel for the defence, on which was written, "Try her for fits"; and thereupon came out a history of epileptic insanity, upon which the prisoner was acquitted. We cannot read the newspaper reports of any assize without meeting with cases in which insanity is strongly suggested, but in which there had been no inquiry, and in which, therefore, the accused was acquitted or condemned, as the case might be, in the dark. One can scarcely be surprised that the Rev. Sydney Godolphin Osborne should have felt himself justified in telling the Royal Commissioners on Capital Punishment—"I am satisfied that we have hanged many insane people, and that we have let off on the grounds of insanity very many who never were anything but sane."

Many have been the suggestions, made with the view of avoiding the miscarriage of justice, which this clear-headed philanthropist has expressed so strongly, most of them more or less impracticable; for it is clear that any suggestion of change must not be inconsistent either with the principles or the practice of our courts. But a simple and workable safeguard against the danger of condemning insane homicides to capital punishment might be found in extending the existing charity or mercy of the law, which provides an indigent prisoner with counsel for his defence, to the providing of an indigent homicide supposed to be insane with a solicitor, with means of procuring evidence and of employing counsel. This grace to a supposed lunatic, which has been suggested by the practical mind of Dr. Orange, would certainly lessen the possibility of the plea of insanity being decided in the dark, as in Drant's case, and the heavy responsibility incurred by judges, who, from want of information, have made such charges to juries as that of Lord Justice Brett in Blampied's case. This would, I am inclined to believe, be a moderate and practicable change in procedure, which, taken in conjunction with the enlightenment of judicial opinion, of which it has been my most pleasing privilege to lay before you such incontestable proof, and also in conjunction with a more cautious use of theory and a more appropriate use of language by medical witnesses, would be sufficient to protect the interests of the community without disregard of its humanity, and to knit up the ravelled sleeve of justice in relation to the insane.

CLINICAL LECTURES
ON THE PROGNOSIS AND TREATMENT OF CERTAIN VARIETIES OF CONSUMPTION.

DELIVERED AT THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

By JAMES EDWARD POLLOCK, M.D., F.R.C.P.,
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Lecture II.

(*Concluded from page 531.*)

Among our very chronic cases of phthisis of a mixed character, the combination with rheumatism or morbus cordis are remarkable. They are not very numerous, but they have features of their own, and they certainly live long, although with much suffering. In what is called the rheumatic constitution you will have fibrous alterations of a slow kind without preceding rheumatic fever or any joint affection; and in families where rheumatism is hereditary, some will have the joint affection, and others the heart disease. It is this latter class which seem to me to fall into phthisis more commonly than the former. In fifty-four cases of valvular disease with phthisis there had been no preceding joint affection, and the mitral form was most common. A profuse hæmoptysis often occurs early in the case. This is probably due to congestion of the lung secondary to mitral disease. But is there a distinctly rheumatic form of phthisis? Perhaps we may say there is not one which histologically differs from ordinary fibroid changes, but we might say that fibroid proliferation is more common in individuals of the rheumatic temperament, and who have had either the joint affection or the thickened valve.

In studying these cases I have found, in corroboration of this view, that the disease is generally productive of much dulness in one lung (more commonly the left); that a cavity forms in the apex, which soon undergoes retraction, the heart becomes drawn up, and flattening of the side takes place. From the heart-displacement a kind of click or accentuation of the second sound occurs, which is not to be mistaken for a murmur from valvular thickening. In rheumatic persons with phthisis you will thus often find the left side presenting these signs from above downwards: much dulness, flattening, cavity-sounds in subclavian region, high-heart beat, with accentuation of second sound at third or fourth intercostal space; while below, the side is contracted, with diminished breath-sounds. These are chiefly fibroid alterations, due to the nature of the deposit in the lung. To this is often added a mitral regurgitant murmur at the usual site. These cases are prolonged, are very subject to profuse hæmoptysis, and in spite of it often struggle through a painful life for many years with intercurrent attacks of joint inflammation, and also of congested lung. Death often occurs from cardiac obstruction, anasarca, etc., and not from pulmonary causes. They commonly present clubbing of the fingers. It is further remarkable about them, that during the joint affection the phthisis seems to be suspended; and that after a profuse hæmoptysis there is commonly a long pause in the symptoms.

And now I must say a few words about *hæmoptysis* and its bearings on the progress of a case. It is a symptom most common in the first and third stages of phthisis. In the first it is generally congestive; in the latter mechanical. When it takes place in the second, or stage of softening, it is partly vital, partly mechanical. In acute tuberculosis and in senile phthisis, as a rule, it is not found. Profuse hæmoptysis is much more common and more fatal in males; slight hæmorrhages in women.

Let us clearly discriminate between *congestive hæmoptysis* and the mechanical or *passive*.

The first is accompanied by high temperature, flushing, increased pulse, and sense of tightness at the chest. It is, in fact, a small pneumonia, and should be treated as such by rest, saline aperients, and in some cases by cupping or local bleeding.

The *passive* form is, in cases where a large bleeding suddenly occurs, almost always from a small aneurism of a branch of the pulmonary artery. It is found after death in cases of fatal hæmorrhage that the walls of a cavity have permitted the exposure of one side of the small sac of the aneurism, which has thus given way. Thus it is a bleeding from erosion or rupture of a dilated artery, and is subject to the same laws as other hæmorrhages from a like cause, its cessation depending on the formation of clot. Its meaning and treatment are obviously different from the first form, perfect rest to promote coagulation, and styptics, being the indications. Were it not that the aneurismal sacs are very small (generally little larger than a pin's head), many more cases would prove fatal. The patient may die from choking of the bronchial tree (asphyxiated), or be exhausted by repeated hæmorrhages, but a moderate hæmoptysis generally relieves lung congestion, which is one of the most serious events in phthisis, leading to a progressive break-up of the deeper parts of the lung.

Hæmoptysis has various prognostic imports, depending on its cause and secondary results. An *early profuse* hæmoptysis often ushers in a rapid form of disease, and at least argues a rapid passage from the first to the second or third stage. In this case it belongs to the congestive variety, and it leaves results in the lung tissues which readily break up.

But again, cases so beginning often have long pauses, and become very chronic. They are, however, subject to a repetition of the hæmorrhage. To this class belong the rheumatic and heart combinations of which I have spoken.

The rule is to give no prognosis at the time, but wait till the fever is over. You may, however, say that hæmoptysis is never fatal *as a hæmorrhage* in the first stage of phthisis. The secondary results of lung hæmorrhages may be good, as I have said; but a fresh danger arises from the fact that blood-clots are often carried to the lower portions of the lung, and, lodging there, become disintegrated and form fresh centres of disease. It has been asked whether hæmoptysis has ever originated phthisis in this manner in a previously healthy person? My own belief is that it has not, for why should an individual with healthy lungs have a hæmoptysis? To prove this it would be necessary to substantiate a case where the hæmorrhage was an accident due to other causes, and where the imbibed blood set up disease in the lung.

In offering an opinion as to danger when bleeding is going on, you will be guided by the amount of disease in the lung, and by its limit to one lung. In the latter case you may be more hopeful. It is to be remarked that what is called reaction after great hæmorrhage is not seen in phthisis. If your patient survive the shock of loss of blood, you will not find him with bounding pulse, tinnitus, giddiness, jactitation, restlessness, etc., but much sunken and well-nigh exhausted.

I have often pointed out in the wards how rarely we see progressive phthisis coexisting with *suppurating strumous external glands*. This combination is exceedingly rare, but where it does exist the disease is very slow, and a favourable prognosis for time may be safely given. I have often witnessed the alternation of acute lung-softening with glandular suppurations, and have over and over again seen phthisis suspended when the cervical glands enlarged. Such facts should make us very thoughtful indeed about consumption. There was a time when the two diseases were considered identical, phthisis being thought to be only a strumous disease of the lung; we now know that there are several varieties of phthisis, some tubercular and some non-tubercular, but the above clinical observation is a very practical proof of the almost identity of certain forms of lymphatic disease with that which blocks the alveoli of the lung. This alternation of internal and external affections receives another illustration in the fact that *fistula in ano*, which is a very common condition in phthisis, is associated with its more chronic forms, and, while discharging, certainly appears to relieve the lung. We have often witnessed an increase of lung irritation after an operation has closed the sinus, and a relief to the chest when nature has re-opened the fistula. A consideration of many of these cases has decided me not to recommend the operation for the cure of fistula in any case of chronic phthisis. In ten cases *operated on*, the fistula healed and the chest became worse in three; phthisis came on after the operation in two; the fistula re-opened in three; the result was doubtful in two. In twenty-one cases *not* operated on, the fistula was persistent and the phthisis chronic in fourteen; the chest became worse in four; and in three the fistula had appeared before the phthisis, which took on a very slow form.

Spinal Gout.—Dr. Ollivier communicated to the Académie de Médecine a case of gout in which he found in the spinal canal appearances due to a uratic infiltration at the external surface of the spinal dura mater—exhibiting, therefore, the characters of true visceral gout. These spinal manifestations have hitherto been rather suspected than described; and in none of the cases related was there furnished any proof of their gouty nature. Until now, in fact, their essential character—the deposition of granules of urate of soda—had never been demonstrated.—*Gaz. Hebd.*, May 17.

Homicides committed by the Insane.—In a memoir read by Dr. Blanche, at the Académie de Médecine, on criminal acts accomplished by the insane in relation to the different forms of insanity, he observed that—1. No form of insanity exists to which the name of "homicidal mania" ought to be attributed. 2. Homicide may be committed by the subjects of various mental affections on the condition that they are liable to the crises of excitement termed "congestive" of sufficient intensity. 3. These crises, of variable intensity and duration, are exhibited by signs which should always excite distrust; and even when they pass away without having led to murder or serious violence, the medical attendant must still be on his guard. 4. Alcoholism and epilepsy are the conditions in which mental perversion is most usually accompanied by the most marked crises of this kind. It is under their influence homicides are oftenest perpetrated. The *délire des persécutions* and suicidal monomania also present pretty frequent examples. 5. Patients attacked by cerebral affections, whether congenital or acquired, characterised at first by physical symptoms, and later by more or less vague disturbances of the disposition and intellect, may become the subjects of these crises of excitement, and commit under its temporary influence murders or acts of violence, in disaccord with their pathological condition during the long intervals which separate the crises."—*Gaz. Hebd.*, May 17.

ORIGINAL COMMUNICATIONS.

ON THE MANAGEMENT OF CHOREA.

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II.

In a former paper(a) I endeavoured to show, from the nature, incidents, and relations of chorea, that it was not unreasonable to believe that a careful system of management, with the adoption of means calculated to divert the child's attention from its disordered movements, while at the same time tacitly discountenancing them, might prove a more successful method of cure than any more formal treatment. In support of this view I adduced the parity between chorea and hysteria, the example of the old convulsive epidemics, the sex and age and mental characteristics of the children most liable to the affection, and lastly the indications afforded both by its manner of getting well and its manner of lingering and recurring.

I have now to show that the principle contended for is actually applied with success—success, that is, as complete as can be reasonably expected from any method.

Before considering, however, the actual achievements of this "moral treatment" of chorea (so to call it), we must determine the measure of success we are justified in seeking, and the criterion by which such success is to be estimated. If it be contended that in chorea we are to make search for some remedy which shall suddenly arrest it, then I would say, first, that, in my belief we should be seeking what the nature of the affection shows to be unattainable, and secondly, that, at all events, the method I have to commend proposes nothing of this sort. If, on the contrary, it be conceded that recovery from chorea implies a process of restitution which must necessarily be gradual and precarious, then I would contend that this management method does, as a fact, accomplish its object as quickly and securely as any other.

How, then, is this assertion to be tested? There is no death-percentage that can be appealed to, and the duration of the affection varies so widely with age, and sex, and temperament, and quality of attack, that the numerical method—fallacious as it is always—is here wholly inapplicable. Add to this that, with every desire to be honest, it is not easy to determine the precise moment of cure. Chorea fades so gradually that the patients are often lost sight of before they are perfectly steady. For such reasons the comparison of a certain number of cases treated upon one plan with an equal number treated upon another quite different plan would be quite worthless and misleading.

Such proof, then, as can be got for *any* treatment of chorea, except that which cures directly and out of hand, cannot be of this precise sort. It must be based rather upon the experience of individual cases; it must rely upon such evidence as can be adduced, not from a heterogeneous body of examples, but of this case treated in this way, and that case (parallel to it in age, duration, and severity) treated in that way; it must even appeal to the opinion of competent observers as to the general effect of the commended treatment when substituted for other methods.

Upon this mode of procedure (which, if inexact, is the only one possible) it will be admitted that the treatment now in question occupies a position which, in comparison with others, is in some respects peculiar. In its ordinary application the general effect upon children of moral treatment is beyond doubt or question. That freedom from adult-scrutiny, an even life and occupation, and the absence of excitement, tell upon these people so as to be reflected in their bodily movements, is already a part of knowledge. All that remains is to ascertain whether this principle, amply recognised as true for children in health, still continues to operate when they become choreic. That it should do so will, of course, appear more or less probable to each of us, according to the view he entertains of the pathology of the disorder. But, however it may appear beforehand, a very few trials—nay, a single trial—will show how the fact really is. If, I say, the principle is found to be actually operative

(a) *Medical Times and Gazette*, March 23, 1878.

in but a few instances, that is enough to commend it in all. The position is quite different from that of a particular drug, which, upon similar trial, has seemed to be of service. The action of drugs towards chorea is empirical, and, at the best, subject to frequent and unaccountable exception. There is no means by which the effect may be known beforehand, or the failure explained afterwards. But the operation upon the minds and bodies of children of encouragement and confidence is not empirical, nor subject to real exception. We can *count upon it*, trace the source of its success, and ascertain the reason of its failure. The only question is whether chorea comes within its area.

That this question is to be answered in the affirmative I am led to believe from considering the actual incidents of chorea. I shall best exhibit these by quoting one or two ordinary examples not specially selected, but which have occurred in my wards during the last few weeks. I only claim for them the merit that, unlike most of the cases that come to print, they are of quite ordinary occurrence, and fairly illustrate the common course of the disorder.

An intelligent and forward girl, aged thirteen, used to accompany her father in his visits to the hospital on his own behalf for some surgical matter. She was observed by Mr. Neal, the House-Surgeon, to be choreic, and with the consent of her parents, who were strong-minded Scotch people, and had not regarded the child as ill, detained. This girl, it appeared, had been put to school some eighteen months before, and there exercised in French, physiology, and other branches of learning, to a degree far beyond her powers. Her mother related that of an evening she would sit crying over her lessons, which she complained were too hard; that she was anxious to learn, and in daily fear of being "kept in." In her anxiety to reach school in time she would often leave breakfast unfinished. Under this discipline the girl's general health had suffered, and for four months she had been wasting. For three weeks she had had choreic movements of the left side, and chiefly of the arm and hand. This limb was now in continual motion, and could not be kept still by any effort. Nevertheless, it was fairly obedient in act, so that the child could raise a cup to her lips and drink the contents without spilling any.

The girl, as usual, strongly objected to being left, and, with her first tears, the chorea for a few days obviously grew worse. Soon, however, favoured by her age and exceptional intelligence, the child got reconciled and amused with the work of the ward. She now took courage to practise controlling her arm on her own account when not under observation. Within two or three weeks she knew and reported that she had in this way secured some command of the limb, and although it was still apt to be unruly, she went out practically well. No drug was given with any specific aim.

Now, this child had suffered neither rheumatism nor terror, yet the source of her chorea could hardly be thought doubtful, while its temporary aggravation under the first penalty of hospital, and presently the co-operation of the patient in producing cure, and her sudden accession of control with returning confidence, were all remarkable.

Again, a girl of thirteen had been restless for two weeks, and especially affected in the left hand, which depended from her arm as though the wrist were paralysed. The want of muscular consensus was here remarkable. The girl had difficulty in extending the arms in any required direction, and altogether failed in getting the hands to meet. Writing her name produced extravagant movements of the hand and body. The head was held in a drooping and languishing manner, with upturning of the eyes, restlessness of eyelids and forehead, and a habit of foolish simpering. There was no difficulty or fault in walking, and in her calmer moments but little agitation of limbs; but she exhibited obvious want of repose in the more responsive muscles, and marked disobedience in her attempt to perform simple muscular movements. The girl had fancies as to the medicine which suited her best, a firm belief (in which her mother fully concurred) as to the loss of power of the left wrist, and a view of her own case corresponding with that of a hysterical woman. She was, in fact, "hystero-choreic."

In the belief that it is harmful to impress by frequent repetition and notice any sort of muscular infirmity, this girl was left to write her name at her own times with the advantage of privacy. She was not practised in co-ordination, but rather impressed with the unimportance, as regards the practical duties of life, of slapping the hands together and touching the tip of her nose. The affection of the wrist was altogether ignored, but the girl was reminded occasionally that her head was awry. She was not cured by these means; nor do I suppose that with the state of mind which this condition of body represents, and with puberty approaching, anything like cure was possible. Within three weeks, however, she greatly improved, and the method of improvement —by gathering confidence and losing sight of infirmity—was not less obvious than the fact of it. The future depends upon her home treatment. It is probable, anyhow, that the muscular incoördination, so far as writing and extending the arms are concerned, will altogether disappear, and that in the next few years she will develope in pure form the over-emotion of hysteria. Sent to hospital, subjected to a rigid system of treatment, her powers of co-ordination tested from day to day and made the subject of remark, this girl would have been placed, as I believe, in the very worst condition for recovery.

Once more, a sensitive, intelligent child of eight, with the aspect and mobility of face so often seen in older girls with hysteria, was brought to hospital with general chorea of moderate severity. No more direct cause could be found than gradual failure of health during the last year. The chorea had begun in the hands ten days before admission, and the child had been observed to stagger and lose her grasp of objects. This patient on first admission was apprehensive and nervous, as one conscious of a fault. It was a surprise to her to find her movements lightly regarded. Readily accepting that view, however, she soon learnt to hold herself in a particular position of her own adoption with perfect steadiness, and at the end of a fortnight went home, not permanently steady, but steady enough for a child of her age and temperament—a subject more fitted for home care than for any medical treatment whatever.

And, while I write, an instance of chorea arrives opportunely, in which the origin and mode of culture of the affection are so manifest, that no one will deny, I suppose, that here, at least, kindness, patience, and encouragement will be more appropriate than arsenic or conium.

A healthy-looking boy from the country, aged ten, going up to bed in the dark, thought he saw a ghost. There was, in fact, some white object in his road which he thus mistook. He screamed in terror, and could not be pacified, and, as he now relates, dreamt of the thing all night. From that time he had been tremulous and unsteady, and on the 31st of the same month, being then in church, his restlessness attracted notice. He was thereupon "cuffed" by a butcher, one of his fellow-worshippers, and afterwards caned or threatened with caning by the schoolmaster. On the day following this unjust chastisement, his mother noticed that he was unable to put his jacket on. He now comes to hospital (April 13) with general chorea of face, speech, and upper limbs chiefly, and of the left arm most of all. Although the immediate cause of this attack is beyond question, it must be mentioned that in October, 1876 (*i.e.*, eighteen months ago), he was laid up for seven weeks with what appears to have been rheumatism—this being the only case of the four with any such connexion.

Time has not elapsed to enable me to record the result of this attack. That a nervous boy should be confined to hospital for fidgetiness of this sort seems unnecessary and harmful. Almost equally so that he should be called upon to fetch and carry, endure the gibes of his schoolfellows, with the set periods of stillness at church or school hateful to all boys. With his interest aroused and mind diverted by light pursuits, new scenes, and companionship, I should have no doubt of his sufficiently rapid recovery. That such should be the rational treatment of a little boy made tremulous and unsteady by the sight of a ghost seems as little doubtful as that the best refuge for a terrified child is in the arms of its mother.

Within the last eighteen months forty-one cases of chorea have been sent from the Children's Hospital in Great Ormond-street to the chronic wards at Highgate. These were classified before removal as follows: nineteen were convalescing, twelve improving, and ten chronic cases. Of the first two classes I take no account; they would have recovered anyhow. But of the ten "chronic," who made little or no progress under active treatment, it argues something that in an average time of a little under six weeks four went out well, three improved, and but three unimproved, these

last being all children of obtuse intelligence, upon whom, according to the hypothesis, moral treatment would have the least operation. The plan adopted with these children was that before indicated. They were not drugged, nor kept in bed, nor visited more than once a week by the doctor, nor then severely.

This measure of success shows, at least, that the moral treatment of chorea is not disastrous; it shows also that with the sudden withdrawal of drugs there is no aggravation of the affection they are supposed to hold in check. It must at the same time be freely conceded that, inasmuch as chorea has its allotted time, those that deal with it latest are in a position of advantage. It may be that the improvement at Highgate was due chiefly to the change of place. But if that be so, change of place is a part, and a very important part, of the treatment I am advocating. It is, indeed, one of the most powerful means of impressing and diverting the mind at all periods of life.

I could adduce a much larger body of cases tending to the same general conclusion—the conclusion, namely, that although moral treatment certainly does not cure chorea suddenly, and in some few instances, owing to mental defect, hardly tells upon it at all, nevertheless a large majority of children begin early to improve upon this method, while there are not any who are found to suffer from the disuse of active drugs.

Considering, then, the actual phenomena and associations of chorea, and not impelled by a blind sentiment which regards all disease as intolerable and presses for its immediate removal, I would maintain that the degree of success here indicated is the greatest we can reasonably expect.

Nevertheless, it is easy to see how, of all methods of treatment, this one is the most likely to be placed at a disadvantage, and but seldom fairly tested. Not only are the associations of hospital (where alone *any* principle of treatment can be adequately investigated) directly injurious to chorea, but moral management is at best but a single plan of treatment amongst the many that are known and commended. Nay, it will be represented as no treatment at all, against every kind of treatment; it is to stand idle in the face of active disease. If such inaction may be justified in very slight cases, it is altogether intolerable in the others. In all nervous affections whatever of any duration we are expected to try one thing after another, impotence of purpose easily disguising itself as fertility of resource.

In spite of such disparagement, however, this moral treatment, rightly regarded, has a real preponderance on its own side. It has certain contingent advantages both in its freedom from danger and the wider reach of its plan, being applicable, indeed, as well to the prevention as to the cure of chorea. If, therefore, it can be shown to be as good as the others in its immediate results, that is tantamount to saying that, on the whole, it is better than any.

I propose in a final paper to refer briefly to these points, and thus complete the heads of evidence in favour of a system of treatment never likely to win support by its own attractiveness or the enthusiasm or clamour of its adherents.

THE PREVALENCE AND SEVERITY OF

VENEREAL DISEASES AMONG MERCHANT SEAMEN, BRITISH AND FOREIGN;

AND THE EXTENSION OF THE CONTAGIOUS DISEASES ACTS TO LIVERPOOL AND OTHER SEAPORTS.

By FRED. W. LOWNDES, M.R.C.S. Eng.,
Surgeon to the Liverpool Lock Hospital.

(*Continued from page* 459.)

ALTHOUGH there is much indifference among shipowners and captains here as to the existence of these diseases, and the only effectual remedy for them, we shall see further on that there are exceptions to this rule, and that some of our influential shipowners are alive to the necessity of doing something to mitigate the serious evils alluded to in the foregoing letter, which, I am perfectly satisfied, are not in the least exaggerated.

To continue, Mr. Prat, H.M. Consul, Barcelona, sends me the following information:—"Barcelona, with some 220,000 inhabitants, is well known to be a sadly diseased city, and at times the Civil Governor has subjected to periodical examination the numerous prostitutes known as such; but the police, high and low, is known to be so venal and untrustworthy that the object in view has never been satisfactorily obtained, and no statistics are procurable, nor indeed could be relied upon even if procured. British seamen arrive here frequently with venereal diseases, but not in any great numbers; and as they are admitted at the General Hospital of this city gratis, and without special difficulty, they are mostly alleviated, if not wholly cured, when they leave Barcelona, there being thus no necessity of sending them home as invalids. The worst feature of the case is that a seaman leaving the hospital, and fairly cured, too frequently forgets his weak condition, and renews his offence, thereby bringing on himself additional and increased mischief."

The Governor of St. Helena (H. B. Janish, Esq.) sends me the following particulars respecting that island:—"I cannot, from my own observation, say much on the subject, although the island has had much more experience of the disease than might have been expected in so small a population; but this arises, no doubt, from the constant communication with seamen from the passing shipping, in proof of which the disease is confined almost entirely to those women who associate with seamen. To remedy the evil, a local ordinance was passed in 1865, based upon the English Act of 1864; and this ordinance, which at first was limited to three years, has been found so beneficial in its operation that it has, without any modification, been continued by subsequent enactments to the present date. More than once the disease has been so subdued that it might have been considered as extinct; but unfortunately there is nothing to prevent fresh importations of it by our visitors. . . . It would be an immense gain in this direction if seamen at least could be subjected on arrival and departure to medical examination. We find, like you, that the women need no coercion, but thankfully receive the aid provided for them by law, but that they will not voluntarily apply for that aid in the early stages of the disease."

The Governor of Labuan (Herbert T. Ussher, C.M.G.) writes that he hopes shortly to introduce the Contagious Diseases Acts there. He says—"Apart from its incontestable value to seafaring men and troops, it will be of great service in checking the great prevalence of venereal disease in this place amongst the Chinese and Malays. My colonial surgeon informs me that there is scarcely a woman here who is not heavily diseased; and its effects are most pernicious. It has been introduced by the Chinese prostitutes, some of whom come in almost every ship from China."

Dr. Edward Henderson, the Medical Officer of Health in Shanghai, published in 1871 a report on prostitution there, from which I extract the following:—"Shanghai, a busy mercantile port visited by ships from all parts of the world, like all similarly situated towns, is peculiarly exposed to the invasion of venereal disease, and has attracted a large number of prostitutes within its limits. The native women who infest the settlement, and who are the chief sources of danger to foreigners, place themselves almost exclusively under the care of Chinese doctors, whose notions with regard to contagion are utterly vague, and whose detection or treatment of disease cannot in the least be relied on." Dr. Henderson describes five different classes of brothels, the third being "houses where the visits of natives and foreigners are equally received. These," he continues, "are the most disreputable of all the brothels in the settlement, and contain without exception the most degraded specimens of the native prostitute. No Chinaman of any pretension to respectability visits such houses; and yet, I regret to say, it is to these dens the sailors belonging to our naval and mercantile services principally resort. They are almost entirely confined to Hong-Kew, where they form narrow streets and lanes leading from, or running parallel to, the main road. They are all alike dark, dirty, and unfurnished; the worst in every way being those where Malays, negroes, etc., are the principal visitors. The opium-smoker's tray is to be found frequently, but not invariably, in the rooms, its presence or absence depending upon the nationality of those who chiefly visit the house. Means of ablution are very rarely to be seen in these houses."

Among the crews of men-of-war, while stationed in Shanghai, venereal diseases were very prevalent, the returns showing those variations and apparent anomalies which have been observed elsewhere. Thus, in one vessel, the *Hornet*, only five cases occurred in a crew of 171 stationed for ninety-

five days; but in another vessel (the commander of which withheld leave to publish the name), out of a crew of 320, in an interval of forty days, no less than eighty-three subsequently suffered from venereal affections, while in more than half of the cases the severer forms of these were manifested. Among the inmates of the Shanghai Sailors' Home, Dr. Sibbald believed that fully two-thirds of the cases for which he was called to prescribe were cases of venereal disease. Dr. Eberbach, of the *Gormastai*, reported that out of sixty men who had shore-going leave between October 3 and November 23, 1870—fifty-one days,—seventeen suffered subsequently from venereal disease. Of these eight were cases of gonorrhœa, seven of indurated (infecting) sores, and two of gonorrhœa and venereal ulcers combined. An attempt to mitigate the evils thus indicated as existing among the lower class of prostitutes was made eight years ago. A hospital, termed a "home," was opened for the reception of native prostitutes. It was arranged that a native doctor should visit the houses, and send infected women to the Home; and, though little reliance could be placed on his inspection, it was hoped that cases of severe or obvious disease might at least be weeded out, and that by the successful treatment of such cases the confidence of the women themselves might be gained. The first case was of a woman from one of the low-class houses, suffering from some of the worst forms of venereal disease—extensive and extending ulceration of the soft palate and nasal cartilages, attended with general glandular enlargements and excessive emaciation. She had been given up by the native doctors, who told her she must die within a month, in spite of which she was, according to her own account, compelled by the mistress of the house in which she lived to receive the visits of foreign sailors. Dr. Henderson adds—"I have no reason to doubt her story, and I fear that not a few similar abominations are perpetrated among the uncared-for women who crowd together in the filthy native houses which disgrace so many of the back streets in the foreign settlement." The patient remained in the Home for a period of four months, when she was discharged in good health and free from any active manifestation of disease. Much was hoped from the success attending the treatment of this severe case, but these hopes were not realised, and the Home had subsequently to be closed. Latterly, however, periodical examinations have been enforced, with the effect of closing a large number of brothels, which Dr. Henderson had anticipated might be the case. As he says, in concluding his report for 1876—"Success will now depend upon the perseverance with which the two municipalities refuse to allow native brothels to exist in the settlement, the inmates of which fail to appear regularly before the examining surgeons."

Laws more or less resembling our "Contagious Diseases Acts" are in force in Barbadoes, Jamaica, Queensland, Canada, New Zealand, Hong-Kong, and other colonies, and I hope in a future paper to give details respecting these places, and now proceed to give the opinions of these surgeons in this country who are, from the appointments they hold, in a position to speak with authority on this subject.

Dr. Walter Dickson, R.N., Medical Inspector H.M.'s Customs, has frequently had his attention drawn to the great prevalence of venereal diseases in seaport towns, and has kindly sent me the following notes of his past labours in this matter:—"Nine years ago, at the Leeds meeting, I brought before the British Medical Association a proposal for the extension of the Contagious Diseases Acts, now in force in military garrisons and naval arsenals, to the great commercial seaports. So far back as 1864, in a paper read before the Epidemiological Society of London, I had advocated this measure, and in a circular drawn up at the request of the Duke of Richmond, then (1867) President of the Board of Trade, I entered into details of a scheme applicable to the Port of London, and with modifications to other mercantile ports, which, I believe, would have greatly diminished a flagrant evil grievously affecting the health of seamen, and seriously crippling the efficiency of our mercantile marine. In spite of detractors, there is very little doubt that the operation of the existing laws, in their present limited sphere, has been salutary, and the medical officers of the army and navy unanimously testify to the benefit derived from them. But seamen of the mercantile marine, being for the most part celibates and vigorous young men, are equally exposed to these diseases with soldiers or men-of-war men, and suffer incalculably more from their consequences, inasmuch as the great majority are in long voyages denied access to any medical aid. Lifelong misery, as the sequel of ill-treated or neglected syphilis and gonorrhœa, is too familiar to all of us, and is seen in its most intense and irremediable form in the broken-down and prematurely decayed merchant seaman. Besides personal suffering revolting to humanity, these diseases cause much incapacity for duty during a voyage, and thus seriously compromise the safety of ships. Inspection of seamen is seldom resorted to so as to insure that the ship leaves port with an efficient crew. Accident and disasters are often the result, affecting the shipowners, underwriters, and the public at large. These various interests, as well as the sailor himself, would be benefited by sanitary supervision."

Dr. Harry Leach, the Sanitary Medical Officer, Port of London, informs me that the compulsory medical examination of seamen is a matter that he is continually urging, both directly and indirectly, on the attention of the Board of Trade. He fears that the expense has something to do with the delay, or rather the question, Who is to bear it—the shipowner or the State?

Mr. Johnson Smith, Surgeon to the Seamen's Hospital, Greenwich, has kindly sent me the following important suggestion:—"In proposing any scheme for the supervision and treatment of prostitutes in a large seaport, such as London or Liverpool, one ought to take into consideration the fact that in the course of every week, almost of every day, a great amount of fresh venereal disease is imported through the arrival of ships from foreign and home ports. About three years ago I made inquiries on this point from all the patients treated here for venereal disease, and found that in about one-third of all the cases the disease had been contracted abroad."

We have seen that measures for the prevention of these diseases are being gradually extended to our colonial ports; in many others, such as Malta, Hong-Kong, the Ionian Islands, Aden, Calcutta, etc., they have been enforced for years; while in Europe, Acts of a very stringent nature have been passed, in Sweden, Denmark, and Greece, within the last few years. It seems to me, therefore, that there is every hope that the number of cases imported from abroad will diminish, and England will have less reason to complain of foreign countries than the latter of England. Moreover, it is only fair to assume that the remaining two-thirds of the cases alluded to by Mr. Johnson Smith were of disease contracted in England.

Dr. R. A. Caldwell, Surgeon, Cunard Royal Mail steamship *Russia*, who has had considerable experience and many most favourable opportunities of studying the subject, thus writes:—"So far as my experience goes as a surgeon in this service, I have no hesitation in saying that a greater boon could not be conferred on the sea-going population than the adoption of these Contagious Diseases Acts in Liverpool and all our great seaports. My experience tells me that scarcely one sailor in ten escapes venereal disease; and the diseases begotten by impure sexual congress are the cause of more invaliding than is generally known. Nor is there any other port in the kingdom more active in disseminating venereal poison than your own town. It is certainly true, I think, that the type of these diseases is greatly modified, but that there is any diminution in their numbers I cannot believe; apparently, too, gonorrhœa is epidemic amongst women frequented by seamen. The experience of the surgeons of the American navy supported the sanitary value of the regulation of prostitution. They report that in certain seaports where stringent rules are enforced a two months' stay was not followed by a single case of syphilis amongst the ship's company, whilst in ports where prostitution was unregulated the records were very different. Your suggestion of attaching venereal dispensaries to sailors' homes is a very valuable one, and would greatly prevent the men falling victims to the numerous quacks who frequent these places. In this trouble more than any other Jack holds to his motto—'The nearest port in a storm.' Compulsory medical examination of all men before signing articles is, however, the true principle. The modern sailor is a very different one from what one reads about; and let the fact once be known that physical soundness is imperative before obtaining a berth, and Jack will not so recklessly expose himself to disease. On the other hand, compel the prostitute to sell her wares unadulterated, and you will practically extinguish the worst features of the disease. I have little faith in the voluntary plan. . . . If these Acts have been beneficial in the garrison towns—and that they have

been so is clearly proved—why, in the name of reason, deny them to the more exposed and worse-cared-for frequenter of our seaports? Surely the machinery of the law is strong enough to prevent their abuse, while the good they would accomplish is incalculable. . . . The subject is one of interest to every surgeon in the mercantile marine, and the evils of prostitution that the extension of these Acts would greatly mitigate are much more pressing on the sailor, often at sea for months without medical aid, than on the ordinary civilian or well-cared-for soldier."

The American Consul in this town (General Lucius Fairchild) informs me that venereal disease is very prevalent among the seamen who serve on board the American vessels in this port. He adds—"There is scarcely a vessel which does not have one or more such cases on board." Other Consuls have given me information with regard to the vessels of their respective countries and their crews, which goes to prove that these diseases are more or less prevalent in all. And though most of the above information is of a general character, it is sufficient to show us that a very large amount of disease prevails in this and other seaports not protected by the Contagious Diseases Acts; that many seamen leave port in a more or less diseased condition, arriving still diseased in foreign ports; and that others reach our home ports after long voyages also in a diseased state.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

INJURIES TO PELVIC REGION.

GUY'S HOSPITAL.

Case 1.—*Impalement—Wound of Gluteal Region into Rectum and Bladder—Operation as for Lithotomy—Complete Recovery.*

(Under the care of Mr. BRYANT.)
[Reported by Mr. BALDWIN.]

ALFRED W., a potboy, aged twelve, was admitted into the accident ward on October 12, 1876, under Mr. Bryant's care. He had been playing near some area-railings of a house situated at the corner of a street. He mounted the rails, and in doing so his feet slipped, and he became spiked in the buttock by the corner rail, and then fell backwards. From this position he was removed, and at once brought to the hospital in a collapsed condition. It was found that he had a punctured wound on the right buttock about an inch long, immediately internal to the tuber ischii, and two inches from the anus. A probe passed through the wound was felt in the rectum, about three inches up, from which there was profuse hæmorrhage. About five in the afternoon Mr. Bryant made an examination, and found a ragged wound in the posterior wall of the rectum, about three inches up; and another just behind the prostate; and it was thought that the recto-vesical peritoneal pouch had been opened. The boy was placed under the influence of chloroform, and put in a half-sitting position, when a considerable quantity of fluid and fæces passed per rectum, it being supposed that the fluid came from the peritoneal cavity. Under these circumstances Mr. Bryant opened the bladder as for lateral lithotomy, to allow of the urine escaping, instead of extravasating into the recto-vesical pouch and peritoneum. After the incision a considerable quantity of urine, serum, and blood passed through the incision. He was put on his left side, and a pillow placed between his legs. Pulse 96. 9 p.m.: There had been free hæmorrhage after the operation, but the bulk of it came from the bowel. It was arrested by the application of ice to the rectum and wound, but it recurred at intervals. He complained of great pain in the abdomen, and vomited. Early the following morning the pain became worse, particularly on percussion, and the abdomen was tympanitic; he seemed also a little delirious. He was ordered five minims of tincture of opium every fourth hour. About 3 a.m. he got out of bed before his nurse could stop him, and on doing so a great quantity of coagulated blood passed from him. 4.30 a.m.: The blood seemed to come from the original wound in the rectum and perineum; several clots passed through perineal wound; and flatus with blood and urine through the original wound. Pulse 122, fairly good. 8 a.m.: The boy vomited again; hæmorrhage being still considerable, ice-bag was applied. 2.30 p.m.: Hæmorrhage had ceased, and he had slept a little; when he awoke he said that he felt hungry. All the parts below the epigastric and right and left hypochondriac regions were tender; his tongue was white. Hot fomentations were applied to the stomach, which relieved the pains. The skin was burning hot to the touch.

October 14.—Temperature 100·1°; pulse 108. Pain in abdomen less; slightly tympanitic. Water passed per rectum. He complained of pain in his left leg to the ankle, and there was great pain in the rectum. His bowels were opened in the evening.

15th.—Pain about the same. Water passed in bed per rectum and perineal wound as made by the operation. The original punctured wound was covered with creamy pus.

16th.—Pulse 96; temperature 99·2°. No hæmorrhage, and the water passed more by perineal wound; tenderness of abdomen about the same. Tongue increased in whiteness; papillæ not so prominent. The boy complained of a good deal of pain in his penis; and, thinking it might be caused by a clot, a catheter was passed, and an opium mixture ordered, which quickly relieved him.

17th.—He had still great pain, but hot fomentations were again applied with relief. He had also spasms of pain in rectum, caused by the urine passing over the wounds. The original wound secreted a great quantity of pus. There was a tendency to bed-sore on left side.

18th.—He had passed a bad night, suffering great pain in rectum, and a little in penis; there was also tenderness over great trochanter. He changed his position to his back, when he felt much more comfortable.

19th.—The spasmodic pains from water passing over the wound continuing, he was ordered five grains of Dover's powder, without effect. Temperature 99·2°; pulse 72, fuller. Water passed very little by perineal wound, and none by penis.

20th.—A subcutaneous injection of morphia was given, and he had slept well, although he awoke in pain. The original wound seemed to have nearly healed, and there was no pain in the rectum.

21st.—During the night his bowels had acted three times, the motions being natural, not so much pain being connected with them; a little water passed per urethram. There was considerable secretion of pus from wounds.

23rd.—Temperature 98·4°. Slept well after injection. He had great pain during the afternoon. Peristaltic action of intestines perceptible through walls of abdomen. He was ordered a warm-water injection per rectum. Abdomen painful on pressure.

24th.—Temperature 99·1°; pulse 84. His bowels were very relaxed; tongue glazed half way on each side of median line, papillæ prominent; some pain in rectum; abdomen tympanitic and enlarged.

25th.—Much better; slept well; all symptoms improved. Tongue cleaner, papillæ less prominent; passed much water by urethra; specific gravity of urine 1027, albumen one-tenth, slightly alkaline, pus one-sixth; a very few shreddy bits of membrane under the microscope.

26th.—Much better; pain only on pressure. A very little water passed per rectum; principally per urethram.

27th.—Tongue papillæ not at all prominent.

28th.—The perineal and spike wounds were both healing. All water passed by urethra.

30th.—Bowels had not been opened for five days, so he was ordered castor oil, which acted three or four times—natural motions per rectum.

November 3.—Perineal wound nearly healed; original one scabbed over.

6th.—He had suffered a good deal of pain occasionally, which seemed to have been caused by solid food; it was relieved by hot fomentations.

9th.—Temperature 100·2°; pulse 90, small. Abdominal symptoms better. Incontinence of urine troubled him a little.

11th.—No pain. The original wound had healed.

13th.—Sitting up in bed, free from pain; the incontinence also had gone.

16th.—Bowels moved naturally.

30th.—The boy had been improving daily, his appetite being voracious.

The patient left for Dover on December 2.

February 5.—He came to Guy's, and was looking the picture of health after his country visit; he was well in all ways.

Case 2.—Fractured Pelvis—Ruptured Urethra—Secondary Hæmorrhage—Perineal Section—Cured.

(Under Mr. BRYANT.)

[Reported by Mr. C. KNOX SHAW.]

Charles J., a boy seven years old, was admitted into Job ward on June 26, 1875. Whilst on his way to school a few days before, a boy pushed him down into the road, and a four-wheeled cart passed over him, one of the wheels going over his thighs and pelvis. He was taken to a surgeon, who tried to pass a catheter, but failed. He was then taken home, but as he did not pass water he was brought to Guy's the following midday. A small-sized silver catheter was introduced, and a pint of urine drawn off. He was subsequently admitted into the hospital, put under the influence of chloroform, and a gum-elastic catheter passed into the bladder and tied in. Whilst he was struggling, distinct bony crepitus was heard in the pelvis, but the exact spot could not be ascertained. There was no fracture to be felt per rectum. There was a double fracture of the third finger of the right hand, also extensive bruising over both thighs.

June 28.—The boy had been able to pass his water, and had spent a very fair night.

29th.—He had been in great pain, as he could not pass his water; this was probably due to the catheter being plugged, as on its being slightly moved the urine flowed from the urethra round the catheter. There was a slight discharge of blood from the urethra. Temperature 100°; pulse 110.

30th.—The patient was able to move his legs perfectly freely and without pain, but during the night he lost more than a pint of blood from the urethra, and when he cried it quite spurted out. A No. 3 catheter was passed under chloroform, which stopped the hæmorrhage, and urine mixed with blood was drawn off from the bladder.

July 2.—He had passed a better night; his urine still contained blood.

5th.—The urine came away free from blood. It was found that he had convergent strabismus. Temperature 99·8°; pulse 88. The catheter was withdrawn; no hæmorrhage followed. The sides of the catheter were covered with phosphates. He passed quite clear water.

6th.—He passed some water, with a good deal of blood.

8th.—Excessive hæmorrhage came on, and he lost about a pint of blood. A No. 3 catheter was inserted, when the bleeding ceased. The following morning he was in considerable pain, his water having a large quantity of blood in it. Mr. Bryant then saw him, when chloroform was administered, and a grooved staff having been passed into the urethra, external urethrotomy was performed, after which a catheter was passed into the bladder, and a little very thick urine drawn off. A quantity of what seemed like old blood also came away, and as there was only slight oozing, no vessels were twisted. The catheter (nearly a full-sized one) was tied in the bladder.

10th.—The catheter was left in; it was found plugged with mucus. There seemed to have been very little bleeding, but he had passed a very restless night. Temperature 99°; pulse 116. About 4 p.m. the patient made water in a fair stream through the opening in the perineum and the urethra; it was quite clear.

12th.—He seemed much better, and had not lost any blood since the operation; he passed water well and without pain.

14th.—He cried just before passing water, but he seemed as if he were afraid it would pain him more than it does really.

16th.—There was slight œdema of scrotum.

19th.—He passed his water through urethra, none coming by the opening in the perineum.

21st.—He passed some thick mucus streaked with blood, and continued to do so whilst micturating, for a day or two.

27th.—He sat up in bed a little, feeling much better.

30th.—The wound in the perineum had nearly healed.

August 2.—The boy still had a good deal of pain in making water; there were clots of mucus in it. A sound was passed into the bladder, but nothing was felt there.

12th.—He had been complaining of pain at the end of his penis; a sound therefore was again passed, but no stone could be felt.

16th.—He left the hospital, his urine being much clearer, and he was able to pass it without pain.

Ten days later he was quite well.

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Medical Times and Gazette.

SATURDAY, MAY 25, 1878.

THE ARMY MEDICAL SERVICE.

WHEN commenting, three weeks ago, on the circular issued to the medical examining bodies by the Committee of Inquiry into the Causes of the Unpopularity of the Army Medical Department, we remarked that it would be a great and most mischievous mistake to suppose that any satisfactory reform of the Department can be founded on a money basis; and that if the Secretary for War and his Committee would but start from the fundamental principle that military medical officers and combatant officers are in every sense equally officers and gentlemen, and would invariably recognise that principle practically as well as theoretically, they would not have much difficulty in solving the question how to make her Majesty's Army Medical Service once more attractive to eligible candidates. It is therefore no little satisfaction to us to find our views supported by such an authority as Mr. C. Macnamara, whose able letters on the British Medical Service we have had the pleasure of publishing in our pages. Mr. Macnamara's claims to be recognised as a high authority upon the subject on which he writes are well known; but it may not be altogether superfluous to remind our readers that he is a Surgeon-Major in the Bengal Army; that he has been a Professor in the Calcutta Medical College, and an Examiner in the University of Calcutta, of which University he is a Fellow; that he has seen active service in the field; that he is a distinguished author; and is now surgeon and teacher in one of our metropolitan hospitals. He has consequently large knowledge and experience of medical schools and medical students, and of military service, and his letters ought to, and no doubt will, command most attentive and careful consideration. But while we spoke of the regulations and conditions of the Service itself, Mr. Macnamara dwells also on the conditions of the entrance into the Service;

and we have little doubt that his denunciation of the competitive system as applied to the Army Medical Department will be very generally considered as heterodox in the extreme. In truth, it evidences no little courage in any man to dare in these days to question the perfect wisdom of the universal application of the system of competitive examinations, for entrance into and promotion in all professions and services. According to dominant belief and practice, "the chief end of man" is to pass examinations, and anyone who would venture to doubt the perfection of the results of the competitive system must be prepared to be judged as being almost outside the pale of consideration, and unworthy of argument. Nevertheless, we believe that there is sound common sense and reason in Mr. Macnamara's contention that it is a mistake to apply the competitive system—at any rate, as it is now applied—to her Majesty's Army Medical Service; and we feel no hesitation in commending what he says on the subject to the most serious consideration of those who have to find out how to fill most satisfactorily the ranks of that Service. The way in which Mr. Macnamara proposes to modify the present system may, not improbably, not be the best possible way, but that some change of the kind that he suggests would be of great advantage to the Service, seems hardly doubtful. The examination-test that has to be passed by men seeking commissions as combatant officers is *the* test, and the only one required, of their educational and intellectual fitness for the profession they desire to enter; but those who seek to obtain entrance into the Medical Service of the Army have already proved their intellectual fitness for the medical profession by passing the examinations of one or more of the licensing bodies. They have been tested, and stamped as duly qualified medical practitioners, and it may well be that to some of them, and those not the least eligible for military medical service, the having to face, and possibly to fail in, another pass examination may be sufficient to deter them from attempting to enter the Service. We believe that it is pretty well known that one of the chief reasons why the entrance examination was adopted, in place of the nomination system, was the desire to relieve members of Parliament from being pestered for nominations, and to save them from the risk of angering influential supporters by refusing to give nominations to candidates whom they knew to be unfit for the Service; and the system was certainly in some measure justified by the failure of many diplomaed candidates to pass the new examination. But whatever may have been the case when the entrance examination was institnted, it cannot well be considered necessary now, for of late it has very seldom happened that every candidate has not passed the qualifying examination. May it not, then, be admitted that this test is no longer necessary, and that some other must be adopted for selecting the men to be admitted to the Army Medical School?

It is not only that candidates do not come forward in anything like the numbers required, but that not a few of the men who do come forward and who enter the Service are not well fitted for it. We hear from senior officers, medical and combatant alike, that the quality of the supply has changed, and not for the better. It is not easy, perhaps, to say exactly what the defect is; but a man may be very clever, or highly educated, and yet be incapable of understanding *esprit de corps*, or of comprehending what the term *bon camarade* means; and a medical officer ought to be not only an able medical man, but "a good fellow" and a gentleman to boot. It may be added that no complaints are heard of from the medical officers of the Guards Brigade, and there they are selected from qualified medical men who have not had to pass the competitive examination. The competitive entrance examination, then, brings into the Service neither the number nor altogether the kind of men wanted; and there is consequently abundant reason for making some such change in the condition of entrance into the Service as that advocated by Mr. Macnamara; and we would add, by the way, that, remembering how the Duke of Wellington pointed to the playing-fields at Eton as *the* school of the English officer, it would be wise, in selecting the men to be admitted to the Army Medical School at Netley, to have special regard to those who, besides being good students, had also distinguished themselves in the cricket-field, on the river, and in athletic sports.

We have left ourselves hardly any space to speak of the changes proposed by Mr. Macnamara in the conditions of the Service itself, but if the system of short service is to be continued, we think his suggestion to limit the term to five years instead of ten a very wise one. After that term of service the officers would be allowed either to retire from the Service, receiving a bonus of £500, or to send up their names as candidates for permanent military employment, when the authorities would select as many of them as the requirements of the Service might demand, according to the reports received from the candidates' superior officers. Five years' service in the Army might be a good additional education to any young medical man, giving him a knowledge of the world, and a training in habits of discipline, punctuality, order, and self-control, that could not but be of service to him should he return to civil life; while it would not be long enough to unfit him for civil medical practice; and few would be so unfit for the Service or so unlucky as not to be able to retire with the whole of the promised bonus—a sum which, though not large, would be of material help in starting a young man in private practice. On the other hand, the five years' service would be quite long enough to prove to the men whether the Service suited them or not, and to enable the authorities to judge who among them were most suited for the Service. As to most of the points in dispute—about leave, allowances, exchange, and the like,—Mr. Macnamara, as we have already said, supports the advice we ventured to give to the Secretary for War, and says:—"If the notion is entertained that the surgeon is a military (though not the less a professional) man, and is therefore entitled to all the privileges of combatant officers, the vexed questions regarding quarters, servants, and such-like matters, resolve themselves into the simple rule that a certain rank carries with it definite privileges, and that these privileges are to be shared equally by all officers holding that rank."

THE DETECTION OF OPIUM.

In the Chantrelle case, to which we alluded last week, two points were raised, both of infinite importance from a toxicological point of view. These were, the possibility of the detection of opium after death from its effects, and the diagnosis of poisoning by coal-gas. In the case of Madame Chantrelle, she was found totally insensible in the morning of January 2, and did not die till the afternoon of the same day. There was no proof of the time at which any poison had been, or could have been, administered to the deceased, but the probability was that it had been given the night before, or early on the morning of the day on which she died. After death no trace of opium or of its components was found in the body, though traces of these substances could unmistakably be discovered in matters which had been vomited or dropped from the mouth of Madame Chantrelle. When Dr. Carmichael first saw his patient, he found in her mouth a piece of an orange, the preservation of which would have been of the utmost importance, but having at the time no suspicion of anything being wrong, he simply removed it, and subsequently it had

disappeared. The defence of Chantrelle was well conducted, and his advocate insisted strongly on the absence of all proof of opium having been administered to the deceased, inasmuch as no signs of it could be found in the dead body. Moreover, one of the most notable signs of opium-poisoning, namely, contraction of the pupils, was not marked during life; the pupils were slightly, but not decidedly contracted. But in opium-poisoning, strange though it may seem, it is almost the exception to discover indications of the main constituents of that substance—meconic acid and morphia—after death. The quantities of each of these contained in a poisonous dose of morphia are small, and the reactions can hardly be called very delicate, having in view the small quantity of opium necessary to cause death. The present case may, therefore, be looked upon as a further enforcement of the law already established, that to prove death from poison it is not necessary to prove the existence of opium or any other poison in the body after death. Long ago now this law was established with regard to morphia in the case of Dr. Castaing, a pupil of Orfila's, who was found guilty and executed for the murder of a M. Ballet, with whom he was on terms of intimacy, as it was supposed, by acetate of morphia. In this case the first chemists, toxicologists, and physicians of the day were engaged, but no trace of morphia was found in the body after death. In the case of Palmer, no trace of strychnine was found in the body of his victim, Cooke, yet he was found guilty of having caused Cooke's death by this substance, and was duly executed. It is not, therefore, necessary to demonstrate the actual existence of a poison after death in the body of a victim to secure the condemnation of the accused for having been guilty of murder. Morphia, of all poisons, seems the most liable to this change, which ends in the disappearance of any substance yielding its characteristic marks; but even such substances as the strong corrosive acids may disappear or become changed so as to be no longer recognisable.

In the evidence on the occasion of Chantrelle's trial we hear almost for the first time of the use of the microscope in the diagnosis of a crystalline substance such as morphia as something to be relied upon in criminal trials. Dr. Maclagan justly, as we think, rejected the idea of any such unaided evidence, though admitting it might be of use as a confirmatory test. But the most noteworthy fact was the admission of a test not quite new, but for the first time allowed in such a case, namely, the effects of sulpho-molybdic acid on morphia. Sulpho-molybdic acid is most conveniently made by taking a small quantity of the molybdate of ammonium, the most common compound of molybdenum, and treating that with strong sulphuric acid. The reagent thus prepared gives, with morphia, a play of colours which ends in an intense sapphire blue. It is a pity perhaps that so much was said about this test, for its full value is far from being yet established, and it may be found as fallacious as some others—such, let us say, as the bichromate test, on the authority of which alone a chemist had the audacity to swear to the presence of morphia in a well-known case, though scores of substances give the same reaction. The question, however, whether we have or have not any reliable test for opium, was fairly well answered in this case, best of all by the cross-examination of Mr. King, the Edinburgh City Analyst. This gentleman was called for the defence, and he testified to various things. He said there were other substances besides meconic acid which would give a blood-red colour with perchloride of iron—among them saliva (this being due to the sulphocyanides which the saliva contains); but he was careful not to state that this colour, in the case of the sulphocyanides, is destroyed by the chlorides of gold or mercury (corrosive sublimate). It is also well known that the iodic acid test for morphia is not by itself reliable; almost any reducing agent, including saliva, will set free the iodine, and so the saliva again may be said to give rise to changes supposed to be characteristic of both meconic acid and morphia, the main constituents of opium from the medico-chemical point of view. The same witness proved that other substances besides morphia would give a blue with the perchloride of iron. This, again, is perfectly well known. Any substance containing a small percentage of tannin will give with iron a bluish-black solution, or precipitate—the ordinary blue-black ink. But if ever a defence founded on such evidence was smashed, it was so on the occasion of the Chantrelle trial by a few questions from the Lord Advocate. According to the Scottish system, it is a common plan in such cases to have a skilled prompter at hand. And whoever prompted the cross-examination of Mr. King knew what he was about: the evidence simply fell to pieces. Here are the test questions, as taken from the *Scotsman*, in which, and in some other of the Scottish papers, the evidence is published question and answer:—

Cross-examined by the Lord Advocate: Is the bitterness of opium a very marked character?—A. Yes; very strong. Q. Would that have been a more satisfactory test than the mere colour which the same tests might produce from other substances that were quite innocent?—A. Most certainly. I would not consider myself justified in expressing the opinion that there was meconic acid present in the substance, which I had only tested by perchloride of iron, producing a violet colour; nor that morphia was present in substances for which I had only tested with iodic or sulpho-molybdic acids, without searching at all for the crystals of morphia. I should not like to say it could not be mistaken for anything else. It might be mistaken for other alkalies—such perhaps as strychnine. I do not know that this bitterness is characteristic of that class of poisons. Q. Tell us something harmless that gives the bitterness of strychnine or extract of opium.—A. I cannot recollect anything just now. Q. Is there any characteristic odour of opium?—A. It has a very peculiar odour, very much like the juice of lettuce. Q. Would any of the articles you tried be likely to yield either the bitterness which is characteristic of opium and strychnine, or the odour which is characteristic of opium and lettuce?—A. No, I do not think so. I experimented upon saliva. The constituent of saliva that gives a reaction similar to that of opium when treated with ferric salts is supposed to be sulphocyanic acid. Q. If the experiment gave the reaction would it continue to give that reaction if treated with corrosive sublimate?—A. No; I do not think it would, because corrosive sublimate destroys the sulphocyanide of iron which gives the red colour. Q. Would the addition of corrosive sublimate have the same effect upon meconic acid?—A. No. Q. So that you would still have the red reaction, notwithstanding the addition of the corrosive sublimate?—A. You would. Q. In regard to the grape test with sulpho-molybdic acid, what were the varying colours?—A. A sort of yellowish-green, then green, then deep blue. Q. You said that the blue colour was very nearly the same as that given by treating morphia with the same acid?—A. I said the same to look at; it may be the same chemical composition, but I don't know. Q. You did not observe the red purple becoming pale, then losing all redness, passing into green, and finally into blue?—A. No; it was first a greenish-yellow, but deep blue was the most decided colour. Q. *Can you say from these experiments that there is any one substance that will give the reaction of morphia and also of meconic acid?*—A. *You may, perhaps, get a mixture, but none of the substances I have named would give both reactions.* Q. *Will you tell me one substance which will give all the reactions of morphia and at the same time of meconic acid?*—A. *No; I cannot.* Q. *You can get one*

from one substance and one from another, but can you get the whole from any one compound?—A. *I have never tried it.* Q. *The question is this: Do you mean to tell me that from one compound or one solution of any of the substances you are dealing with combined you could get all these reactions?* —A. *I think you might get them with a mixture, but I can't say, because I have never tried it.*

By the Court: Q. Do you think that orange-juice mixed with saliva would produce these reactions.—A. It might give the red colour and the blue colour, but I have not tried it.

By Mr. Trayner: I know that I get with sulpho-molybdic acid and with iodic acid [*i.e.*, with starch—*Ed.*] a blue colour, and a red colour from saliva with perchloride of iron. Q. And if you put these two things together—the saliva and the orange-juice—have you any doubt that, subjecting them to the chemical tests, you will find under each its appropriate red or blue?—A. I have not the least doubt.

By the Court: Q. Is the transition of these colours uniform?—A. The final colour is the same, but they don't commence in the same way. Q. Then, with these transitions, you would determine the substances?—A. Yes.

Whether Mr. Trayner, who defended Chantrelle most efficiently, had other scientific evidence at his command or not, we cannot tell; but certainly we never saw or heard of a more thorough collapse of scientific testimony than the cross-examination just recorded evidences. And yet in certain respects we do not greatly blame Mr. King. He was placed in the witness-box, and he answered the questions put to him in a straightforward manner. But *why* should Mr. King be in the witness-box? He had nothing to do with the case, and if he came forward to prove on his own account that Douglas Maclagan, Littlejohn, Crum-Brown, and Fraser were fools compared to himself, he got what he deserved. We do not know that Mr. King is a medical man, but whether or no, his story conveys a lesson to all of us: "Go into the witness-box to tell the truth as it seems to each of us, and not as an advocate." Such a breakdown as that of Mr. King's evidence could hardly fail to affect a jury adversely. Nevertheless, the line of his evidence must have been known to the counsel for the defence, and Mr. King entered the witness-box with his eyes open as to the consequences. His evidence-in-chief was only half the truth, as was shown by the result of his cross-examination. Why should scientific or medical men place themselves in such predicaments? According to the Scottish system, both Drs. Maclagan and Littlejohn, and Professors Crum-Brown and Fraser furnished written reports, which were read in court, and which constituted the bases of their examination and cross-examination. No one could have entered the witness-box to oppose that evidence without his eyes being open to the risk of such a procedure; yet it is to the boldness of one man (the late Dr. Ure), under somewhat similar conditions, that we owe the knowledge now made so much of. In the trial of a man named Stewart, in Edinburgh, many years ago (1829), this same red colour from the perchloride of iron was greatly spoken of. Ure stepped into the witness-box, and showed that the same thing could be produced by saliva. It is plain that one part, at least, of this lesson has not been forgotten.

The question of gas-poisoning must be considered separately, for it is very large.

THE WEEK.

TOPICS OF THE DAY.

A VERY influential deputation, composed principally of gentlemen connected with Yorkshire and other parts of the North of England, had an interview last week with the Duke of Richmond and Gordon and the Chancellor of the Exchequer, at the Privy Council Office, to present to the Government memorials praying that if a new University be created, its principle may be that of a confederation of Colleges, and that its name may not be a merely local one. It appears that much hostility has been evoked in the North of England by the scheme of the Manchester townspeople to obtain a charter for Owens College, and hence the present deputation to the Government. The Duke of Richmond and Gordon and the Chancellor of Exchequer both promised that the subject should receive every attention at their hands; the Duke, however, observed that in the present state of affairs, both at home and abroad, the memorialists could scarcely expect the Government to come to any very speedy decision on so great and intricate a question. Sir Stafford Northcote also expressed an opinion that the movement of the authorities of Owens College had at least been of great advantage in awakening public attention to this subject, and eliciting a proposal for consideration in the first instance; and it had also had the effect of inducing the present deputation to come forward and offer its opinions for the guidance of the Government.

Notwithstanding the efforts of legislation to modify the evil effects of adulteration, it is abundantly evident that they are as yet by no means so successful as could be desired. At a recent meeting of the Liverpool Health Committee, the Medical Officer reported a circumstance which had come to his knowledge: about 400 tubs and firkins of a material called oleomargarine, otherwise butterine, had just arrived in Liverpool, and was consigned to a firm not ordinarily dealers in butter. Some was made up like firkin butter, and some like rolls of fresh country butter. It was therefore announced that if the Health Committee's officers found any of this stuff sold as butter it would be seized, and the vendors would be prosecuted. In reply to a question, the Medical Officer said that shopkeepers could sell it as butterine, but not as butter.

The Hospital for Sick Children in Great Ormond-street is anxious to correct an erroneous impression which has somehow gained ground amongst the public, that it is a wealthy institution. So far from this being the fact, it was announced at the twenty-sixth annual meeting of the governors of the Hospital, recently held, that the amount received as income during the past year was £9634, whilst the expenditure had been £9954, leaving a deficit of more than £300. The amount paid on account of the new building was £4700, which entirely absorbs the building fund, and leaves a considerable amount to be raised to meet the outstanding accounts. The total number of children admitted to the Hospital last year was 927, a larger number than in any previous year. The out-patients numbered 9800, and the number of children sent to the Convalescent Home, Cromwell House, Highgate, where fifty-two beds are provided, was 396. The Committee draw attention to the balance-sheet as proof of their want of funds, and state that they are now compelled to keep some of the rooms empty, whilst the present number of inmates will have to be reduced if additional subscriptions are not forthcoming.

On the 11th inst. a meeting was held at the residence of Dr. Sieveking, Manchester-square, attended by various members of the staffs of London hospitals, and a deputation from the Ambulance Committee of the Order of St. John, the object being the organisation of aid to the sick and wounded. Dr. Julius Pollock announced by letter that the authorities of Charing-cross Hospital were desirous of aiding the movement; Dr. Lionel Beale spoke to the same effect on behalf of King's College Hospital; and similar assurances were given by gentlemen representing St. Thomas's and St. Bartholomew's. St. Mary's Hospital has already formed a

special Ambulance Committee, of which Mr. Haynes Walton is chairman, and Mr. Page secretary. The chairman and secretary of each hospital Ambulance Committee are to be *ex officio* members of the St. John's Ambulance Association. Several points were discussed at the meeting on the subject of organising the arrangements for the necessary training, and a cordial vote of thanks to Dr. Sieveking for presiding terminated the proceedings.

At the Southwark Police-court a bricklayer's labourer was recently summoned by the sanitary inspector of St. George's for exposing himself in the public streets while suffering from small-pox, thereby rendering himself liable to a penalty of £5. The inspector stated that on the morning of the 13th ult. the defendant came to the Vestry-hall in Borough-road, and requested that his son might be removed to the Small-pox Hospital. Witness gave him the requisite order, and then perceived that defendant was himself suffering from the disease. He remonstrated with him for exposing himself in such a condition, and on his arrival at the Stockwell Small-pox Hospital, he, as well as his son, was detained. The defendant said that he had had small-pox, but had got over it when his son was taken ill; being a very poor man he applied to the Vestry to have his child removed to the Hospital, but at the time he thought he had recovered sufficiently to enable him to search for work. As the Vestry did not press for a heavy penalty, considering that the man had most likely acted in ignorance, the magistrate fined him in the mitigated penalty of 5s. and 2s. costs.

A conference has been held between the Committee of the Hospital Sunday Fund and the managers of the Surgical Aid and other kindred societies, with the view of ascertaining how far the latter were prepared to modify their rules and practice, so that patients could obtain surgical appliances upon the production of one letter, instead of being compelled, as in some cases, to produce letters representative of the value of the instruments, if they were allowed to participate in the distribution of the Hospital Sunday Fund. No practical result followed this conference; and the Committee resolved to communicate with the Samaritan agencies of the several hospitals with the same object.

The Lower Thames Valley Main Drainage Board, at their meeting last week, were officially informed that if they wanted to make any alteration in the provisional order for the inclusion of Heston and Isleworth, they must petition Parliament, where a Bill had been introduced to confirm such provisional order. The common seal was, after some discussion, affixed to a petition which asks that Heston and Isleworth shall not be so largely represented as proposed; that the district be called upon to share the preliminary expenses in connexion with the formation of the Board; and that the joint Board be protected from any costs incurred in the litigation with Heston and Isleworth for fouling the river Crane. The General Purposes Committee were authorised to prosecute this petition, provided there was no chance of an amicable settlement.

An important fact connected with the recent review of the troops stationed at Aldershot by her Majesty the Queen calls for more than a passing notice at our hands. We refer to the circumstance that upon the occasion in question the Army Hospital Corps, some 900 strong, marched past the saluting station, headed by the medical officers in command. For the first time in the history of the Army Medical Department the doctors have been permitted to assume charge of their own men; and the very best results may be anticipated from such a satisfactory arrangement. Under the new arrangements for an army in the field the interests of the Service will be materially furthered by this sensible regulation; and such a step will certainly help to restore some of the popularity which the Army Medical Department has of late years so unfortunately lost.

In case of future outbreaks of plague in Turkish Arabia it is stated to be the intention of the Government of Bombay to establish at Bombay and other ports a system of inspecting ships arriving from places in communication with the Persian Gulf, at or near which outbreaks have occurred. By this means it is hoped that the risk of importing infection will be considerably diminished.

An application was made in the St. Albans County Court last week (in the case of Woollam *v.* the Corporation of St. Albans, for polluting the river Ver), on behalf of the plaintiff, for an order that defendants should pay £50 a day for every day during which they are in fault in complying with the requirements of the order of the Court dated October 26 last. At the April sitting a further extension of time for six months was allowed, but to this the plaintiff now objected, and asked for the imposition of a fine within two months. The judge imposed a fine of £25, but gave liberty to the defendants to apply for rescindment on August 9, on proof being given that all due care and despatch have been used in the preparation of a scheme to prevent continuation of the offence, and that such scheme will be carried out without delay.

The Committee appointed by the Thirlmere Defence Association to inquire into the Manchester scheme for obtaining a supply of water from Lake Thirlmere have sent in their report, which, when summed up, states that Manchester can obtain an adequate further supply of water in the neighbourhood of that city, and can also, if necessary, obtain a supply from other places, which, though not in the neighbourhood of that city, are yet nearer to it than Thirlmere. The Committee therefore draw this inference: that under these circumstances Thirlmere and the Lake district need not and ought not to be sacrificed. They therefore again strongly urge all who are interested in the question to join in providing the funds necessary for continuing the opposition to the Bill in the House of Lords. They estimate the expense of this further opposition at about £2000.

SMALL-POX AND FEVER IN THE METROPOLIS.

At the meeting of the Metropolitan Asylums Board, held on Saturday last, the committees of the five small-pox hospitals presented their reports, which showed that during the previous fortnight there had been 343 admissions, 54 deaths, 337 discharged, 802 cases still under treatment, and 355 vacant beds. During the fortnight preceding this return there were 391 admissions, 80 deaths, 376 discharged, and 834 cases under treatment. In the two fever asylums at Homerton and Stockwell, during the fortnight ended Saturday, the 18th inst., 48 patients had been admitted, 11 had died, and 45 had been discharged, leaving 141 under treatment—a diminution as compared with the previous fortnight of 8 admissions and 7 under treatment. Mr. J. A. Bostock, C.B., Inspector-General of Hospitals, and Chairman of the Fulham Asylum Committee, presented the first annual report of that Asylum. After detailing the history of the building, the report adds: "Several important questions arise from the report of the Medical Superintendent, and are well worthy the serious consideration of the managers. The most prominent appear to be—1. A more efficient performance of vaccination during infancy, revaccination at or about puberty, and a house-to-house visitation in suspected localities at the outbreak of, and during, an epidemic. 2. The provision of hospital accommodation for non-pauper patients, and the speedy removal to a hospital of all cases that

cannot be effectively isolated at their own houses. 3. More perfect arrangements for the conveyance of the sick from their own homes to the hospitals. 4. The registration of all cases of infectious disease, not necessarily for removal, but in order that the public health officers may be able to adopt at any early period preventive means for checking the spread of such diseases. The Committee firmly believe that until such or similar measures are made compulsory, and a uniform system adopted for carrying them out in all parts of the metropolis, no real progress can be made in combating the outbreaks of small-pox or other epidemic diseases as they arise." The report was ordered to be entered on the minutes, in order that the above remarks might come before the Local Government Board, and before the local authorities of the metropolis.

THE MEDICAL DEFENCE ASSOCIATION AND THE GOVERNMENT MEDICAL BILL.

On Monday last a deputation representing the Medical Defence Association waited upon the Duke of Richmond and Gordon at the Privy Council Office, to state the views of the Association with regard to the new Medical Bill now before Parliament. Among those present were—Dr. B. W. Richardson, F.R.S. (President of the Association), Dr. C. J. White (Vice-President), and Mr. George Brown (Hon. Secretary). Dr. Richardson, on being introduced, presented a memorial to his Grace, in which were stated the views of the Council of the Association on the chief points needing reform. The Council desired a State Examining Board for each division of the kingdom; direct representation of the profession on the General Medical Council; more stringent clauses to prevent the assumption of medical titles by unqualified persons; and to suppress the practice of medicine and surgery by those who were not registered. The Council also objected to the clause of the Bill which proposed to give the General Medical Council power to place on the Medical Register the names of foreigners who were not qualified to practise in their own country. In reply, his Grace said that he was anxious to stop the practice of medicine by unqualified persons, but the subject was one which presented great difficulties. He could see that the proposed Bill would not be an efficient check, and if the Association would draw up a clause which would meet the case, and send it to him before the Bill passed through committee, he would consider it, and, if possible, adopt it. With respect to the institution of a State Examining Board, he could not adopt the suggestion; but he might state that he had determined to propose an amendment to the Bill, which would have the effect of making the institution of a conjoint board in each division of the kingdom compulsory on the part of the corporations; but it would not compel the universities to join the conjoint board. He could not see his way clear to adopting the suggestion of the Council as to direct representation of the profession on the General Medical Council. He was quite sure that if he proposed such a clause it would have no chance of passing and would be fatal to the Bill. As to the clause admitting foreigners to the Medical Register, he was not aware that it would give the General Medical Council power to register those who possessed no legal qualification to practise in their own country. Such was not the intention of the Government, and he would consider the clause again.

THE COLLEGE OF PHYSICIANS IN IRELAND AND THE ARMY MEDICAL DEPARTMENT.

In replying to the inquiries of the War Department regarding the emoluments of civil medical practitioners the President and Fellows of the King and Queen's College of Physicians in Ireland express their regret that they are unable to supply any trustworthy estimate of the average earnings, under ordinary circumstances, of medical practitioners in civil life. "They believe, however, that although the income of junior members of the profession derived from practice and appointments does not always exceed the pay of junior army surgeons, yet that the emoluments of those of (say) five years' standing and upwards are greatly in favour of the civil practitioner, whilst the professional prospects of the latter are incomparably superior to those of officers in the Army Medical Department." But they take care to add that the unpopularity of the Army Medical Service, though partly due to dissatisfaction with the present rate of pay, is, in their opinion, to be mainly attributed to the several other causes already enumerated in their communications to the War Department.

THE REGISTRAR-GENERAL ON UNCERTIFIED DEATHS.

In the return of births and deaths in England for the first quarter of the year ending March 31 last, the Registrar-General calls attention to the number of uncertified deaths. The number of deaths entered upon the national register during this period was 139,825; the causes of 125,841, or 90 per cent., of these were certified by registered medical practitioners, and 6785 inquests were recorded, equal to 4·9 per cent. of the total deaths. In 7199 cases, equal to 5·1 per cent. of those registered, no certificate of the cause of death was produced; in these cases (a large number of which had been previously referred to the local coroners, who pronounced inquests to be unnecessary) the causes of death, as well as the other particulars required for insertion in the register, were furnished by the ordinary informants of the deaths, in most cases relatives of the deceased. The largest proportion of uncertified deaths consists of that class of cases in which the deceased persons have been attended in their last illnesses by unqualified practitioners, practising either on their own account or as assistants to registered practitioners; although in some thinly populated parts of England and Wales considerable numbers of persons die without any kind of medical attendance in their last illnesses. The following are examples of the replies made by registrars to inquiries as to the reason why so large a proportion of the causes of deaths in their sub-districts during the past quarter was uncertified. A registrar of Durham says, "The medical officer of the collieries resides several miles from the place and keeps a non-registered assistant, who attends all cases, and gives information as to the cause of death." And a Chesterfield registrar explains that "it is in consequence of a druggist in the neighbourhood attending so many young children in sickness, and others as well, he being much thought of among the working-classes." This latter case would surely be worthy the attention of the Medical Defence Association; the whole subject, indeed, demands investigation, since the Registrar-General himself admits that the registration of deaths without the production of certificates of their causes affords dangerous facilities to conceal negligence, if not crime.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.

At the annual general meeting of this Society, held recently at the Leeds General Infirmary, Mr. Scattergood, the president, in the chair, the yearly report was presented and adopted. The Society now includes no fewer than 183 members, and has just closed a very active and successful session. A new feature in the history of the Society was the devotion of one whole evening of last session to the discussion of one subject of general interest. Typhoid fever was the first subject thus discussed, and the result was so encouraging that the Committee hope to be able to repeat the experiment. The following gentlemen were elected office-bearers for the ensuing year:—*President*: Dr. Holdsworth, Wakefield. *Vice-Presidents*: Mr. Pridgin Teale and

Mr. Hodgson Wright (Halifax). *Treasurer:* Dr. Heaton. *Hon. Secs.:* Mr. McGill and Dr. Churton. *Librarian:* Mr. Horsfall. *Committee:* Dr. Clifford Allbutt, Mr. E. Atkinson, Dr. J. H. Bell (Bradford), Dr. Eddison, Dr. Ginders (Normanton), Mr. Lodge (Bradford), Mr. Nunneley, Mr. Seaton, Dr. Symes (Halifax), Dr. Tibbits (Bradford), Mr. T. Walker (Wakefield), and Mr. C. J. Wright.

MR. GLADSTONE AT THE EAST LONDON CHILDREN'S HOSPITAL.

THE annual festival of the East London Children's Hospital at Shadwell was celebrated on the evening of Wednesday, May 22, in a handsome tent within the grounds of the institution. Mr. Gladstone occupied the chair, and made an interesting speech in proposing the toast of the evening. After lamenting the increasing severance between the populations of East and West London, the right hon. gentleman pointed out the comparatively recent introduction of special hospitals for children, and commended the Shadwell institution to the notice of the benevolent of all classes of the community, on the grounds of its situation, its history, the special objects of its care, and its efficient and economic management. Subsequently, in proposing the health of the medical staff, Mr. Gladstone spoke of the great educational advantages of such hospitals to the younger members of the profession, and pointed out that this was not merely a professional question, but that it was in the interests of the whole general public that such institutions should be available for the extension and completion of our practical acquaintance with disease.

UNIVERSITY COLLEGE HOSPITAL.

THE annual dinner in aid of the funds of this charity was held at Willis's Rooms on Tuesday evening, with Mr. Erichsen in the chair—and right well did he occupy the post. The speech he made on behalf of the Hospital, though it might have been eclipsed by others more brilliant, was one of the most thorough vindications of the necessity for such institutions and of the good they do we have ever listened to. Incidentally, he mentioned that by the will of the late Sir Francis Goldsmid the Hospital becomes entitled to £10,000, and we believe that the College comes in for something very much larger.

THE GROSVENOR GALLERY.

THE manager of the Grosvenor Gallery Restaurant feels aggrieved at our few simple comments on the Pharmaceutical Society's dinner recently held there. The fault lay not, he says, in the management, but in the guests, who came in too great numbers at the last moment. The guests, on the other hand, maintain that the management was in fault. It is therefore quite plain that there was something wrong somewhere. But let that rest. It will be wise for Mr. Michels to take more ample precautions on such another occasion.

MEDICAL PARLIAMENTARY AFFAIRS.

Factories and Workshops.—In the House of Lords, on Wednesday, May 15, this Bill was read a third time. The Earl of Shaftesbury, while approving of the measure, and congratulating the Government upon its general principle, said that the nail and chain makers had been entirely excluded from the operation of the Act. In such factories girls and women were employed; he therefore reserved for them the right to come to Parliament at a future time for similar legislative control. Lord Balfour replied that the Commission appointed had sat in various towns of the Black Country, and, having carefully considered the evidence in favour of legislating in behalf of this trade, had arrived at the conclusion that it was impossible to distinguish between the heavier and lighter kinds of nail and chain work, and therefore they decided that the employment of young women in these trades could not be forbidden. He reminded Lord Shaftesbury that by the Act now passing through the House the working hours for young women would be from 6 a.m to 6 p.m. or 7 a.m. to 7 p.m., with an hour and a half for meals, instead of from 6 a.m. to 8 p.m. under the regulations now in force. This would be a decided gain for the young women engaged in these trades.

Army Medical Officers.—In the House of Commons, Colonel Stanley, in reply to Mr. Meldon, said that the garrison at Woolwich has its full complement of medical officers, and no private practitioners are employed. Other garrisons, however, are short of medical officers, partly in consequence of a number having been withdrawn for the purpose of undergoing field training with the Army Hospital Corps. The increase of £5000 in the estimates had reference to the employment of civil surgeons at the Cape, which was a more economical and desirable arrangement than an augmentation of the staff.

County Government Bill.—Mr. Sclater-Booth, in reply to Mr. A. Peel, said that the recommendations of the Lords' Committee on the subject of floods and the control and management of rivers had not been overlooked, and he hoped there would be more complete legislation with respect to it before long. He could not promise any further legislation dealing with it during the present session.

Noxious Vapours.—In the House of Lords, on Friday, May 17, Lord Aberdare, in reply to Lord Winmarleigh, said that no time would now be lost in preparing and presenting to Parliament the report of the Commission on Noxious Vapours.

FROM ABROAD.

PROF. HAMILTON ON COLLES' FRACTURE.

WE extract the following observations from a clinical lecture delivered by Prof. Hamilton at the Bellevue Hospital, New York, and reported in the *Philadelphia Medical Times*, March 30:—

"True Colles' fracture, in which the radius is broken an inch and a half above the joint, is exceedingly rare; but the typical and classical fracture of the lower end of the radius which goes by his name (but is really situated within half an inch of the joint) is sufficiently common. Mr. Colles really never saw in the cadaver the fracture which he described; but, always meeting with it during life, he supposed it to be situated an inch or an inch and a half higher up than it really was. I may say that I greatly deprecate the practice of calling fractures or diseases after gentlemen's names, for it is very apt to be the case that in the course of a few years the affection so named is found to be in reality a very different one from that originally described. The English are especially given to this custom, and as examples I may mention Pott's disease of the spine and fracture of the fibula, Bright's disease, and Addison's disease.

"I propose to mention briefly a few of the varieties of fracture of the lower end of the radius. And first we have the typical one, which is usually caused by a fall upon the hands at the back-door in winter, and is hence frequently called the 'back-door fracture.' From the shape of the deformity it is also known as the 'silver-fork fracture.' When this fracture occurs, the individual usually falls only his own length; and it is far more common in winter, when there is ice on the ground. You will observe that there is a swelling at the back of the wrist, and that the hand falls a little forwards, as well as a little towards the radial side. If we could examine the bones, we should find that there was a fracture within half or three-quarters of an inch of the lower end of the radius, the lower fragment being simply tilted backwards: the fracture is transverse. In nine cases out of ten this is the character of the fracture; and you have simply to replace the fragment, which is most conveniently done by flexing the wrist across your knee. But secondly, there is unfortunately, in a certain proportion of cases, in addition to the fracture, a giving-way of the radio-ulnar ligament. Even if it does not yield altogether, it is at least put upon the stretch, giving rise often to considerable pain and soreness. Ligaments, when once disrupted, can never be made to unite as they were before, and hence, whenever this accident occurs, there is always more or less deformity remaining. Thirdly, we may have also a fracture of the lower end and styloid process of the ulna—a condition

which I do not know very well how to remedy. And, fourthly, we may have another more serious complication, viz., a comminution of the lower fragment, which, instead of being simply tilted backwards, is found to be broken into three or four pieces. A 'back-door fracture' is never of this character, for it requires a greater force to produce it than is brought into play in falling one's own length."

Proceeding to the consideration of the treatment of the accident, Prof. Hamilton observes that the fact of the hand being thrown to the radial side has given rise to the invention of so many "pistol-shaped" splints for the purpose of throwing the hand in the opposite direction. But these are all useless owing to the absence of traction, the only splint (that of Nélaton) by which sufficient traction-power can be obtained being insupportable on account of the pain produced by the stretching of the injured ligaments.

"There is, indeed, no indication to fulfil by throwing the hand towards the ulnar side, the only real indications being to restore the fragment to its own place and to maintain it in position. When the fracture is once reduced it remains so permanently with the greatest ease, for the least pressure in the opposite direction prevents the fragment from slipping back again. This fracture, however, which is almost always transverse, is not quite so easy to reduce as it is to maintain the parts in position when the reduction has been made; and this is due to the denticular character of the surfaces where the bone has been broken off. A good reduction at first I regard as the most essential point of the treatment; and I lay special stress upon it, because I have seen so much injury to the joint result from tight bandaging, which is altogether unnecessary, and seems to be resorted to by some under the idea that great force is required to keep the lower fragment in position. If you ever get a good result in this fracture, it will be because you have reduced it well at first. Be very careful, then, to get the lower fragment into line before applying any bandage whatever; and if at first you do not succeed, try and try again. I ought to remark here that in not one case out of five do I succeed in getting crepitus in reducing it, because the fragments glide over each other so easily. Having reduced it well, which I again remark is a matter of the utmost importance, I care very little what apparatus you make use of to retain the parts in position. There is a variety of appliances, by all of which you can get excellent results; but I must say that I like my own best.

"I am in the habit of employing the pistol-splint, because it affords a better view of the seat of fracture, and this enables me to see whether the fragments are in line. It is of course applied to the palmar surface; and this is sometimes the only splint I use, though ordinarily I prefer a back-splint also. When I am going to treat a Colles' fracture, I take a piece of common shingle and cut it to the shape best adapted to the particular case, always taking care to hollow out a space into which the ball of the thumb may fit, and to cut it off at such a length as to reach only to the metacarpophalangeal articulation, so as not to interfere in the least with the free motion of the fingers. There is no reason whatever why the motion of the thumb and fingers should be interfered with; and by leaving them free you prevent any stiffness or tendency to anchylosis, as well as greatly enhance the comfort of the patient. The splint should reach as high up as the elbow, and should be carefully padded (especially in the portion covering the palm of the hand) in such a manner as to adapt itself well to the parts with which it comes into contact, except at the seat of fracture. It is a point of the utmost importance that there should be no padding between the lower fragments and the splint, but that here the space should be so open that there can be no possibility of any pressure upon the median nerve and the radial and ulnar arteries. The bandage should never be put on tightly enough to do any mischief whatever, and the arm should be just as comfortable after the dressing is applied as if lying on a pillow. To sum up, then, the treatment consists of (first) a complete reduction of the fracture at first, and (secondly) the retention of the parts in position by means of an apparatus which shall be perfectly comfortable to the patient, and in which there can be no danger of pressure upon the nerve and arteries. The same treatment is equally applicable to all the complications; though, fortunately for the surgeon, the injuries which are sufficient to produce the comminuted form of the fracture almost always result fatally.

"In all of these wrist-joint fractures it is of importance to give motion early; and, fortunately, in the ordinary cases we can do this at about the end of a week."

GENERAL CORRESPONDENCE.

THE BRITISH MEDICAL SERVICE.—No. II.

LETTER FROM MR. C. MACNAMARA.

[To the Editor of the Medical Times and Gazette.]

SIR,—Referring to my former letter on the condition of the British Medical Service, I urged the advisability of investing the heads of our educational establishments with the power of nominating candidates to Netley. My reasons for insisting so strongly on this point was because I am convinced that, however perfect the rules and regulations of the Service may be, unless its members are thoroughly qualified in every way to fulfil the work imposed upon them, the Department can never be a flourishing one; and I hold that the test by examination is not a sufficient proof of the fitness of a man to perform the duties of an Army Surgeon: the only possible means of acquiring a knowledge as to his ability for the work is through a personal acquaintance with the candidates for the Army Medical Service. It may be urged that the same reasoning applies to combatant officers. If the competitive system answers with them, why not with members of the Medical Department? This reasoning, however, is utterly fallacious, for it assumes that the competitive system is the best fitted for filling the ranks of regimental officers—an assumption I very much question; and beyond this, the relations in which the surgeon of a regiment stands to the officers and men entrusted to his charge is very different from that of combatant officers to one another, or to the soldiers under their command. It is, however, useless dilating further on this point, or urging in stronger language than I have already done the necessity for employing the best qualified medical students for special work, such as is required of them by the circumstances of military duty.

As a further means to this end it seems desirable that medical officers entering the Army should enlist for five years, and then be permitted either to retire from the Service, receiving a bonus of £500, or be allowed to send up their names as candidates for permanent military employment. The authorities would select such of these candidates as the exigencies of the Service demanded, and in accordance with the reports they receive regarding the qualifications of the candidates from their superior officers. All the parties concerned would profit by a scheme of this kind. The habits of discipline, order, and punctuality acquired in the course of five years' training in the Army would be of advantage to most young men in any line of professional life they might subsequently follow; nor could it be said that five years with a regiment would confirm them in habits inconsistent with those of a general practitioner. On the other hand, the military department would profit by the plan, because it would only receive into its permanent ranks chosen men, who, having had five years' experience in the Army, had come to the conclusion that they preferred a military career to that of practice as civilians.

It would be simply waste of time entering into details as to the rules and regulations governing the pay, rank, promotion, and retirement of Army Surgeons, unless the principles upon which the Service is to depend are first established. If the lines in which the Department is to be set are clearly defined, matters of detail regarding the organisation of the Service will very soon shape themselves into an acceptable form; but when once the regulations of the Service have been elaborated, they should remain in force for some years. The frequent alterations (arising from want of fixed principles of action) that have occurred in the rules of the Department during the past fifteen or twenty years have done as much as anything else to render the Army unpopular with the profession.

With reference to the constantly recurring question of the regimental *versus* the existing system, there seems to be a widespread opinion that the latter is as faulty as it well can be, and that it is desirable to revert, as far as practicable, to the former. I am aware that there are difficulties in the way of providing for regimental surgeons when their corps are at the head-quarters of the depôt, but the difficulty might in some measure be overcome if the names of the medical officers

were retained on the rolls of the regiment, although they might themselves be otherwise employed until the regiment left the depôt. In this matter, however, I would again refer to the spirit which evidently animated Army Surgeons in former years. Their ideas were influenced by something more than simply how much they were to get in the way of pay. Many of them took as much interest and pride in their regiment as any of the combatant officers did; in fact, the colonel, adjutant, and the doctor were the men who virtually ruled the regiment. All this is changed under existing circumstances.

And so with the matter of promotion, rank, and pay. If the notion is entertained that the surgeon is a military (though not the less a professional) man, and is therefore entitled to all the privileges of combatant officers, the vexed questions regarding quarters, servants, and such-like matters resolve themselves into the simple rule that a certain rank carries with it definite privileges, and that these privileges are to be shared equally by all officers holding that rank. It is the existing unstable ideas regarding the position of medical men in the Army that has led to much of the bickerings and trouble of which we have heard so much lately, and which will never cease until those in authority clearly comprehend the spirit which should animate, and which it is their duty to foster among medical men seeking employment in the Army.

I am, &c.,

London, May 22. C. Macnamara.

REPORTS OF SOCIETIES.

THE PATHOLOGICAL SOCIETY.

Tuesday, May 7.

Charles Murchison, M.D., LL.D., F.R.S., President, in the Chair.

Malignant Disease of the Tonsils.

Mr. Butlin read the report of the Morbid Growths Committee upon Mr. Lennox Browne's specimens of malignant disease of the tonsils (see *Medical Times and Gazette*, February 16, page 181, and March 2, page 248). The first specimen proved to be a lympho-sarcoma, which had probably originated in the tonsil. The second specimen was an epithelioma, which had probably commenced in the tongue.

Ulceration of the Bowels with Granular Kidney.

Dr. Dickinson showed a specimen of this nature. Two years ago, in his Croonian Lectures, Dr. Dickinson had mentioned ulceration of the bowels as very rarely associated with granular disease of the kidney, and had recorded two cases. Both the patients had been young persons dying of granular degeneration of the kidneys, hypertrophied heart, and all the results of high arterial tension; and in both cases the immediate cause of death had been peritonitis, with more or less complete perforation of the bowels by ulceration. The condition of the bowel somewhat resembled the appearance in dysentery. One case had occurred in a boy of fourteen, a butcher, who described his symptoms "as if there were a twisting of the gut." There was neither tubercle nor typhoid fever present, and only granular kidney could be suggested as the cause. Dr. Greenhow had mentioned a similar case in a young woman; and now the present case made the fourth instance of the connexion on record. A young man of twenty came as an out-patient to St. George's Hospital, complaining of blindness, and was found to be suffering from extreme albuminuric retinitis. He was admitted; and the urine proved to be copious, pale, albuminous, and full of casts. There was little dropsy, and the kidneys were evidently granular. The left ventricle was greatly enlarged; and the pulse was the hardest that Dr. Dickinson had ever felt. Hæmorrhage occurred occasionally from the bowel and nose. Thereafter peritoneal pain began, of a colicky kind; ulceration was diagnosed of the same character as in the previous cases; the abdominal symptoms increased; and the patient died in collapse from peritoneal symptoms. Post-mortem, the kidneys were seen to be granular and contracted, with much fibroid growth. The peritoneum contained a considerable amount of purulent fluid. The bowel was ulcerated in two places; and in the lower part of the ileum, near the valve, were found circular or irregular ulcers. There was no appearance of typhoid disease, and no tubercle was found in the body. The bowel was pigmented and presented other evidence of hæmorrhage. Dr. Dickinson said that there was evidently an association between the granular kidney and the intestinal ulceration in this case. Perhaps the ulceration was connected with hæmorrhage. It was important to notice the early age of the subjects in these cases. This patient had had scarlatinal dropsy fourteen years before, at the age of six.

The President asked whether there was any explanation of the exceptionally youthful age of all the patients. Further, it was important to know what the evidence was of the absence of typhoid fever—for instance, the temperature.

Dr. Dickinson replied that the only explanation he could offer of the youthful age of the subjects, was that scarlatina might have been the starting-point in some; and in one at least, calculous disease of long standing, with alteration of the ureter. In no case was there any evidence of typhoid fever in the history. Two of the cases were under observation for a long time, and presented no acute pyrexia, or other symptoms of typhoid fever.

Renal Calculus of Carbonate and Phosphate of Lime.

Dr. Ord showed this specimen, which was companion to the indigo-calculus described at a previous meeting (see *Medical Times and Gazette*, March 16, page 292). It was taken from the left kidney, which was destroyed by a sarcoma, obstructing the ureter, and completely reducing the gland to a lobulated cyst, containing pus and this calculus. Its characters were coral-like, being elongated and branched, and the mode of its formation had probably been as follows:—Under circumstances leading to deposit in the pelvis of the kidney and its offshoots, nuclei had been deposited in different parts, and these had subsequently become fused. In this specimen the largest nucleus had evidently belonged to the pelvis itself, and consisted of uric acid and urate of ammonia in concentric layers. The central branch further contained phosphate of lime in spherules, and friable needles of urate of lime, along with uric acid and urate of soda. Externally there were mixed layers of urate of ammonia and phosphate and carbonate of lime, compactly mixed with organic material. The history of the present case had therefore evidently been, that with moderate obstruction of the ureter, uric acid and urates had been deposited in the pelvis; thereafter, as obstruction became more complete, deposits had formed in the calyces; and finally, phosphate and carbonate of lime had been deposited where there was no flow of urine. Carbonate of lime deposits were always found out of the track of flowing urine. No trace of indigo or of indigogenous material was present in the calculus.

Spontaneous Disintegration of Vesical Calculi.

Dr. Ord also showed two sets of specimens of fragments of calculi, illustrative of the results of spontaneous disintegration of these formations within the bladder. A similar case had been shown by him last session. The first set was formed by a group of five fragments from a gentleman of fifty-six. The patient had suffered from vesical symptoms for months previously, when he began to pass fragments of stone. For several weeks the pieces were discharged, and, on being collected, appeared to belong to two pisiform calculi. The nuclei were not found. The second set consisted of a group of thirty-six pieces. Some of the fragments were water-worn, polished, and fawn-coloured; others were white-washed and had sharp edges. The fragments were passed within a period of several weeks by a patient, who between 1870 and 1875 had passed several portions, and in 1876 was known to have several large calculi in the bladder. He died of uræmia shortly after. In these specimens the basis was almost pure uric acid, with an organic matrix, and a fibrous, crystalline, radiating character, the fibration being interrupted by laminæ. It was evident that these fragments belonged to calculi originally pisiform, some of them being coated, after disintegration, with neutral urate of ammonia. Some of the fragments must have been retained in the bladder. With respect to the mode of disintegration, Dr. Ord's view was that, the nucleus being different from the rest of the calculus—say of uric acid and in a muciform material,—it was capable of being swollen by alkalies. When the urine became alkaline, disruption accordingly ensued. In these specimens the uric acid was very compact and fibrous in form, and it had

therefore been deposited slowly in a colloid substance. In the specimen previously exhibited this was not the case, the uric acid being crystalline.

The PRESIDENT asked whether the nucleus was ever found in these cases.

Dr. ORD replied that, although he had not found the nucleus in any of his cases, the nucleus was present in a similar specimen in the Hunterian Museum.

ORGANISMS IN MEASLES.

Dr. BRAIDWOOD, of Liverpool, exhibited a large collection of microscopic specimens illustrative of his researches on the intimate pathology of measles. The first specimen was a slide with glycerine, in which the breath of a child suffering from measles had been collected. A slide on which a healthy child had breathed presented no special appearances; while the preparation made from the breath of a child on the third day of the eruption of measles presented many clear sparkling bodies. The second series of specimens were made from the tissues from two cases of measles, fatal on the eighth and fifteenth days respectively. The tissues had been hardened in strong spirit, after having been removed within twenty-four hours of the time of death. In the first case, fatal on the eighth day, the skin presented great swelling of all the elements, proliferation of the rete mucosum, and sparkling bodies, situated near the sudoriparous ducts, underneath the rete, of a spherical, staff-like, or cylindrical shape. It was probable that these bodies were related to the contagium of measles. The particles were collected into groups, but did not occupy either the lymph-channels, the ducts, or the glands. The lungs presented obliteration of the alveoli in places, and the bronchi contained exudation. This material consisted of blood-globules, leucocytes, amorphous exudation, and here and there sparkling bodies, spherical or elongated. The liver also contained sparkling bodies; the kidneys contained none. The second case was in the fourteenth day of eruption: the skin presented proliferation of cells and the same contagium-particles as in the other instance; the lungs contained patches of pneumonia, with bronchial catarrh, with the specific organisms easily distinguished as before; the liver also contained the peculiar particles; the kidneys presented no special appearances.

The PRESIDENT spoke in admiration of the specimens exhibited, and of the drawings that accompanied them, and said that the whole question was whether the particles discovered were the micrococci of measles. It was an important fact that similar bodies had been found in the breath. He was not himself prepared to admit that the specific organisms of measles had been found; and he recommended repeated observation and cultivation of the organisms.

Mr. MORRANT BAKER asked whether Dr. Braidwood had examined the breath in health, and in other exanthemata.

Dr. THIN said that it was not possible to say by microscopical examination whether a single particle was a bacterion or not; the body must be observed to be jointed, or groups of similar bodies must be observed.

Mr. BUTLIN said that fur on the tongue in fever contains large quantities of bacteria. It was probable that bodies similar to those described might be found in the breath in other diseases.

Dr. WILBERFORCE SMITH said that he had found abundant fungi in the fur of the tongue. He had seen considerable desquamation of epithelium from the bladder in the convalescence of measles. He asked whether Dr. Braidwood had examined the blood.

Dr. ORD asked what the size of the particles was, and whether there was any difference in their appearance on the eighth and fourteenth days.

Dr. COUPLAND said that it would be of the greatest importance to vary the method of preparing the specimens, so as to eliminate the chance of the appearances being artificial.

Dr. BRAIDWOOD replied. He said that the investigation and the communication were only preliminary. Cultivation would be tried. He did not attach much importance to the examination of the breath; but the observation was an earlier and independent one, and had therefore been recorded. The living skin had not been examined yet, but there were distinct differences in the appearances according to the day of eruption. The particles which were believed to be the organism of measles were somewhat larger than the micrococcus of vaccinia, which was one-twenty-thousandth of an inch in diameter.

Dr. DICKINSON referred to Salisbury's observations on the connexion between the contagium of measles and a growth upon wheaten straw.

EPITHELIOMA OF THE FEMALE LIP.

Dr. THIN showed microscopical specimens of this disease. The occurrence of epithelioma of the lip in women having been questioned by some London surgeons, the present specimen had been sent from Edinburgh by Mr. Bell, who had removed it from a woman of sixty-five. The patient had been a smoker for twenty years, and the labial ulcer began after the use of a new clay-pipe, at the angle of the mouth. The histology of the specimen was further interesting inasmuch as the mucous glands were peculiarly affected, the ducts being choked with *débris* and an active form of new epithelial growth. Externally the hairs and the sebaceous glands were also involved, but the rete mucosum was not affected.

OLD CANCEROUS ULCER OF SKIN.

Dr. THIN also showed microscopical specimens of a cancerous ulcer of the skin of forty-three years' duration. It had been excised by Sir James Paget from the scapular region of a woman of sixty-eight, who at twenty-five had noticed a wart about the middle of the left scapular spine. In five years it had reached the size of a pea, and was then removed by ligature. It reappeared, however, and in ten years was as large as a strawberry. Again removed, its base now spread like an ulcer; and this steadily increased in size, discharged, and occasionally bled—especially at menstrual periods. The general health was beginning to suffer, and the ulcer covered the whole scapula at the time of the operation, when it was removed by incision. The deeper tissues were free. The case progressed favourably. Microscopically, the essential feature of the floor of the ulcer was a cellular growth, and the raised external border consisted of the same material. The growth invaded the rete mucosum, and then destroyed it—this constituting the ulceration. Thus the cellular infiltration and the ulceration advanced *pari passu*. Upwards the masses grew in columns from the upper part of the cutis; downwards they formed long tapering processes, through the layers of connective tissue, so that the centre of the ulcer contained in many places no cells at all, the cutis remaining as the base. These were the main features of the case. The cells were arranged in an epithelial manner, in columns bounded by other cells standing on end, and the elements being unlike those of the rete Malpighii. Negatively, the rete did not grow downwards as in ordinary epithelioma. There was no change beyond retrogression in the sebaceous glands or hairs; but some of the sweat-glands were dilated, and perhaps were filled with these cells, so that they might have been the starting-point of the growth. The disease was on this account possibly an adenoma of the sweat-glands.

CLINICAL SOCIETY OF LONDON.

FRIDAY, APRIL 26.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

(*Continued from page* 550.)

OVARIOTOMY IN A CHILD AGED TWELVE YEARS.

DR. T. BARLOW read notes of this case, which had been under the care of himself and Mr. Howard Marsh at the Children's Hospital, Great Ormond-street. The enlargement was on the right side of the child's abdomen, and consisted on the extreme right of a hard mass, internal to which, and attached to it, was a tight cyst. The whole tumour was slightly movable and painless, and had been eighteen months growing. The child had scarcely any symptoms; she suffered only from a little constipation. Her temperature was normal. Chloroform having been given, a hypodermic syringe was introduced into the cyst two inches below the umbilicus, and one drachm of clear straw-coloured fluid was withdrawn. Next day the temperature had risen to 99·4°. Four days subsequently the tumour was considerably collapsed, the abdominal surface was flattened, and the hard part of the tumour was now quite definite. It evidently contained some material as hard as bone. The cyst had become quite soft and flabby, and gave no evidence of fluid. After about six days the cyst refilled. Fifteen days subsequently it was

completely aspirated, and six pints of fluid were removed. The cyst, however, again filled. Ovariotomy was then performed by Mr. Marsh. There were no adhesions between the tumour and its surrounding parts. When it had been thoroughly exposed by the incision into the abdomen, it was tapped, and eighty ounces of light brownish-green fluid were drawn off. The remaining solid portion of tumour was still too large to be drawn through the opening, which was three inches long; it was consequently extended nearly to the pubes. The thick and fleshy pedicle was clamped by Mr. Spencer Wells's method and divided. Bleeding points in the omentum were secured by catgut; and the wound was closed with sutures. No subsequent bad symptoms occurred. Pain in the abdomen was treated with morphia suppositories. After the eighth day several sutures were removed; the bowels acted spontaneously on the twelfth day; and the clamp dropped off the pedicle on the thirteenth day. For some weeks the stump of the pedicle remained protruded and covered with florid granulations. It at length became completely retracted, and the child was discharged well about eleven weeks after the operation. The tumour weighed two pounds eleven ounces; it measured six inches across, and seven inches from above down, and was nearly spherical in shape. The lower half was composed of a thin-walled cyst, capable of holding a large cocoa-nut; it had projecting into its cavity several smaller cysts. The hard part contained a plate of bone measuring two inches by four inches, and other smaller pieces of bone. There were cysts at the upper and outer part of the growth, with gelatinous and solid contents; many of which contained sebaceous matter, with collections of dark short hairs. There were also fibroid bands and irregular spicula of bone interposed between some of the cysts.

The President, upon inquiry, was informed that the child had not menstruated.

Mr. Maesh remarked that such operations in children were by no means unique. Mr. Spencer Wells had operated successfully upon a child eight years old; and in the *American Journal of the Medical Sciences* there was a record of successful operation where the child was only seven years old. At Bonn, a child aged two years had been operated upon and perfectly recovered. In all the cases, he believed, the cysts were dermoid.

Mr. Maunder said one important feature in connexion with cystic tumours of the abdomen was the question of a preliminary tapping. He had known, and doubtless others present were acquainted with, instances in which the simple tapping of an ovarian cyst had led to fatal peritonitis. He was therefore strongly of opinion that this should not be done except in obscure cases, and as an aid to diagnosis. The case under consideration indicated a leakage into the peritoneal cavity, notwithstanding the small instrument that had been used; but fortunately no serious result followed. Assuming the radical operation justifiable in a given case, it is very undesirable to submit the patient to additional risk without corresponding advantage.

Dr. Wiltshire remarked that in dermoid cysts the fluid was made up of decomposed skin-products, etc., which, oozing into the peritoneum through the puncture made with the canula, were very apt to set up peritonitis. In a patient with such a cyst, he had seen a severe attack of peritonitis supervene upon tapping. After her recovery, a second cyst filled; this had been opened, and still remained open. In most children cysts of the ovary were dermoid.

Dr. Coupland stated that the fluid drawn off in this case was thin and pellucid, and came up through a hypodermic syringe; consequently, this cyst was not dermoid.

The President said that as the fatal results which might ensue from these tappings were well known, it seemed desirable to draw off a large quantity of fluid, that the cyst might collapse and no further fluid exude. When only a small quantity was drawn off, the tension of the cyst-wall was scarcely diminished.

Dr. Barlow said that at Great Ormond-street, in very many cases of the use of the hypodermic syringe, no harm had resulted. In regard to hydatids also, even if (after tapping) the remaining fluid exuded into the peritoneal cavity, no harm seemed to come of it. If surgeons would use a hypodermic syringe more frequently, they would learn the advantages of it. Dr. Wilson Fox had taught that, after puncture in pleuritic effusions, the serum might be transformed into a purulent liquid. Dr. Barlow, however, had seen oftentimes the removal of a small quantity of pleuritic fluid seem to be the first point in the absorption of the rest of the fluid itself.

Operation for Strangulated Femoral Hernia, in which an Anomalous Obturator Artery was Divided.

Mr. Barker read notes of this case. The patient, a woman of fifty-six, was operated on in the usual way on February 7. Most of the constricting fibres were easily divided; but, on severing some which remained, embracing the neck closely, blood welled out of the wound. The latter was enlarged and the vessel sought. As it could not be found and the bleeding soon ceased to be severe, it was deemed advisable to apply pads over the wound and compress with bandages. On the 8th the patient was better, and on the 9th better still. Early on the morning of the 10th, however, she took a turn for the worse (indicating peritonitis), and died at 5 p.m. on the same day. A post-mortem examination revealed acute peritonitis with serous effusion. Near the wound, about three or four ounces of blood were found effused underneath the peritoneum in the pelvis, above and to the right side of the bladder. This blood came from an anomalous obturator artery passing down on the inside of the neck of the sac. It sprang from the epigastric about half an inch from its origin, and was completely severed at about three-fifths of an inch from its commencement. Its vein lay to the outside of the sac. The proximal end was plugged; the distal had furnished the bleeding. Mr. Barker remarked that his object in bringing the case before the Society was not only that it was a rare one, but that he hoped to elicit an expression of opinion from the members as to the best mode of dealing with cases where this rare accident had occurred. Was the artery to be sought at all costs, and ligatured; or was it, in certain cases, as in this, to be left to itself controlled by pads? He had, with a good deal of trouble and search through English and foreign literature, succeeded in collecting only twelve cases where this accident had occurred: excluding doubtful cases where no correct record had been given. Out of these, he said, it was remarkable that in six the vessel was secured with ligature or hook, and in six it was left to itself. Of the first six, two died; and of the second six, one (the present case) died of peritonitis. Without desiring to make too much of these facts, he thought that the one line of practice was at all events justified as well as the other, although in some books very positive statements were made as to the urgent necessity of seeking the artery and placing a ligature upon it.

The President said that he personally had only once seen such a case, and that was one of those mentioned by Mr. Barker, which had been under the care of Mr. Stanley. The artery in that instance was tied, and the patient did well. He had encountered hæmorrhage in some of his operations for femoral hernia, but had always stopped it by local pressure. When the cases recovered, it was difficult to say whether the blood came from a wounded obturator artery or from a vein. In the six cases of wounded obturator artery which were ligatured, Mr. Barker, who had collected them, had said there were two deaths; that proportion of fatal cases was not much greater than the deaths after ordinary operations for strangulated hernia. He thought each case should stand on its own merits. In some, pressure would suffice; in others, the subcutaneous fat, etc., being pushed aside, the artery might be tied. In some cases, however, it would be very difficult to find it.

Mr. Hutchinson thought also that each case should stand on its own merits. In the present case, did Mr. Barker think there was any secondary hæmorrhage? If not, the cause of death was evidently peritonitis. What was the method adopted for applying pressure? He advocated the plugging of the wound by a sponge with a silk thread tied around it, dipped in alcohol, and then thrust deeply into the wound, as generally the best method of arresting the hæmorrhage. He had had no case of wound of the obturator artery. Possibly, if the patient were thin, the artery might be tied; in other cases, pressure should be applied.

Mr. Maunder said he was personally grateful to the author for the valuable information conveyed in his paper. Hunting up statistics was always more or less irksome and distasteful, but Mr. Barker had done this very efficiently, and had clearly indicated the line of treatment to be adopted. Doubtless an individual case must be treated on its own merits, and in an

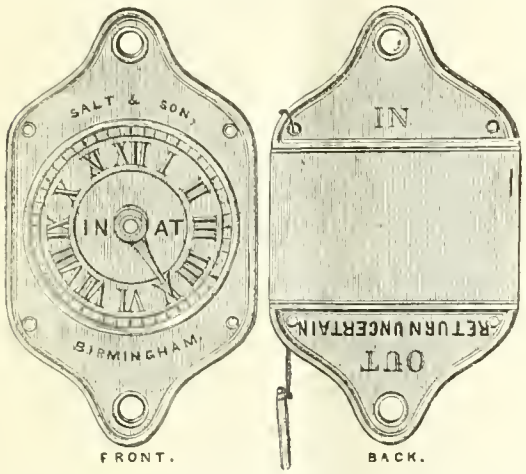
instance of severe hæmorrhage the bleeding vessel might be sought for. Failing to find this, compression must be resorted to, and in order that it may be effectual the compressing body should be applied through the wound and upon the actual source of the bleeding. In the author's case, the patient being stout, and the mode of compression being indirect, all the soft parts of the region intervening, pressure had probably very little to do with the arrest of bleeding: nature proved equal to the emergency.

Mr. BARKER, in reply, said that he had purposely excluded in his statistics all cases in which there was any doubt as to the source of the hæmorrhage. In some books it was emphatically stated that the artery should be ligatured; so said Mr. Hey, Mr. Lawrence, etc. In his own case, at the necropsy there appeared to have been only a small amount of secondary hæmorrhage. The pressure was applied externally, and the wound was not plugged, as the external pressure seemed to be enough.

NEW INVENTIONS AND IMPROVEMENTS.

SALT AND SON'S DIAL INDICATOR.

THE little dial indicator, the character of which is clearly shown by the accompanying illustration, has been lately designed by Messrs. Salt and Son, of Bull-street, Birmingham, especially for the members of the profession. The index on the front side serves to show at a glance the hour



at which a medical man will return if he is out, while on the back he may note where he may be found, or a visitor may write any message he wishes to leave—and so neither will be at the mercy of the memory of servants. It may be hung up in the hall, is very neat and handy, and well deserves a word of special commendation.

PROFESSOR DE MELSENS.—The Royal Belgian Academy of Medicine has just passed a resolution congratulating Prof. de Melsens, one of its honorary members, on account of his brilliant success in carrying off for the second time the prize of 10,000 fr., instituted by Dr. Guinard, in favour of the author of the best work on the best invention for the amelioration of the material and moral position of the working classes. The researches for which the jury unanimously awarded the prize to Prof. de Melsens relate to his curative and preventive treatment of saturnine and mercurial intoxications.—*Presse Méd. Belge*, May 12.

BROMIDE OF AMMONIUM.—As the result of thirty-three experiments illustrative of the physiological action of this substance, Dr. Brechemin, of Philadelphia, concludes:—1. The convulsions caused by poisonous doses are spinal. 2. It produces paralysis of the receptive tract of the spinal cord—that is, of the part which receives and transmits impressions—and of the peripheral ends of the afferent or sensory nerves. 3. Death is produced by asphyxia. 4. The action of bromide of ammonium on the nervous system is, therefore, identical with that of bromide of potassium.—*Phil. Med. Times*, March 30.

OBITUARY.

HENRY JEPHSON, M.D.

THE obituary notices of the papers last week included the name of one of the most remarkable physicians that this century has seen. We allude to Henry Jephson, M.D., of Leamington, who died at his residence, Beech Lawn, on May 14. During the past week the local as well as the general press has been full of interesting notices of his life, so that our duty might almost be fulfilled if we reproduced some of these, but it will probably be more interesting to our readers if we give a short account of that part of his career more generally interesting to the profession.

Henry Jephson was born on October 4, 1798, near Mansfield, in Nottinghamshire. As a youth he showed much interest in scientific studies, and while experimenting with fulminating silver he blew off the first and second fingers of the right hand. He often told friends that much of his subsequent success in life depended upon his knowledge of chemistry, a subject then not very much studied or valued by the profession; and in after-life, when his marvellous success in practice left him hardly a minute which he might call his own, he had a laboratory in which he occasionally snatched a few hours of relaxation. When quite a youth he became a pupil of Mr. Alcock, and was entered at St. George's Hospital. Here he made the acquaintance of Mr. Brodie, who was House-Surgeon, and afterwards became Sir Benjamin Brodie; and the friendship then formed between them continued until Sir Benjamin's death. A Mr. Chambers, a retired surgeon of the Navy, was then in practice in Leamington, which was a small place of about 2000 inhabitants, but with a rising reputation as a health-resort, on account of its saline springs, which were even then coming into much use. Mr. Chambers required an assistant, and on applying to Mr. Alcock, young Jephson was strongly recommended by him to Mr. Chambers. In 1818 Jephson came to Leamington, and from then until his death he has never left it except temporarily. Very soon after his arrival the assistant made himself so useful and so necessary that he was taken into partnership by the principal. A few years afterwards Chambers retired from practice, leaving the whole of it to his partner. The success of the young surgeon now became remarkable, and seeing his way from the reputation he had already acquired beyond the place he lived in, he determined to fit himself for the highest success attainable. In 1827 he left Leamington, and, with his wife—for he had by this time made a prosperous and happy marriage—went to Glasgow, where, after the usual residence, he proceeded to the degree of M.D. at the University of that city. In 1828 he returned from Glasgow and went to Cheltenham, where it was his intention to reside and practise, but a deputation of his old friends and patients waited on him, earnestly requesting him to return to Leamington. This he did, and upon his return honourably repaid to the gentleman to whom he had sold his former practice the whole of the purchase-money. From this time forward until 1848—exactly twenty years—he had what probably was, and possibly still is, the most extraordinary success ever achieved by any physician.

Patients from all parts of the kingdom, from the colonies, and from the Continent of Europe, thronged to Leamington. His time was occupied almost night and day. He received summonses—rare in those days—to all parts of the country for consultations, and he had a specially contrived travelling-carriage made for these journeys. The income he made is almost fabulous, and we have reason to know that it once reached £24,000 in one year, and that for several years together it was over £20,000. As the result of these labours his health began to fail in 1846, and in 1847 he first began to perceive that failure of vision which in 1848 resulted, in spite of the best of advice from Dalrymple and Sichel, in total blindness. It was attributed to what was then called gouty amaurosis, but it was probably not unconnected with failure of nerve-power, the result of overwork. Since 1848 he had lived in quiet retirement in the house which he built for himself during his great success. The circumstances which led to the extraordinary success of Dr. Jephson are not likely to recur. The art-medical is happily becoming in public estimation less of the art-magic than it was fifty years ago. But Jephson was a great man, and a great physician. His method with most of his patients showed that he knew what he was about, while his absolute

demeanour commanded and enforced an obedience that others failed to obtain. He believed that most of our ailments sprang from bad habits of eating and drinking, so that in almost all cases he insisted upon a rigidly plain diet and abstinence from stimulants. In this he was manifestly before his time, and had his example been more followed we should have heard less of homœopathy. He made a very general use of the Leamington waters, both internally and externally; and in this respect it would be better if his example were more generally followed, for the saline springs of Leamington are as efficacious now as they were in his day, and are quite as capable of miraculous cures now as then. Some of his prescriptions came almost into general use, and are even now in much reputation. We allude particularly to sulphate of magnesia in small doses with dilute sulphuric acid; and also to the purgative draught known as "the broom," which, in Leamington at any rate, is in common use. To his patients he was intensely autocratic and self-dependent, and many amusing anecdotes are told of him. To his friends he was ever kind, sympathetic, and generous. He had not much time for reading, but he always tried new remedies as soon as they appeared. No man ever made more true or warm friends, and he made them in shoals. No man in our profession, in provincial practice at least, ever had such honour accorded to him while living: a splendid statue was erected of him thirty years ago, the public gardens were called by his name, and two portraits were painted of him for public use. In person he was of middle height, and of very intelligent and pleasing countenance. He was most generous with his wealth, and Leamington has in her public institutions of all kinds to remember him with deep gratitude.

He was for many years a county magistrate, and in Warwickshire was, apart from his profession, most deservedly admired and esteemed. About a month ago his increasing weakness, arising from failure of nervous power, probably dependent upon degeneration of the nerve-structure, alarmed his friends. Dr. Quain, of Harley-street, Dr. Heslop, of Birmingham, and Mr. Kimbell, of Knowle, Warwickshire, gave every assistance to his local medical friend, Dr. Thursfield, of Leamington; but in spite of all their efforts he gradually and surely declined, and peacefully entered into his well-earned rest on May 14. Though he has so long lived in retirement, he will be greatly missed, especially by his poorer brethren, to whom his heart and purse were to the last open. His career was singular, almost improbable, and now almost impossible. Had he died thirty years ago, his biography would have appeared in every newspaper in England, and books innumerable would have been written about him. "*Sic transit gloria mundi.*" Better as it is. Those of us who knew him in later life saw more of his goodness and generosity, and of the patience with which he bore his awful infliction, than others could previously have seen; and though he might have had more of the plaudits of the world, he could not have had more of the affection of friends. He married, in 1820, Anne Eliza, daughter of the Rev. Dr. Geldart, Rector of Kirk Deighton, in Yorkshire, and happily did not lose her help and companionship till 1874. One child, a son, who died in infancy, was the issue of this marriage. Dr. Jephson was buried quite privately beside his wife in the rural churchyard of Old Milverton, near Leamington, on May 17.

HENRY JAMES SCHOOLES, M.D., M.R.C.S.,
DEPUTY INSPECTOR-GENERAL OF HOSPITALS.

DR. H. J. SCHOOLES passed away, at Hythe, on the 12th inst. He became M.R.C.S. in 1837, and M.D. Glasg. in the same year. He joined the Service as an Assistant-Surgeon in 1839, and served in the 69th and 81st Regiments, until promoted Surgeon in 1847. He was subsequently in medical charge of the 2nd Battalion 60th Rifles, with which he served in the Indian Mutiny of 1857 and 1858, proceeding afterwards with his regiment to China, where he served the campaign of 1860 in charge of the Cavalry Brigade. He retired on half-pay in 1864, and had been for the past fourteen years Medical Officer to the School of Musketry at Hythe.

MR. ALDERMAN JAMES ATKINSON, M.R.C.S., Mayor of Crewe, was on Tuesday, May 21, sworn in as a Justice of the Peace for the City and County Palatine of Chester.

MEDICAL NEWS.

KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.—At the usual monthly examinations for the licences of the College, held on Tuesday, Wednesday, and Thursday, May 7, 8, and 9, the following candidates were successful:

For the licence to practise Medicine—

Previous Examination.
Bartholomew, Isabella.

Final Examination.
Clark, Ann Elizabeth. | Sweeny, Terence Humphrys.

For the licence to practise Midwifery—

Clark, Ann Elizabeth. | Hyne, Frederick Alexander.
Sweeny, Terence Humphrys.

For the licence as a Midwife and Nurse-tender—

White, Hannah Stoddart.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their primary examinations in Anatomy and Physiology at a meeting of the Board of Examiners on the 16th inst., and when eligible will be admitted to the pass examination, viz.:—

Adams, William C., student of University College Hospital.
Anderson, James, of Guy's Hospital.
Boot, Arthur E., of St. Bartholomew's Hospital.
Burton, Francis H. M., of St. Bartholomew's Hospital.
Clay, Challoner, of Guy's Hospital.
Edwards, David G., of the Liverpool School.
Edwards, Thomas R. C., of St. Mary's Hospital.
Evans, Thomas J., of University College Hospital.
Gardner, Percy H., of Guy's Hospital.
Gilkes, M. D'Oyley, of Guy's Hospital.
Gray, Thos. Underwood, of St. Bartholomew's Hospital.
Hills, Augustus P., of Guy's Hospital.
Hunt, J. Sidney, of St. Bartholomew's Hospital.
Laurent, Eugène A., of University College Hospital.
Owen, John M., of Guy's Hospital.
Ryate, Robert E., of the London Hospital.
Rygate, David J., of the London Hospital.
Smith, Frederick M. G., of Guy's Hospital.
Taylor, Robert, of St. Thomas's Hospital.
Webster, John A., of St. Mary's Hospital.
Willis, Arthur, of St. Bartholomew's Hospital.
Woodruff, J. Winthrop, of Guy's Hospital.

Fourteen candidates were rejected. The following gentlemen passed on the 17th inst., viz.:—

Beddon, Josiah, student of University College Hospital.
Bousignac, Joseph L., of St. Mary's Hospital.
Cockburn, Lestock W., of St. Bartholomew's Hospital.
Davenport, Harold D., of Guy's Hospital.
Gray, John A., of St. Bartholomew's Hospital.
Lane, Benjamin H., of Guy's Hospital.
Newcombe, Frank, of the Middlesex Hospital.
Nicholls, John M., of St. Bartholomew's Hospital.
Phipps, Edgar V. A., of St. Bartholomew's Hospital.
Pilkington, Frederick W., of Guy's Hospital.
Rigby, John, of Guy's Hospital.
Taylor, Thomas P., of St. Bartholomew's Hospital.
Terry, Henry G., of St. Bartholomew's Hospital.

Nine candidates were rejected, making a total of fifty-three out of the 130 examined, who, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their anatomical and physiological studies for three months.

The following gentlemen, having undergone the necessary examinations, were admitted Members of the College at a meeting of the Court of Examiners on the 21st inst., viz.:—

Barnard, John Henry, Lillie-road, Fulham, student of Guy's Hospital.
Biden, William Price, Peckham, of the Charing-cross Hospital.
Blacker, Ernest, L.R.C.P. Edin., Bath, of the Bristol School.
Corbyn, Fred. H., L.R.C.P. Ed., Cheltenham, of King's College Hospital.
Clements, William George, L.S.A., Rochester, of the Middlesex Hospital.
Davis, George, L.R.C.P. Lond., Blackheath, of Guy's Hospital.
Dowsley, David Henry, M.D. Queen's College, Kingston, Canada, Clinton, Canada West, of St. Thomas's Hospital.
Drought, Eugène Napoleon, Winchmore-hill, of St. Bartholomew's Hospital.
Faulkner, Alexander Samuel, L.K.&Q.C.P. Ire., Liverpool, of the Liverpool School.
Groome, William Wollaston, B.A. Cantab., Monk-Soham, Suffolk, of St. Thomas's Hospital.
Hough, Charles Henry, Cambridge, of St. Thomas's Hospital.
Jackson, George H., L.R.C.P. Edin., Liverpool, of St. Thomas's Hospital.
Jones, Robert Dennett, Conway, North Wales, of King's College Hospital.
Macdonald, George Alexander, Hull, of St. Thomas's Hospital.
Morton, Augustus Charles, L.S.A., Aylsham, of Guy's Hospital.
McKrough, George Thomas, M.D. Toronto, Chatham, Canada West, of the Toronto School.
Parke, Thomas Henry, Tideswell, near Sheffield, of the Manchester School.
Pettinger, John Henry, Manchester, of the Manchester School.
Porter, William Smith, Sheffield, of the Leeds School.
Russell, James William Leonard, Sheffield, of the Sheffield School.

Stein, Charles Guthrie, Cape Town, of University College Hospital.
Stuart, Henry Ogilvy, L.S.A., Woolwich, of Guy's Hospital.
Webb, H. Langley, L.S.A., Cheadle, Staffordshire, of St. Mary's Hospital.
Williams, Dawson, Burnley, near York, of University College Hospital.

Two gentlemen were approved in Surgery, and when qualified in Medicine will be admitted Members of the College; and four candidates, having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months.

The following gentlemen were admitted Members on the 22nd inst., viz.:—

Ambler, Horace Edward, Hemel Hempstead, of the Middlesex Hospital.
Bousfield, Edward Collins, Bedford, of St. Bartholomew's Hospital.
Bibby, John, Preston, Lancashire, of St. Thomas's Hospital.
Biggs, John Maundy, Dallington, Sussex, of University College Hospital.
Copley, William Henry, Melton Mowbray, of University College Hospital.
Cowan, Frederick Samuel, Bath, of St. George's Hospital.
Davies, Hugh E., Llanddulas, Denbighshire, of University College Hospital.
Flower, George John William, Stafford, Dorsetshire, of Guy's Hospital.
French, Francis Nalder, Over, Cheshire, of the Manchester School.
Fuller, Ledham Henry, L.S.A., Bath, of King's College Hospital.
Gover, H. J., B.A. Cantab., L.S.A., Clapham, of St. Thomas's Hospital.
Haslam, William Frederic, L.S.A., Reading, of St. Thomas's Hospital.
Jackman, W. T., Stoke Newington-road, of St. Bartholomew's Hospital.
Jackman, G. F., Beaulieu, Southampton, of St. Bartholomew's Hospital.
Kidd, Percy, B.A. Oxon., Blackheath, of St. Bartholomew's Hospital.
Newman, A. Joshua, L.S.A., Watton, Herts, of the Middlesex Hospital.
Walter, William Henry, L.S.A., Sydenham, of St. Bartholomew's Hospital.

Five gentlemen were approved in Surgery, and when qualified in Medicine will be admitted Members of the College; and six candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months.

At the written examination on the 17th inst. the candidates were required to answer at least four (including one of the first two) out of the following questions on Surgical Anatomy, and the Principles and Practice of Surgery, viz.:—1. Describe the origin, course, and relations of the internal pudic artery; and state in what accidents or operations this vessel or its branches may be wounded. 2. Describe "Chopart's amputation" through the foot; and name the structures in their relative positions which are divided in performing that operation.—3. Under what circumstances may iritis occur? Describe the characteristics of this disease in the acute form, and its appropriate treatment. 4. How do you distinguish between an adenoma and a scirrhus of the female breast, before and after removal by operation? 5. Describe the operations which may be adopted for paracentesis thoracis. What are the precautions to be taken in performing them? 6. Describe the signs of a dislocation of both bones of the forearm backwards at the elbow-joint. For what injuries may this accident be mistaken? and how would you reduce and subsequently treat this dislocation?

The following were the questions on the Principles and Practice of Medicine submitted to the candidates examined on the 18th inst., viz.:—1. Discuss the pathology, symptoms, treatment, and condition of the urine in hæmaturia, omitting the subject of hæmorrhage from surgical injuries. 2. Describe the morbid anatomy, symptoms, and results of enteric fever. 3. What medicinal plants belong to the order *Euphorbiaceæ*? Give their medicinal properties and uses, and the names and doses of their several Pharmacopœial preparations. Write an unabbreviated prescription in Latin, with directions for use, for a case of acute bronchitis.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 16:—

Dámlá, Edalji Manekji, Gower-place, W.C.
Hawkins, Walter Robert Thomas, Bristol.
Nicod, Louis Charles Napoleon, Oxford-road, Ealing.

BIRTHS.

ANDREW.—On May 15, at 6, Hope-street, Edinburgh, the wife of James Andrew, M.D., F.R.C.P.E., of a son, stillborn.

BROMLEY.—On May 17, at Castle Hedingham, Essex, the wife of J. B. Bromley, M.R.C.S., of a son.

JARDINE.—On May 12, at Stanwix, the wife of Surgeon-Major J. Jardine, M.D., A.M.D. (retired), of a son.

ROWLAND.—On May 17, at Gloucester House, Malvern Wells, the wife of H. Mortimer Rowland, M.D., of a son.

MARRIAGES.

FLOWER—POPE.—On May 9, at Biggleswade, Bedfordshire, Thomas Flower, M.R.C.S. Eng., of Warminster, Wilts, to Jessie Susan, younger daughter of William Pope, Biggleswade.

HERBERT—DEMPSTER.—On March 29, at Mangalore, Madras Presidency, F. H. Herbert, Esq., Madras Civil Service, to Rosa Francis, eldest daughter of Surgeon-Major R. Dempster, M.R.C.S. Eng., 34th Regt., Chicacole Light Infantry.

KEATES—BOURCHIER.—On May 15, at Grays, Essex, W. Cooper Keates, L.R.C.P. Lond., of the Acacias, East Dulwich, to Florence Anne, second daughter of Staff-Commander W. S. Bourchier, R.N., Superintendent of the training-ship *Exmouth*.

SMITH—GARATIN.—On May 18, E. Stanley Smith, M.R.C.S. Eng., to Katie, second daughter of the late Colonel Hervey Murray Garatin, Bengal Staff Corps.

WELLER—TURNER.—On May 18, at the parish church of St. Marylebone, John Weller, M.R.C.S. Eng., to Emily Catherine, only daughter of Marshall Turner, Esq., formerly of Lincoln's-inn-fields.

DEATHS.

BUCHANAN, SOPHIA GARDNER, wife of William Buchanan, M.D., at Egremont Lodge, Brighton, on May 18.

COPLAND, ELLEN JESSIE, youngest child of James C. Copland, M.R.C.S. Eng., at 87, Ladbroke-grove, Notting-hill, on May 21, aged 2 years.

ELKINGTON, FRANCIS, M.D., late of Brockville, Canada, and formerly of Birmingham, at Alcombe, Dunster, Somersetshire, on May 16.

JEPHSON, HENRY, M.D., J.P., at Beech Lawn, Leamington, on May 14, in his 80th year.

MANSON, DAVID, M.D., fourth son of the late John Manson, of Fingask, Aberdeenshire, at Foochow, China, of sunstroke, on April 1, in his 31st year.

POPE, PHILIP MONTAGUE, third son of Peter Montague Pope, M.D., at West Malling, Kent, on May 21, aged 24.

SANDYS, SAMUEL, M.R.C.S., L.S.A., formerly of Grove House, Kentish Town, at Eversholt House, Bedfordshire, on May 15, in the 68th year of his age.

SCAIFE, CHRISTOPHER, M.R.C.S., L.S.A., Univ. Coll., at Sydenham House, Low Harrogate, on May 19, in his 59th year.

SMYTH, ELIZABETH, wife of Hatton Smyth, M.D., of Poole, Dorset, on May 15.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

GENERAL INFIRMARY, HULL.—House-Surgeon. Candidates must be Members or Licentiates of the College of Surgeons of England, Edinburgh, or Dublin. They must be qualified as general practitioners, registered, and unmarried. Applications, with testimonials, to the Secretary, on or before June 7.

KENT AND CANTERBURY HOSPITAL.—Physician. Candidates must have been practising as physicians for the space of two years previous to election, and be registered as regular graduates in medicine of some University of Great Britain or Ireland, or Fellows or Members of the Royal College of Physicians of London. Qualifications and testimonials to be sent to the Board of Management on or before June 28.

RADCLIFFE INFIRMARY, OXFORD.—Surgeon. Applications, with testimonials, to the Secretary, on or before June 8.

ROYAL HANTS COUNTY HOSPITAL, WINCHESTER.—House-Surgeon and Secretary. Candidates must possess the diploma of the Royal College of Surgeons of England, or surgical diploma of a Royal College or University in Scotland or Ireland; also a licence from the Royal College of Physicians of London, or from the Apothecaries' Society. Applications, with testimonials as to moral character, to the Committee, under cover to the Secretary, before May 27.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATION.

Halifax Union.—Mr. John L. Pugh has resigned the Brighouse District; area 3156; population 8769; salary £28 per annum.

APPOINTMENTS.

Carmarthen Union.—Vaughan D. W. B. Jones, M.R.C.S. Eng., L.R.C.P. Edin., to the Llanwinio District.

Church Stretton Union.—Ernest Tredinnick, M.R.C.S. Eng., L.R.C.P. Edin., to the Second District.

East Grinstead Union.—George J. Eady, M.R.C.S. Eng., L.R.C.P. Edin., L.S.A., to the Fifth District.

Falmouth Union.—Charles F. Bullmore, M.R.C.S., L.S.A., to the Constantine District.

Kingston (Surrey) Union.—Cuthbert C. Fitzsimon, M.D. Ire., L.R.C.S. Dub., to the Teddington District.

Mere Union.—David S. E. Bain, M.R.C.S. Eng., L.S.A., to the First District.

Teesdale Union.—Eneas Macaulay, L.F.P.&S. Glasg., to the Middleton District.

THE TRAVELLING PRIZES OF THE UNIVERSITY OF DUBLIN.—Among the resolutions adopted by the Council at the meeting of May 15 were the following (previously adopted by the Board), which are of much interest to medical and surgical graduates:—"1. That the amalgamation of the Medical and Surgical Travelling Prizes shall commence in 1879—Medicine taking the prize in that year. 2. That all students who have graduated in medicine within two years before the examination for the Medical Travelling Prize, or who have graduated in surgery within two years before the examination for the Surgical Travelling Prize, may compete for these prizes."

ROYAL COLLEGE OF PHYSICIANS.—The President and Fellows of the Royal College of Physicians of London will give a *conversazione* at the College on Wednesday, July 3; and the Harveian Oration will be delivered by Dr. Burdon Sanderson on Wednesday, June 26, at five o'clock in the afternoon.

GIANT LAND-TORTOISES AT PARIS.—Three gigantic land-tortoises have arrived safely at Marseilles on their road to Paris for the Jardin d'Acclimatation. The largest of these measures is in its longest diameter 1 metre 17 centimetres, and weighs 187 kilogrammes; it is supposed to be several hundred years old.—*Rev. Scientifique*, May 18.

RADCLIFFE INFIRMARY, OXFORD.—The office of Surgeon to this Infirmary is now vacant by the resignation of Mr. Frederick Symonds, after many years of service to the hospital. There are, we understand, only two candidates for the vacancy—Mr. Julius Sankey, M.R.C.S. Eng., 1867, and Mr. Horatio Symonds, M.R.C.S. Eng., 1874, and F.R.C.S. Edin. Both men are well known in Oxford, and Mr. Symonds has the valued support of his father's reputation and influence. The contest is likely, we believe, to be a rather keen one; but we hope, though the election, according to the old evil custom, is by the governors at large, that merit, and not influence chiefly, will carry the day.

THE LATE PRINCIPAL CAMPBELL, OF ABERDEEN UNIVERSITY.—A desire having been expressed in various quarters that the University of Aberdeen should possess some suitable memorial of the late Principal Campbell, a large and influential committee has been formed for carrying out the object in view. It has been suggested that the placing of a stained-glass window in the chapel of King's College would be an appropriate tribute to the memory of the deceased Principal; but the form which the memorial may ultimately take will depend on the wishes of the subscribers and the amount of subscriptions. Professor Fyfe has agreed to act as honorary secretary and treasurer, and will thankfully receive small as well as large subscriptions.

ABUSE OF HYPODERMIC MEDICATION OF MORPHIA.—The Editor of the *Philadelphia Med. Times* (March 16) calls attention to the abuse of hypodermic medicine by employing it where this form of employment is not especially called for, often in this way producing much local irritation, and risking the occurrence of untoward constitutional results. He states that death has recently been produced, in Washington, by one-third of a grain of morphia, this being probably the smallest dose of that substance which has caused death in the adult. In one case a sixth of a grain caused unconsciousness in three minutes, and was followed by persistent and alarming symptoms. The dose employed should not be more than one-quarter of a grain, except under very urgent and peculiar circumstances. The rule also should be imperative not to employ hypodermic medication unless with some definite prospect of special advantage derivable from this mode of administration.

PROFESSOR SPENCER WELLS, F.R.C.S.—The following is the syllabus of the course of lectures on the Diagnosis and Surgical Treatment of Abdominal Tumours, to be delivered in the theatre of the Royal College of Surgeons by the above gentleman, who will commence the course on the 10th proximo, viz.:—*Lecture* 1 (Monday, June 10): Mode of examining patients with abdominal tumours. External, internal, and combined examination. Form of note-book for recording cases. Collections of fluid in the abdominal cavity and in cysts. Ovarian, renal, and hydatid cysts; illustrative specimens from museum. Chemical and microscopical examination of fluids removed by tapping. *Lecture* 2 (Wednesday, June 12): Semi-solid abdominal tumours. Different kinds of ovarian tumours; their diagnosis; complications with pregnancy. Extra-uterine pregnancy. Specimens illustrating various other conditions resembling ovarian tumours. Fibroid and fibro-cystic uterine tumours; tumours of abdominal wall; tumours of omentum and mesentery, of liver, spleen, kidney, and mesenteric glands. Cancer and tubercle; aneurism; hæmatocele and pelvic abscess. Fæcal accumulation; phantom tumours. *Lecture* 3 (Friday, June 14): Surgical treatment of ovarian cysts and tumours. Tapping, by abdominal wall, vagina, or rectum; tapping with drainage; injection of iodine or antiseptics; incision and drainage. Ovariotomy; selection of cases; preparation of patient; instruments; anæsthetics; duties of assistants and nurse. *Lecture* 4 (Monday, June 17): Details of different steps in the operation of ovariotomy; position of patient; incision; adhesions; opening and emptying of cyst; its removal; treatment of pedicle; closure of wound; dressing, and after-treatment. *Lecture* 5 (Wednesday, June 19): Results of the operation. History of recovered patients. Proportion of incomplete operations, and the results. Cases of recurrence and second operation. Successive changes in the mode of operating and after-treatment. *Lecture* 6 (Friday, June 21): Antiseptics in abdominal surgery. Surgical treatment of uterine tumours. (It is probable that some variation may be found necessary in the precise subject or order of each lecture.)

TRUSSES.—Prof. Agnew, in a lecture on the treatment of reducible hernia, says:—"When you advise a patient to use a truss you should always make it a rule to superintend its first application. If you cannot be present, give your patient the following directions:—1. Never accept a truss until you get one which fits; 2. Try it by putting it on and (*a*) stooping down and rising up suddenly; (*b*) by coughing violently and persistently; (*c*) by separating the limbs and stooping; (*d*) by crossing the limbs and sitting down; (*e*) by going through all kinds of motions. Of course, the truss is not a proper one if the hernia slips away from it in the course of any of these movements. In wearing a truss the following precautions must always be taken:—1. The patient must never take off the truss till he is in the recumbent position; 2. Before putting it on again the parts must be rubbed until they are all aglow, so that active circulation and full secretion are maintained; 3. The truss must be taken off the last thing before the patient retires, and put on the first thing in the morning; 4. In the case of a child the truss should be worn all the time, day and night, after the first feelings of discomfort have passed away. At first it must be taken off three or four times a day, while the skin is thoroughly rubbed and anointed, and then put carefully on again. If these rules are conscientiously adhered to, a cure may be expected in the course of two or three years. The truss, at any rate, should not be taken off sooner than that. A permanent cure is much more likely to ensue if a hard pad has been employed."—*Phil. Med. Times*, April 13.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

THE SPECIAL SERVICE AT ST. PAUL'S CATHEDRAL.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Will you kindly allow me to direct the attention of your readers to an advertisement which appears in the present issue of the *Medical Times and Gazette*, announcing that, by the kind permission of the Dean, a special service for the medical profession will be held in St. Paul's Cathedral on Friday evening, the 31st inst., at 8 p.m., when a sermon wil be preached by the Rev. George Body.

The choral arrangements have been kindly undertaken by the London Gregorian Choral Association, and the choir will number about 400 men and boys. A special service book has been published, containing the special hymns, psalms, and lessons which have been selected as most fitting to be used on this occasion.

As perhaps the question may be asked why such a service has been organised, let me add that I think there is a special fitness in such a public expression of our opinion of the need which exists for, and the advantages which may result from, a religious service of this kind. What that need is, and what those advantages are, I feel I may safely and wisely leave to the heart and conscience of each of your readers to answer for himself.

London. I am, &c., ALFRED MEADOWS, M.D.

W. Dickson.—Try a physician.

F.R.S.—The appointments are both public and private. In public appointments there is a retiring allowance. It is not essential to have served as an assistant, but those having experience in such matters are always preferred.

Lex and J. M.—We have already published the unprofessional circular alluded to, and on inquiry at the College of Surgeons we are informed that the "surgeon-dentist" who issued it is not a licentiate in denta surgery.

A Royal Recognition.—The Emperor of Russia has established an Order of the Red Cross for ladies in connexion with the Russian Red Cross Society. To those ladies whose services during the late war merited it this distinction has been awarded. It is of two classes; each bears the inscription, "For the Protection of the Sick and Wounded Soldiers."

Earlswood Asylum for Idiots.—From the annual report for the past year of this institution, we find that the number of inmates at the end of March last was 612, that 63 had since been admitted, that 46 had been discharged, and that 30 had died, making the present number 599 The general health of the inmates had been good, and there had been no epidemic. The death-rate had been low—4·4 per cent. on the total number of patients treated. The report refers with satisfaction to the results of the various employments and exercises in which the inmates were engaged, as well as to some of their amusements. It was stated that a large proportion of the patients had been found susceptible of religious instruction, and that an increase of moral thoughtfulness, hardly to be expected, had been observed in many of them.

Medical Experts and their Remuneration.—An interesting and instructive case as to the remuneration of medical experts lately occurred in America. In November last, in the Supreme Court of Indiana, in the case of Buchman *v.* State, there was an appeal from an order of commitment. Dr. Buchman, the appellant, was called to testify as a witness at the trial of a person named Hamilton. He was asked a medical question, but he refused to answer unless reasonably compensated before testifying as a medical expert. He refused to answer another question saying that this answer would depend upon his professional knowledge of the subject, and he would not give it without being paid. The Court held that the witness was required by law to answer the questions without compensation other than the ordinary witness-fee; and the witness persisting in his refusal to answer, he was committed as for a contempt, and thereupon took this appeal. The question appeared to be a novel one in Indiana, but also an important one, and the Court of Appeal bestowed much time and care upon its consideration. This Court, in pronouncing its judgment said:—"It must be and was conceded that a physician or surgeon, when called upon, must attend and testify to facts within his knowledge for the same compensation, in the way of fees, as any other witness. In respect to facts within his knowledge, he stands upon an equality, in reference to compensation, with all other witnesses. But the question presented was, whether he can be compelled to give a professional opinion without compensation other than the ordinary fees of witnesses. The Court thought that the physician or surgeon, when giving his professional opinion in a court, does not occupy the position of a witness testifying to facts. He performs the service under oath, to be sure, and this is the only circumstance from which he can be called a witness at all. It was unnecessary to determine in this case whether all classes of experts can require payment before giving their opinions as such. It was sufficient to say that physicians and surgeons, whose opinions are valuable to them as a source of their income and livelihood, cannot be compelled to perform service by giving such opinions in a court of justice without such payment. The commitment of appellant for contempt was erroneous, and the judgment of the Court below was reversed."

F.R.C.S. Eng.—Not having signed the by-laws, you will not be allowed to vote at the annual election in July next, as there does not appear to be time for your arrival in England to attend the meeting of the Council for that purpose. To the second inquiry: Sir Joseph Fayrer, who is resident in London, is a Fellow of both Colleges of London and Edinburgh. To the third inquiry: We believe that it is the only occasion in which a member of our profession has been elected a Vice-President of the Madras Club—an institution patronised by the *élite* of society. The gentleman recently so elected, Dr. Clarence Cooper, F.R.C.S. Eng. (exam.), is the only son of the late Mr. George Cooper, J.P., F.R.C.S., a former Master of the Society of Apothecaries.

Rahere.—Not necessarily, as there are several Fellows of the College by examination who never passed any examination for the Membership, as—Messrs. W. Alexander, of Liverpool, in 1877; Timothy Holmes, of London (now a member of the Board of Examiners), in 1853; T. K. Hornidge, of London, in 1854; Athol A. W. Johnstone, of Brighton, in 1847; Joseph Lister, now of London, in 1852; George May, jun., of Reading, in 1851; E. Palmer, deceased; and W. F. Teevan, of London, in 1858. The next examination for the Fellowship will be commenced in a few days.

Pollution of Glamorganshire Rivers.—It would seem it were time the Pollution of Rivers Act was put into active force in this country. Mr. Williams, one of the inspectors of nuisances, reported to the Cardiff Rural Sanitary Authority that he had, according to instructions, ascertained the chief causes of the polluted state of the river Taff, and had followed the course of the river from Tongwynlais to Pontypridd. After describing the chief sources and the variety of character of the contamination, he adds—"I have not attempted to describe in detail *all* the objectionable matters brought from almost every point into the river, but the Sanitary Authority would be better able to estimate the alarming extent to which this river is polluted when it is stated that the Rhondda Valley at the present time contains a population of 40,000, and the river Rhondda is the *only* channel through which the sewage from so vast a multitude is removed." The Board has ordered a copy of this report to be sent to the several rural and sanitary authorities interested in it, and that their immediate attention should be called to the important statements it contains. A copy was also to be forwarded to the Local Government Board.

The War in the East: Sanitary Measures.—The commission appointed to bury dead men and animals in the Danubian districts have completed their work at a cost of 40,000 francs. The work was done by soldiers under the supervision of veterinary surgeons. The authorities of Ban Jassy, near Giurgevo, are burning petroleum over the sites of the hospitals for the purpose of disinfection.

Female Pedestrianism.—Madame Anderson, who styles herself "the lady champion walker of the world," completed, at Leeds, on Monday morning, the feat of walking 1500 miles in 1000 hours. She walked the last mile and a half in fourteen minutes and thirty seconds, and afterwards for several hours continued to walk a quarter of a mile every quarter of an hour, her average time being two minutes for each quarter of a mile.

Coroners' Cases.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—I quite agree with the remarks in your leading article in last Saturday's issue, on the great superiority of the Scotch method of procedure in medico-legal cases over the English, as exemplified by the recent case of opium-poisoning in Edinburgh. I have had a little experience of medico-legal cases in both countries, and the opinion which I have formed of the system of coroners' inquests is, that the whole thing is a farce, serving indeed to satisfy the public, but in by far the greater number of instances throwing no light whatever upon the case. In the newspapers we have evidence every day of the absurd verdicts brought in by coroners' juries, founded on the very slightest evidence, and in many cases on no evidence at all, but having their origin in the lively imagination of the coroner or some of his jurymen. I should just like to refer to one or two cases which I, as one of the medical officers in a large provincial hospital, have recently had to do with. I do not wish to blame the coroner of this city as an individual, as he is a man for whose intelligence I have considerable respect, and I do not think he is at all below the average of English coroners; but I decidedly blame the system which allows of such flagrant abuses, while it pretends to be doing so much to assist law and justice. I may say that in the following cases the post-mortem examinations were made in accordance with the custom of this hospital, of having an examination in every case in which there is any obscurity, or any point of clinical interest, unless such examination is objected to by the friends of the deceased. In *not one of them* was there an order from the coroner to make any inquiry whatever into the cause of death.

Case 1.—A woman of middle age, stout, and of previously fair health, was brought in dead, late on a Saturday night. Her husband stated that she had been in her usual health when she left home with him that evening. They both went into a public-house, but into different rooms, she saying that she would have a glass of ginger-beer. They came out together, but as soon as they got outside the door she staggered and almost fell. Some smelling-salts were applied to her nose: she revived to a certain extent, walked a few paces further, then fell down again, and was not seen to give any sign of life after this time. The autopsy revealed a tumour of the heart. At the coroner's inquest the husband's statement was heard, and a verdict of "Death from heart disease" returned. No medical evidence was called for, and the coroner did not know whether a post-mortem examination had been held or not. The only representative of the hospital who was present at this and the other inquests was the under-porter; and he certainly was not in a position to give medical evidence in the case.

Case 2.—A sailor, aged thirty-two, strongly built and well nourished, was brought in dead by some of his shipmates. His companions stated that he had been drinking heavily for some days, and that he had been seized with violent sickness and diarrhœa two days before his death. He had himself stated that he believed his beer had been drugged. About an hour before he was brought here he was trying to do some work on the deck, when he suddenly fell down, and scarcely moved again. The post-mortem examination revealed an aneurism of the basilar artery, which had burst. At the inquest no medical evidence was led; and the jury brought in a verdict of "Died by the visitation of God"! How delightfully vague!

Case 3.—A girl, aged fifteen, who was stated always to have enjoyed excellent health, was brought in comatose, and died within half an hour after her admission. Her friends stated that she had been complaining of giddiness and sickness for about four days. They sent to a chemist, who, without seeing the girl even, sent some rhubarb pills, and afterwards a seidlitz powder. As she seemed to get rather worse, he advised that she should be sent to the hospital. She was put into a cab to come here, but on the way was seized with convulsions, and when admitted was quite comatose. She never recovered consciousness, but died, as I have said, within half an hour from the time of admission. The post-mortem examination revealed a comparatively early stage of tubercular meningitis, which had caused death in the first convulsion, as she had never had a fit before, nor given any sign of illness whatever until a day or two before death. The coroner ordered no post-mortem examination to be held. He remarked to one of the medical officers that he "supposed it was all right"; he was told that there were rumours of foul play about, but he had spoken to the friends, and quite believed their statement, and did not intend to hold an inquest.

I need not, however, multiply cases. I have selected these three, as the cause of death was in each case uncommon. Tumours of the heart are almost unknown; aneurisms of the larger cerebral arteries are not very common; and I think I may say that it is not by any means usual for tubercular meningitis to kill in the first fit. I do not think there is any medical man, however experienced, who would have ventured to certify the cause of death in any of these cases without first making a post-mortem examination. On the other hand, I have been asked several times to give medical evidence as to the cause of death in the case of patients who had been brought to the hospital suffering from the effects of some accident, and who had been under treatment in the hospital for some time before death—cases in which no medical man would have had the slightest difficulty in certifying the cause of death. For example: an old man fell from a wall on which he was working, and sustained a severe fracture of his leg, which necessitated amputation. He went on fairly well for some time, but an attack of erysipelas supervened, and he succumbed to this, after having been in the hospital for several weeks. In this case medical evidence as to the cause of death was asked. It is surely time that a mode of procedure carried on as this is was either abolished or very greatly reformed. It is unjust to make the English public pay heavily to support such a useless system, which is merely a blind to their eyes. I am, &c.,

May 20. Anti-Coroner.

COMMUNICATIONS have been received from—

Mr. B. R. Wheatley, London; Dr. James Edward Pollock, London; Mr. C. Macnamara, London; Mr. J. Chatto, London; Mr. Thomas Bryant, London; Mr. R. W. Parker, London; Dr. J. M. Bruce, London; Dr. F. Churchill, London; Mr. C. J. Cullingworth, Manchester; Dr. Octavius Sturges, London; Mr. H. Courtenay Fox, London; Mr. T. M. Stone, London; Messrs. C. J. Hewlett and Sons, London; Messrs. J. C. and J. Field, London; The Registrar of Apothecaries' Hall, London; Mr. McGill, Leeds; Mr. J. Hamilton Craigie, London; Messrs. H. R. Williams and Co., London; The Secretary of the Society for the Encouragement of Arts, etc., London; The Sanitary Commissioner, Punjaub; Dr. Hancoa, Lille; Mr. C. Higgens, London; Dr. T. W. Thrasfield, Leamington; Mr. W. Dixon, London; The Secretary of the Royal Institution, London; The Secretary of the London and North-Western Railway Company's Hospital, Crewe; Mr. F. E. Michels, London; Dr. R. H. Semple, London; Dr. A. E. Aust-Lawrence, Bristol; Dr. James Wilson, Worcester; Dr. James Scott, Bristol; Dr. Henry Harris, Redruth; Dr. P. Black, London; Dr. J. W. Moore, Dublin; Mr. M. Becker, London; Dr. Alfred Meadows, London.

BOOKS AND PAMPHLETS RECEIVED—

Cyclopædia of the Practice of Medicine, edited by Dr. H. von Ziemssen, vol. xviii.—General Anomalies of Nutrition and Poisons—Eighth Report on the Operation of the Contagious Diseases Acts—Dress, Health, and Beauty: a Book for Ladies—Charles Creighton, M.B., Contributions to the Physiology and Pathology of the Breast and its Lymphatic Glands—W. Copley Woodhead, M.R.C.S., The Dangers of Sewer-Gas in our Dwellings, and Particulars of a Scheme for Preventing its Entrance—Report on the Health of Bolton during the Year 1877—J. A. Russell, M.A., M.B., Sanitary Houses: Two Lectures to Builders and Plumbers—Dr. L. J. Teissier, De la Valeur Thérapeutique des Courants Continus—Dr. H. Hallopeau, Du Mercure, Action Physiologique et Thérapeutique—Dr. F. Labadie-Lagrave, Du Froid en Thérapeutique—Dr. Isidore Straus, Des Ictères Chroniques—Dr. H. Duret, Études Expérimentales et Cliniques sur les Traumatismes Cérébraux, vol. i.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wocheoschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Guy's Hospital Gazette—L'Avenir Médical—Saint Louis Medical and Surgical Journal—Medical Inquirer—Chicago Medical Journal and Examiner.

APPOINTMENTS FOR THE WEEK.

May 25. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

27. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Society of Arts, 8 p.m. Dr. B. W. Richardson, "Some Researches on Putrefactive Changes, and their Results in Relation to the Preservation of Animal Substances." (Cantor Lectures—VI.)

28. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Mr. W. T. Thiselton Dyer, "On some Points in Vegetable Morphology."

Royal Medical and Chirurgical Society, 8½ p.m. Sequel to Mr. Barwell's Case of Aneurism of the Aorta, &c., treated by Double Distal Ligature. Dr. Vaadyke Carter, "On the Spirillum Fever of Bombay, 1877." Dr. H. Jones and Mr. H. Page, "Cases of Intussusception." Dr. Semon, "Case of Thyrotomy." Dr. Stephen Mackenzie, "Fatal Purpura following a Single Dose of Iodide of Potassium."

29. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern; 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

30. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Guthrie, "On Molecular Physics: Gases."

31. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal Institution (Weekly Meeting, 8 p.m.), 9 p.m. Prof. Flower, "The Native Races of the Pacific Ocean."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 18, 1878.

BIRTHS.

Births of Boys, 1271; Girls, 1243; Total, 2514.
Average of 10 corresponding years 1868-77, 2181·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	716	664	1380
Average of the ten years 1868-77	708·1	635·9	1344·0
Average corrected to increased population ...	...	...	1438
Deaths of people aged 80 and upwards ...	...	...	43

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	9	2	2	...	9	1	4	...	6
North ...	751729	23	4	10	4	22	...	1	1	4
Central ...	334369	...	2	1	1	10	...	3	...	1
East	639111	6	8	6	3	30	1	3	...	3
South	967692	10	12	7	4	31	1	5	2	7
Total	3254260	48	28	26	12	102	3	16	3	21

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·588 in.
Mean temperature	58·0°
Highest point of thermometer	73·8°
Lowest point of thermometer	47·8°
Mean dew-point temperature	49·9°
General direction of wind	S.W.
Whole amount of rain in the week	0·63 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 18, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending May 18.	Deaths Registered during the week ending May 18.	Temperature of Air, Fahr.: Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.): Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2514	1380	73·8	47·8	58·0	14·44	0·63	1·60
Brighton	103923	44·1	59	34	67·0	50·5	56·5	13·61	1·44	3·66
Portsmouth ...	129461	28·9	96	49	...	...	...	...	...	...
Norwich	84620	11·3	60	47	74·5	49·0	58·4	14·66	0·69	1·75
Plymouth	73599	52·8	51	33	63·0	51·0	55·3	12·95	1·63	4·14
Bristol	206419	46·4	144	72	...	...	...	...	...	...
Wolverhampton ..	74240	21·9	45	40	68·4	45·3	54·9	12·72	1·88	4·78
Birmingham ...	383117	45·6	287	117	...	...	...	...	...	...
Leicester	121473	38·0	95	32	70·2	48·5	56·8	13·78	1·33	3·38
Nottingham ...	165267	16·6	128	61	72·6	46·8	57·2	14·00	0·88	2·24
Liverpool	532881	102·2	402	294	66·7	49·5	55·5	13·06	1·33	3·38
Manchester ...	360514	84·0	273	176	...	...	...	...	...	...
Salford	170251	32·9	154	68	70·3	46·5	55·4	13·00	0·95	2·41
Oldham	107366	23·0	79	57	...	...	...	...	...	...
Bradford	185088	25·6	153	67	68·0	46·2	55·2	12·89	1·89	4·80
Leeds	304948	14·1	210	115	69·0	49·0	56·3	13·50	1·76	4·47
Sheffield	289537	14·7	228	133	70·0	47·5	56·3	13·50	1·13	2·87
Hull	143139	39·4	125	44	...	...	...	...	...	...
Sunderland ...	112459	34·0	97	56	69·0	42·0	54·5	12·50	0·97	2·43
Newcastle-on-Tyne	144570	26·9	99	58	...	...	...	...	...	...
Edinburgh	222371	53·1	162	78	66·3	43·0	55·4	13·00	0·87	2·21
Glasgow	568940	94·0	430	250	66·0	46·5	56·0	13·33	1·30	3·30
Dublin	314666	31·2	199	221	70·6	46·1	57·5	14·17	0·89	2·26
Total of 23 Towns in United Kingdom	8373953	37·9	6090	3482	74·5	45·3	58·2	13·44	1·22	3·10

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·54 in. The lowest reading was 29·30 in. on Wednesday, and the highest 29·90 in. on Friday evening.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

THE LUMLEIAN LECTURES
ON
INSANITY IN ITS LEGAL RELATIONS.

Delivered at the Royal College of Physicians, London.

By J. C. BUCKNILL, M.D., F.R.C.P., F.R.S.,
Late Lord Chancellor's Visitor in Lunacy, and Medical Superintendent of Devon County Asylum.

LECTURE II.—PART I.

THE exigencies of affairs compelled the lawyers themselves to construct one of the earliest classifications of insanity—namely, that well-known one of Lord Coke, who divided insane persons into—(1st) idiots from birth; (2nd) the accidentally insane who have wholly lost memory and understanding; (3rd) those who have lucid intervals; and (4th) those who deprive themselves of understanding by vicious actions, as drunkards;—by no means a comprehensive or useful classification, but interesting as showing the need which was felt of referring individual instances to generalised notions. We need not delay to criticise the demerits of this ancient scheme. Like all kinds of insanity which have any interest for lawyers, its forms are based upon mental qualities and conditions, and not upon the physical substratum. It is this point which, more than any other, we are bound always to bear in mind in the consideration of the diagnosis of insanity for legal purposes. When we reflect upon the nature of inquiries in courts of law in which the diagnosis of insanity is involved, we are bound to acknowledge that they refer entirely, not to the existence of bodily disease which is the cause of insanity, but to the product of that disease, which may to a great extent be considered by itself and apart from its origin.

In the debate in the House of Lords, to which I have before referred, Lord Chancellor Westbury went far beyond this position in his statement "that the introduction of medical opinions and medical theories upon this subject has proceeded upon the vicious principle of considering insanity as a disease." And upon this text he founded a great disparagement of medical witnesses. The error into which he here seems to have fallen was in stating that, according to medical opinions and theories, insanity is a disease; whereas no thoughtful medical man could be capable of maintaining so absurd an opinion. None of us dream of maintaining that insanity is a disease. We do, indeed, consider it the result of diseased conditions, and as no other than such result; and while we admit that insanity, as a mental fact, is the only proper subject of legal inquiry, and also that in many instances of legal inquiry there is no need to trace such fact to its cause—as, for instance, in a case of insanity where the state of a man's mind is plainly evident from his behaviour,—yet in other instances, and those of the most difficult and intricate legal inquiry, it is impossible to omit the consideration of the origin and causation of the fact. And if it has been shown that a diseased condition of the body is in so great a number of instances the undoubted cause and condition of the fact of insanity, that all men who have carefully studied the matter believe that the connexion always exists, then it must of necessity follow that the fact of insanity cannot be considered without reference, tacit or expressed, to the fact of bodily disease which underlies it. And it has come to this pass, that these are not the opinions and theories of medical men alone, proceeding upon a vicious principle of reasoning, but those of lawyers themselves, with the Lord Chief Justice of England at their head, who now express it without reserve. And of almost greater importance, they are the opinions of the public, and therefore of the jurymen, so that they are established beyond the power of debate to disturb. We need not, therefore, concern ourselves very seriously about Lord Westbury's attempt to oust medical witnesses from the witness-box in lunacy inquisitions, nor about Lord Moncrieff's charges, who, following in the same track, showed an inclination to do the same for medical witnesses in criminal trials when lunacy is pleaded, and the fallacy of whose argument I have elsewhere exposed. We are bound, however, to accept whatever instruction may be found in the arguments of these eminent lawyers, however false some of their data may be; and this I take to be their earnest and emphatic declaration, that the object of the lawyer's pursuit in every concrete instance is the mental fact of insanity, and not that of disease; and from this we must further conclude that in the pursuit of this object any generalisations for practical purposes must be generalisations of instances which resemble each other in the kind of insanity, and not generalisations which resemble each other in the kind of disease. Whenever the kind of insanity can be shown to correspond to the kind of disease, we have a perfect generalisation, and we may well believe that this correspondence always does exist; but, unfortunately, in a large proportion of cases our actual knowledge halts lamentably in the rear of our scientific foresight: and it is knowledge alone which is, or ought to be, accepted as evidence in judicial investigation.

It is towards the enlightenment of this darkness that we as men of science, have to strive; and if we, or those who, take up the task from our failing hands, be successful upon this result, we may be sure that when each concrete fact of insanity can be referred to a corresponding fact of disease as its sole cause, no precedent or argument will be able to prevent civilised communities from requiring its judicial officers to accept proof of the particular disease as evidence of the fact of insanity. Our task at present is, with untiring patience and undaunted resolution to search for and accumulate the knowledge which will enable us to build the edifice of our science of mental pathology, of which the foundations are assuredly already laid. To what extent the science will eventually be perfected one may well decline to surmise, but when we compare the past with the present condition of our knowledge in the two elements of the science we may well be hopeful, if not confident. When we think of Lord Coke's rudimentary classification of insane persons, and remember that even Pinel did not distinguish the mental defects of the dement from those of the idiot, the mind in wreck and decay from the mind abortive; and when, on the other side, we reflect that within the present century the physiology of the nervous system has been discovered so far as it is known, from Prochaska and Charles Bell to our own Ferrier, what grounds have we to think so despairingly of our successors as to doubt that they will carry forward with unflagging persistence a branch of science which appeals more strongly than any other to man's curiosity about himself, and involves his dearest and weightiest interests? In other investigations as to changes of force by diseased conditions—for instance, as to variations of temperature caused by fever—the change of force is only important as an indication of variations in its cause. But in changes of mind-force the change in the force itself is of weightiest importance; and not only so, but it most insists upon our attention, the result of diseased change in this case being obvious, while the physical substratum is oftentimes quite hidden. On these two accounts it has occurred that even physicians, and for medical purposes, have been in the habit of inverting their customary method of investigations, and, in regard to diseases causing insanity of classifying the phenomena rather than the reality; and it still must be so for a time, for in all but rare cases the reality remains undemonstrable. Therefore, physicians still continue to classify the insane as maniacs, monomaniacs, melancholiacs, dements, etc.—terms originally technical, but which have now worn for themselves a use and a place in common language; terms, therefore, with which it would now be exceedingly inconvenient to dispense, although they may not connote things with scientific accuracy. And it is to be remarked that all such terms are redolent of derangement of the mental force—that is to say, of insanity from the lawyer's point of view,—and that they in nowise denote diseased conditions of the physical substratum.

And if this can be said of these technico-popular terms, how much more completely will the distinction apply to that more recent nomenclature of mental derangement which physicians have introduced, for the instruction, perhaps, but certainly not to the contentment, of our legal friends: homicidal insanity, suicidal insanity, instinctive insanity, impulsive insanity, with their Latin compeers, kleptomania, pyromania, erotomania, and oinomania, to connote the ideas that theft, fire-raising, lust, and drunkenness are the results of madness.

The most important of these forms for our present purpose is homicidal insanity, or, as it is more frequently expressed in the recent works of English authors, impulsive insanity

to kill. Not that any of them is devoid of a reflected importance, seeing that the argument is urged with pertinacity that the proof of one of these states carries with it the proof of the whole series. Although I am prepared to deny the truth of the theory in all its ramifications, time will only permit me to discuss it with reference to its crowning point of mischief if it be untrue—namely, in its application to excuse the guilt of murder. Our colleagues and countrymen have adopted the theory of impulsive insanity from the distinguished French physicians who flourished early in this century, and especially from Esquirol, Georget, and Marc, but I do not remember to have seen it remarked that these writers derived their inspiration from an earlier and still more celebrated authority—namely, from the founder of phrenology. It seemed strange that although the first instances of *monomanie homicide sans délire* of the French authors are quoted from Gall, no credit for the idea was ever given to him; but a reference to Gall's great work, "Sur les Fonctions du Cerveau," affords some explanation. In this treatise, replete with learning, full of common sense, and only spoiled by the dogmatism of cranioscopy, he indicates clearly the natural growth of "the impulse to kill, with enfeeblement of the moral liberty." "There is," he says, "in man an inclination which advances by degrees, from a simple indifference to witness the sufferings of animals, and a pleasure in seeing death inflicted, even up to the most imperious desire to kill. Sensibility may reject this doctrine, but it is only too true. Whosoever wishes to form a right judgment of the phenomena of nature, ought to have the courage to recognise things as they exist, and in general not to make man out better than he is." "There are," he adds, "both among adults and children, both among common and cultivated men, some who are sensitive, and some who are indifferent, to the sufferings of others. Some feel pleasure in torturing and killing animals, without our being able to attribute it either to education or to habit"; and he cites examples in which men had become butchers, and even executioners, to gratify this inclination, and a number of other horrid instances less within the sufferance of the law. The most remarkable of these is that of M. le Duc de Bourbon Condé, Comte de Carolais, who tortured animals, exercised atrocious barbarities upon women, committed many murders, without interest, without vengeance, without anger; and who even shot men while roofing houses, for the barbarous pleasure of seeing them fall. This case has been repeatedly quoted from Gall as an instance of homicidal insanity or of moral insanity; but although he admits that this "detestable inclination may always be derived from a vice in the organisation," he adds—and here is the great difference between him and his French disciples, which they pass over in silence,—"Up to this point the inclinations [*penchants*] of which I have spoken are not yet included among those which characterise a true alienation. These inclinations necessitate the most energetic measures, and criminals of this kind cannot be tolerated in society. Most of them even, in order that they may not destroy men, ought to be themselves killed like ferocious beasts." This is a notable admission of the German philosopher that a man suffering from detestable inclinations or dispositions which have their sole origin in a vice of the organisation, is yet not a lunatic, and ought to be punished.

The French medical advocates of homicidal monomania whom we have named all admit that there are two distinct forms of the malady: one in which there is delusion or some other recognised form of insanity, and the other in which no derangement of the intelligence exists. It is true that they put the assertion in a somewhat less positive form than this, an elastic phrase being usually employed, like that of Esquirol, who, after asserting the existence of this kind of insanity, says that "On ne peut pas observer aucun désordre intellectuel"; and a corresponding loophole of hesitancy in statement is generally met with in the writings of our physicians who embrace the theory; although I think that, from Esquirol down to the last English writer on the subject, no one would be inclined to admit that, if any intellectual disorder did really exist, it would be likely to pass undetected by their skilful methods of inquiry. Their argument, moreover, in favour of homicidal insanity without any intellectual disorder, is founded, not upon the probability of intellectual disorder escaping detection, but upon other grounds—namely, upon the assumption that the passions and affections, or the will itself, may be diseased. Esquirol, quoted with approval by Georget, expresses this last argument in his suggestive manner. "If the intelligence and even the moral sensibility can be perverted and abolished," says he, "why should not the will, that complement of the intellectual and moral being, not also be deranged or destroyed? Is it that the will, like the understanding and the affections, does not experience vicissitudes according to a thousand circumstances in life? Has the will of the infant and the old man the same force as that of the adult? If it be so, why should not the will be subject to troubles, to perturbations, to morbid weaknesses, however incomprehensible the state may be to us?" A noteworthy passage this seems to be, not only in support of the theory of our recent English writers who have declared that insanity is a disease of the will, but as a caution to our legal authorities that they should not needlessly vivify this Frankenstein of a will, for if there be a criminal will there may possibly be a diseased will. But surely both lawyers and physicians have something more certain to speak about than the attributes of the will!

Esquirol's description of this kind of homicidal insanity has become classical, our own authors having added nothing to it, and only altered it by changing the words "puissance irrésistible" into their new shibboleth—uncontrollable impulse. "There exists," he says, "a kind of homicidal monomania, in which one cannot observe any disorder of the intellect; the murderer is impelled by an irresistible power, by a dragging onwards, which he cannot overcome, by a blind impulse, by an unreflecting determination. One is incapable of imagining that which carries the man without interest, without motive, without intellectual error, to an action so atrocious and so contrary to the laws of nature." This is the statement around which all this discussion rages, and which has been called nonsense and mischievous rubbish by English judges, and by terms not more complimentary by legal authorities in the country of its origin. This is the statement of fact supported by the theory that the will becomes insane, and which Caspar condemns in these decisive words—"We arrive at the dogma that *there is no such peculiar species of insanity as that termed homicidal insanity, or homicidal monomania, and that forensic medicine neither can nor ought to recognise any such.*" Yet it is to this statement of fact our English authorities on the irresponsibility of the insane still adhere, and support under the slightly altered designation of homicidal or impulsive insanity, or uncontrollable impulse to kill.

It is of the first importance to understand, if we can, what is meant by an uncontrollable impulse to kill. Legal authorities, who have not unnaturally shied at the phrase, have, I think, been scared by the wrong end of it. They object to the predicate *uncontrollable*, averring that it means that which is not controlled, whereas there can be no doubt that the medical writers who have used it intend to designate by it, action which cannot be controlled; and, as we have seen, this is the very essence of an act for which an insane person ought not to be held responsible. The subject *impulse* seems to me to be really the mischievous factor in the proposition, in its misleading application to intentional action—that is, to conduct. A recent medical author, whom I much respect, speaks of it as a "sudden, blind, motiveless, unreasoning impulse to kill"; and another author as "the frightful *impulses* which spring up in the diseased mind, and drive the individual to a deed of violence—as little under control as the convulsions of epilepsy, and the origin of them, perhaps, as little within the individual's knowledge as the origin of the impulse which entered the unfortunate herd of swine and drove them over a steep place into the sea, so that they were drowned, was within their knowledge." And I might multiply quotations, perhaps not quite so strong in epithet or remarkable in simile, but all stamped with the same belief that nothing exists, and nothing is wanted, "between the diseased condition and the act" save and except this *impulse*, the characteristics of which seem to me quite unlike those of any other mental state resulting in conduct. What is this strange power which, unconnected with the sequence of mental movements, arises without precursor; which is blind, although it attains its object; which has action without motive, and comprehension without reason? I must own that, to my mind, this term "impulse" is a word which darkens knowledge, and that its use seems wrong and misleading, in that it pretends to give the appearance of explanation to a problem of life which it is greatly to the

interests of the community should be clearly stated and thoroughly unravelled. Suppose we change the word to its synonyms, and say disease of the brain gives rise to a sudden blind, motiveless, unreasoning *push* or *thrust* forward to kill, just as inclination means the mental *bend* forwards. There is no desire or motive or reasoning intention to strike the blow, but only that which we call a *push* received from the diseased action of the physical organ. No doubt impulses of the mind are spoken of, in the slack and slovenly parlance of common life, to express rapid wishes and desires, whether they be or be not checked by others of greater force, as when it is said that a man has an impulse to throw himself from a height, which is an unreasonable desire very frequently felt, but very rarely indulged. To say that I have an impulse to throw myself over a precipice, but that I have a stronger impulse not to do it, is an odd use of language, which seems to lead to the conclusion that the word "impulse" is used instead of the word "desire" or "wish," when, upon reflection, the thing we wish to do or are impelled to do seems to be wrong, or bad, or dangerous. And with regard to the many men of whom we must believe that they have had the wish to kill, but the stronger wish not to kill, what do we get but ambignity and obscurity of meaning by saying that they have had frightful impulses to commit murder, but stronger impulses not to commit murder? It may aid us in our inability to understand what is meant by this so-called impulse to murder, if we compare it with the so-called impulse to commit self-murder. Referring to this, the author above quoted remarks: "It is certain that there is an exactly similar form of mania or monomania in which *the patient is possessed with an impulse to kill somebody*, is infinitely miserable in consequence, *yet exhibits no other mental derangement*. . . . But there is not the same willingness to recognise disease when the morbid impulse is not suicidal, but homicidal." As an "example of uncontrollable morbid impulse with clear intellect and keen moral sense," he gives the case of a lady who was seized with a strong and persistent suicidal impulse, without delusion or disorder of the intellect. All the fault that could be found with her intellect was that it was enlisted in the service of the morbid propensity. She secretly tore her nightdress into strips while in bed, and was detected in the attempt to strangle herself with them. For some time she attempted to starve herself by refusing all food. She threw herself into a reservoir and was nearly drowned. After this she gradually regained her cheerfulness and love of life. Now, it is to be remarked that in this and in other cases of a like kind the morbid impulse is long enduring; that it gives rise to actions of patient deliberation and of cunning contrivance; and therefore that the word "impulse" seems as inapplicable to such a persistent desire as it would be to say that Cruden, being insane, had an insane impulse to write the Concordance. Socially and ethically, the difference between suicide and murder is enormous, notwithstanding that they are so often the joint results of undoubted insanity. But who will affirm that the desire to end one's days is not controllable, and is not constantly controlled by fear of a greater evil? Not, indeed, by the exposure of the naked corpse, which is said to have stopped an epidemic of suicide among young women, but by the fear of shame among one's fellow-men, the fear of grief and ruin to those we love, and above all by

> "The dread of something after death.
> Thus conscience doth make cowards of us all."

I find it difficult to advance arguments in contravention of the theory that homicidal insanity depends upon disease of the will, or against insane impulse to kill without motive and without other mental derangement, simply because I cannot understand it; but the statement of fact that it is certain that there is such a form of disease deserves our earnest attention.

In the earlier editions of the "Manual of Psychological Medicine," fifty of the more remarkable cases of homicidal insanity on record were analysed by my indefatigable fellow-labourer in that work, and of these no less than thirty-five displayed no marked disorder of the intellect. Of the fifteen remaining cases, in ten there were delusions, and in five deficiency of intellect, and these of course came under another category altogether. Unfortunately, out of the whole number of fifty cases, only four have an English reference, and of the foreign ones almost the whole are from Esquirol and Marc, with a few from Otto, all of whom were committed to the theory, and whose accuracy of observation as to the facts is the very point at issue. Moreover, the French law of insanity is essentially different from our own, the sixty-fourth section of the code enacting that "there is neither crime nor offence when the accused was in a state of insanity at the time of the action," thus leaving the whole question widely at large, so that the proof of any state which can upon any theory be deemed insanity may be sufficient to exonerate. Of the English criminal cases which have been cited by various authors as examples of homicidal and impulsive insanity, those of which I have been able to obtain any information do not seem likely to bear thorough investigation. The celebrated Morningside case, if I am rightly informed by an eminent mental physician who knew the man, was clearly one of chronic lunacy with delusions. He has been seen with a placard on the wall over his bed, with the words "I am the Almighty." In Dr. Pownall's case I am informed that the delusions of persecution and poisoned food which existed before the homicidal acts, but could not be detected during his residence at Bethlem, are now again quite recognisable. In other cases which have been referred to as instances of homicidal insanity, no insane impulse nor other sign of mental disease has been discovered after acquittal. Bisgrove, whose case has been so frequently referred to, never manifested any symptoms of mental disease while at Broadmoor; and I venture to assert that there is no example of *monomanie homicide sans délire*, or of impulsive insanity to kill, which can be referred to as existing in any English asylum, in which there are no other symptoms of mental disease. In all my own experience, which is not small, I have never met with such a case, and I have made inquiry of two of my friends whose means of observation have been of the largest, and whose methods have been the most accurate and trustworthy, and each of them has assured me that he has never met with a single instance of homicidal insanity without other distinct symptoms of mental disease. When I mention the names of Dr. Crichton Browne, the Lord Chancellor's Visitor, and for a long time the medical chief of the vast West Riding Asylum, and of Dr. Orange, the Medical Superintendent of Broadmoor, and add to their names my own, I think I present to you a trio of observers whose field of experience has been so wide that a form of insanity so pronounced in its characteristics as that under discussion could scarcely have failed to be embraced within it. Certainly I think such an event highly improbable; but that instances of men suffering from the so-called uncontrollable impulse to commit homicide without other mental disease should have come within the field of our observation, and yet not have been observed, is, I think I may say, impossible. The truth seems to be that homicidal lunatics are only too common, and that if you inquire carefully you will always find the lunacy, but that even if you do not look carefully the prominent symptom of homicidal violence cannot escape attention, although you may fail to observe its concomitants.

I am glad to be able to support this opinion with the concurrence of the late Dr. Morel, of Rouen, one of the most able, as I think, of French alienists. He declares that the cases in which an individual is said to be dragged by a blind instinct to kill—"par quelque chose d'indéfinissable que le port à tuer"—must be very rare, and that facts of this kind rest upon incomplete observation of pathological phenomena and ignorance of the motives which influence the insane. The conclusion, therefore, to which we must come is, that the theory of homicidal insanity—the impulsive insanity to kill—either rests upon imperfect observation, which has failed to detect real derangement, or upon mistaken estimates of real criminals.

(*To be continued.*)

AN ENTHUSIASTIC OPERATOR.—Surgeon Cox was an enthusiastic and eccentric army-surgeon in the late war. After the battle of Anttietam he essayed the amputation of the mangled limb of a soldier, and became so absorbed in his task that he did not notice that the man was dying. As he began sewing up the stump, a hospital steward who chanced to pass said, "Doctor, there is no use of going on; the man is dead." The surgeon looked up in surprise, and then said, "I am sorry the poor fellow is dead; but there is one consolation about the matter, he has gone to heaven with a 'flap' he may be proud of!"—*New York Med. Record.*

ORIGINAL COMMUNICATIONS.

THE STRUCTURE AND FUNCTIONS OF THE NERVOUS SYSTEM.

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(*Continued from page* 168.)

THE ENCEPHALON.

The cerebellum consists of a body and three pairs of crura, or peduncles, by which it is connected with the rest of the cerebro-spinal axis. The grey substance of the cerebellum is found in three masses, by far the greater proportion being disposed on its surface; the next in importance being the dentate nuclei, situated in the medulla of the hemispheres; and the third consists of two convex masses, called the "roof nuclei" by Stilling, situated below the central lobule of the superior vermiform process. The structure of the cerebellum has been for a long time accurately described by anatomists, and a great deal has been done in recent years in the experimental investigation of its functions; but that branch of science which interprets function in terms of structure, and, conversely, interprets structure in terms of function, has made less progress in the case of the cerebellum than in that of any other part of the nervous system. One particular group of functional disturbances may enable us to state with the utmost precision that a certain tract of fibres in the spinal cord is diseased; another group, that certain fibres of the internal capsule, or pons, are interrupted; and another, that the lesion will be found in a particular convolution of the cortex of the cerebrum. But in the case of the cerebellum the symptoms during life only enable us to say that either a particular peduncle is affected, or that the lesion will be found in a certain lobe, without our being able to limit it to a special tract of fibres, or to a limited part of its body or surface. Even the portions of its grey matter which are in relation with its centripetal fibres are not distinctly separated in our knowledge, as is now the case with the cerebrum, from those which are in relation with its centrifugal fibres. The inferior peduncles of the cerebellum are, as already noticed, closely associated with the posterior or sensory portion of the cord; hence it may be presumed that the fibres of the former are mainly centripetal. This connexion must now be more accurately described, since it has turned out not to be a direct, but an indirect and crossed one.

A transverse section of the lower half of the medulla shows that the columns of Goll are continued upwards into the medulla in the form of two bundles of fibres, one on each side of the posterior median fissure. Each bundle contains a nucleus of grey matter, which from its form is called the clavate nucleus, and the bundle itself is called the pyramidal column, or fasciculus gracilis. External to this fasciculus is placed a wedge-shaped bundle, called the fasciculus cuneatus, holding in its interior a grey nucleus, called from its form the triangular nucleus. The greater portion of the fibres of the posterior root-zone of the cord terminate in the cuneate fasciculus and its enclosed grey nucleus. The slender and cuneate fasciculi of the medulla are much larger in size than the column of Goll and posterior root-zone of the cord, owing to the interposition of the grey nuclei; hence the posterior horn of grey matter is displaced outwards and forwards in the medulla, so that the continuation of the caput cornu forms a mass of grey matter on the lateral aspect of the medulla, known as the grey tubercle of Rolando. This mass of grey matter is continued upwards in the medulla and pons to the level of the point of emergence of the fifth nerve, and gives origin to the ascending root of the fifth nerve. In close relationship with the external surface of this grey mass is a bundle of fibres, which are medullated in a nine-months embryo, and which are the homologues in the medulla of the posterior root-zone of the cord, and which are frequently found diseased in locomotor ataxy. The direct cerebellar fibres are represented by a thin lamella of longitudinal fibres lying on the surface of the cuneate fasciculus and of the grey tubercle of Rolando. One of the most remarkable rearrangements of fibres in the medulla arises from the fact that the cuneate fasciculus, through the intermediation of its nucleus, resolves itself into arcuate fibres, which pass forwards and upwards to be connected with the nucleus of the olivary body on the same side; and it is also probable that the slender fasciculus through its nucleus has a similar termination.

A transverse section of the upper part of the medulla shows that the fibres have undergone a still further rearrangement, and that they are greatly reinforced in number; but the course of the additional fibres will be more readily traced if we follow them from the cerebellum to the medulla, instead of from below upwards.

The inferior peduncle of the cerebellum, according to Stilling, breaks up, on entering the medulla, into an internal and an external division, the latter of which he called the "restiform body." The fibres of the internal division spring from the roof-nuclei of Stilling, and on reaching the medulla resolve themselves into arcuate fibres, which pass downwards and inwards, interlacing with the ascending fibres of the anterior root-zone behind the olivary body of the same side; and some anatomists believe that they cross the median raphe to reach the olivary body of the opposite side. The fibres of the restiform body are derived from the cortex of the cerebellum, and from a layer of fibres surrounding the dentate nucleus; and this division, on descending to the medulla, subdivides into two bundles, which are separated from one another by the direct cerebellar fibres of the lateral columns of the cord in their ascent towards the cerebellum. In an eight-months human embryo the fibres of the restiform body are non-medullated; while those ascending from the lateral columns are medullated, so that the two sets can be readily distinguished from one another. The fibres of the restiform body, like those of the internal division of the peduncle, resolve themselves into arcuate fibres; the external bundle forming the zonular layer which passes in front of the olivary body, and the fibres of which reach the median raphe by passing both in front and behind the anterior pyramid. These fibres, after proceeding backwards in the raphe for some distance, reach the hilus of the olivary body of the opposite side. A great part of the arcuate fibres of the internal bundle seem to pass through the olivary body of the same side without being connected with its grey substance; and after gaining the raphe they also cross over to pass into the interior of the olivary body of the opposite side, in the grey substance of which all the arcuate fibres of the restiform body terminate. The olivary body, therefore, is the medium of communication between the cuneate fasciculus and probably also the slender fasciculus of the same side; and the restiform body, and probably the internal division of the cerebellar peduncle, on the opposite side. The direct cerebellar fibres pass upwards to the cortex, and thus form an uninterrupted connexion between its grey matter and the cord, where the fibres are supposed to pass inwards between the bundles of the pyramidal fibres of the lateral columns, to terminate in the cells of the group known as Clarke's column. Their function, however, is not yet ascertained.

The fibres of the middle peduncle of the cerebellum are derived from the cortex; they pass in front of and through the substance of the pons, where they separate the ascending fibres of the anterior pyramids into bundles, and interlace in the middle line with the fibres of the middle peduncle of the opposite side. On reaching the opposite side they are supposed to terminate in the cells of interposed grey matter, by means of which they are connected with fibres descending from the crusta. The close relationship of the middle peduncles with the lateral lobes of the cerebellum is well illustrated by the fact that in those animals in which the latter are deficient or absent the transverse fibres of the pons are few or entirely wanting. The fibres of the superior peduncles are derived from the dentate nuclei; they decussate with one another in the tegmentum, the fibres of one side passing over to be connected with the red nucleus of the opposite side. The fibres of the superior peduncles are medullated in a nine-months embryo; they may be seen surrounding, and even in, the substance of the red nucleus, and a considerable proportion of them pass upwards uninterruptedly into the tegmental portion of the internal capsule, and either end in the inferior or external surface of the thalamus, or, as I am inclined to believe, pass uninterruptedly along its external border upwards to be connected with the central convolutions of the cortex of the cerebrum.

With respect to the function of the cerebellum, all recent researches have, in my opinion, tended to confirm Mr. Herbert

Spencer's hypothesis, "that the cerebellum is an organ of doubly compound co-ordination in space, while the cerebrum is an organ of doubly compound co-ordination in time." The main sensory organs through which we acquire our developed ideas of co-existences and relative distances in space are the organs of vision with their motor apparatus; and there is a very close connexion both functionally and anatomically between these organs and the cerebellum. It is largely in relation with, and by the aid of, the sense of sight that the special actions which distinguish the modes of locomotion of the higher vertebrata from those of the lower vertebrata and invertebrata must have been developed. We have already seen that the general movements of locomotion are co-ordinated by the posterior root-zones of the cord; but although these systems of fibres are still operative, they are wholly inadequate for the co-ordination of the special kinds of locomotion which have been organised in the higher animals under the guidance of the sense of vision. It might be possible, for instance, for the muscular actions involved in the ordinary flight of an eagle to be co-ordinated in the spinal cord; but the wonderful adjustment of action to requirement, and the adaptation of muscular movements to distance, involved in the swooping down of the bird upon its prey, guided by the sense of vision, could not possibly be co-ordinated in the cord. The first impulse to perform the action comes probably from the cerebrum, but the requisite movements for the execution of the act are mainly co-ordinated by the cerebellum. It is very probable that, as already remarked, the dentate nuclei of the cerebellum, the olivary bodies of the medulla, the red nuclei of the tegmenta, and the masses of grey matter in which the fibres of the middle peduncles of the cerebellum terminate in the pons along with their connecting fibres, together constitute a system of compound co-ordination inspace. The muscular adjustments necessary for maintaining the erect posture, and for balancing the body in various positions which do not necessitate change of place, are co-ordinated by this system. The power to assume special attitudes in opposition to gravitation and other forces acting upon organisms has been developed in the higher animals mainly under the guidance of the sense of sight; but the cerebellum would be a very imperfect co-ordinating centre if impressions received through the optic nerves were always necessary for its exercise. The alternation of day and night causes the functions of the optic nerves to be held in abeyance for a considerable portion of each day, at least to a very considerable extent. Hence, although the capability of maintaining special attitudes—as the erect posture by man, and the power of special locomotive actions—have been developed in the passage of the higher from the lower races of animals under the guidance of vision, yet it is important that the exercise of these functions should be in large measure independent of impressions received through the optic nerves. It is probable that the cerebellum may help to co-ordinate certain movements in response to impressions received through the cutaneous, olfactory, gustatory, and auditory nerves; but the balancing of the body in special postures is rendered possible, in the absence of sight, by labyrinthine impressions.

The corpora quadrigemina are homologous with the optic lobes in fishes and the lower vertebrata—organs which are developed in connexion with the sense of sight. These ganglia appear to be the centres for the reflex co-ordination of all the muscular actions concerned in the movements of the eyeballs and of the reflex contraction of the pupils caused by light falling on the retinæ. It is through these bodies, and not directly, that the optic tracts come into relation with the cerebellum; hence it may be expected that they will be associated with the latter in its functions. We have already seen that the corpora quadrigemina are connected with the anterior root-zones, or the system of fibres which co-ordinate the actions of the cord longitudinally on the side of the outgoing currents; hence the posterior segments of the body are to a considerable extent brought under the regulative influence of these ganglia. The corpora quadrigemina are, however, simple co-ordinating centres, and their regulative action on the posterior segments of the body is of a purely reflex character. The following may be taken as an illustration of the manner in which I suppose them to act:—While a fish is swimming through the water a sudden impression is made on the right eye by the shadow of a large approaching object, and immediately the muscles of the tail on the left side contract, and the head is turned away from the object. Such a movement would tend to secure the safety of the fish from capture by a more powerful antagonist. If, on the other hand, the impression is made by a relatively small object, the muscles of the tail on the same side might contract, so as to turn the head towards the object—a movement which would tend to secure prey. In these movements the main regulative centres are the optic lobes, and there is no occasion to believe that the actions are in any way of a different character from the ordinary reflex movements of the spinal cord. It may, however, be remarked, in passing, that since a large approaching object would produce a greater impression than a small object, a rudimentary eye would be more useful to its possessor for avoiding capture than in securing prey; and, consequently, the primary and fundamental connexion between the eye and the posterior segments of the body would be a crossed one. The most ready communication, therefore, would be between the right eye and the muscles of the left side of the body. And this helps to explain the crossing of the optic nerves, not only in the lower animals with rudimentary eyes, but in the higher organisms; since, during the development of the latter from the former, the primary and fundamental crossing, however much modified, would still be retained. It is, indeed, very probable that the crossed connexion which may be supposed to exist in the lower vertebrata between the rudimentary eyes and the muscles of the body was the main factor in determining during the course of development the crossed connexion which exists between the cerebral hemispheres and the spinal cord in the higher vertebrata.

The centripetal or sensory and centrifugal or motor tracts of the cord, after passing through the medulla and pons, are received by the crura cerebri, and by them conducted to the ganglia at the base of the brain, and to the important structures known as the internal capsules. Speaking broadly, the centrifugal and centripetal tracts are separated in the crus, the locus niger lying between them; the superior portion, or tegmentum, forming the centripetal or sensory, and the inferior or crusta forming the centrifugal or motor tract. The tegmentum, however, contains the posterior longitudinal fasciculus and the fillet which are the continua-

Fig. 4.

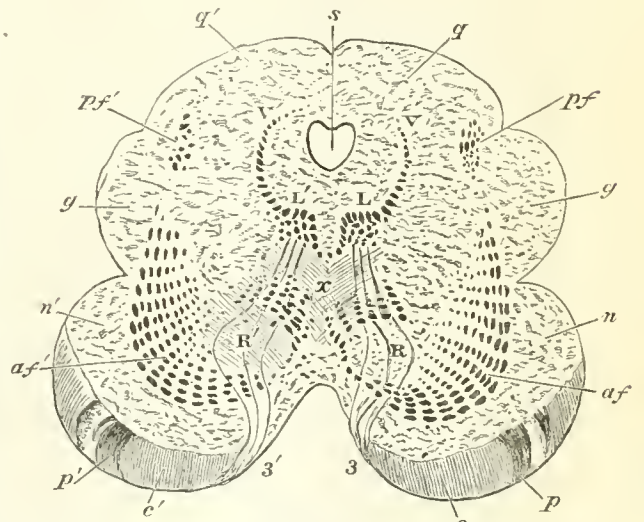

Fig. 4.—Transverse section of the crura cerebri on a level with the anterior pair of the corpora quadrigemina: from a nine-months human embryo. The dark portions represent medullated fibres. *s*, aqueduct of Sylvius: *q*, *q'*, anterior pair of corpora quadrigemina; *pf*, *pf'*, fasciculi of medullated fibres proceeding to the anterior pair of corpora quadrigemina; L, L', posterior longitudinal fasciculi; V, V', portions of these fasciculi which join the posterior commissure of the third ventricle; *g*, *g'*, external geniculate bodies; *af*, *af'*, anterior portion of fillet; *n*, *n'*, substantia nigra; R, R', red nuclei; *P*, *P'*, pyramidal fibres; *c*, *c'*, crustæ; 3, 3', third pair of nerves; *x*, decussation in front of the aqueduct of Sylvius, which is part of the interlacement of the tegmentum.

tions of the anterior root-zones, and belong to the centrifugal tract. The spinal tracts are greatly reinforced in the crus by fibres derived from the pons and its connexions. A considerable number of these fibres no doubt arise from the cells of the grey matter on the floor of the fourth

ventricle, and other masses of grey matter scattered through the substance of the pons; while others are purely accessory fibres derived from the connexions of the pons and crura with the cerebellum and corpora quadrigemina. The passage of the fibres of the anterior pyramid of the medulla through the pons and crusta has already been described. These fibres (Fig. 4, *P, P'*) occupy pretty nearly the middle third of the crusta, and in a nine-months human embryo dying at birth they are the only fibres of the crusta which possess a medullary sheath; hence the bundle which they form is readily distinguished with the naked eye by its white colour from the greyish colour of the external and internal thirds of the crusta. The continuation upwards of the anterior root-zones of the cord appear also of a white colour in the tegmentum of a nine-months human embryo, owing to the fibres being medullated. Two of the bundles (one for each side) can be traced to the testes, and other two, *pf, pf'*, to the nates; while a third pair (the posterior longitudinal fasciculi), L, L', are situated in front of the aqueduct of Sylvius in close relationship with the nuclei of origin of the third pair of nerves, above which a portion of them is continued forwards in the thalamus along the lateral walls of the third ventricle, and the remaining fibres bend backwards to join the posterior commissure of the third ventricle, the fibres of which are the first in the cerebrum to become medullated. These fibres are the continuations of the portion of the anterior root-zone of the cord which belongs to the anterior column. The anterior portion of the fillet, *af, af'*, is seen in a transverse section of the crura of a nine-months human embryo as a thin layer of medullated fibres (one for each side) lying transversely along the upper margin of the locus niger. None of the fibres of the crusta are medullated at birth except the pyramidal fibres; so that the fibres of the fillet are not likely to pass uninterruptedly into the crusta; nor do they pass into the tegmental portion of the internal capsule; and they must consequently terminate in the cells of the locus niger, *n, n'*, from the lower margin of which fibres issue to pass into the internal and external portions of the crusta. The locus niger, therefore, may be regarded as the medium of communication between the crusta, and consequently the corpus striatum, and the part of the anterior root-zone of the cord which is situated in the lateral column. The fibres of the superior peduncles of the cerebellum are medullated at birth. Some of these end in the red nucleus; but a large proportion appear to proceed uninterruptedly into the internal capsule. The remaining fibres of the tegmentum are non-medullated at birth, and these represent the centripetal fibres of the cord, medulla, and pons, with their associated grey matter.

The crus is at first irregularly quadrilateral in form, but in ascending to the hemisphere it becomes flattened from above downwards, and the fibres of both crusta and tegmentum spread out like a fan, the edges of which are directed forwards and backwards. On emerging from between the basal ganglia, the fibres radiate in all directions, so as to reach the cortex of the hemisphere; hence these have been described by Reil under the name of "corona radiata"; and the point at which the fibres emerge from between the ganglia is called the foot of the corona radiata. The fan formed by these fibres is bent into the form of an incomplete hollow cone, having its concave surface turned downwards and outwards, and its convex upwards and inwards. The inner convex surface formed by the tegmentum has resting upon it the thalamus and intraventricular corpus striatum or the caudate nucleus; while the outer concave surface formed by the crusta rests on the extraventricular corpus striatum or lenticular nucleus.

It would be quite out of place to enter here upon minute anatomical details; but the most interesting features may be described in a few words. The pyramidal fibres of the medulla form a bundle, which occupies, speaking somewhat broadly, the middle third of the crusta. These fibres ascend uninterruptedly through the internal capsule, and are distributed to the central convolutions of the hemisphere or those about the sulcus of Rolando, especially the paracentral lobule. The remaining fibres of the crusta terminate in the corpus striatum, by far the larger proportion ending in the lenticular nucleus; while the connexion between these and the caudate nucleus is not accurately determined, but probably some of the fibres may reach the latter near the anterior perforated space, where the two nuclei of the corpus striatum are almost continuous.

The greater portion of the fibres of the tegmentum end in the thalamus, but a small bundle of fibres—a continuation, probably, of some of the fibres of the superior peduncle of the cerebellum—appear to pass uninterruptedly through the capsule, and to be, like the pyramidal fibres, distributed to the central convolutions. Another important bundle of direct fibres—*the optic radiations of Gratiolet*—passes upwards from the superior and external aspect of the tegmentum to form the posterior third of the internal capsule. These fibres pass through the capsule without communicating with the basal ganglia, and are distributed to the posterior convolutions of the cortex.

The fibres of the crus, which end in the thalamus and corpus striatum, are replaced in the internal capsule by fibres which take origin from these ganglia, and ascend to the cortex through the corona radiata. It follows that five sets of fibres enter the corona radiata through the internal capsule. These are—(1) the direct centrifugal fibres which connect the cortex with the crusta, or briefly the pyramidal fibres; (2) the direct centripetal fibres which connect the tegmentum with the cortex, or the optic radiations of Gratiolet; (3) fibres issuing from the optic thalamus; (4) those which ascend from the superior and internal surface of the lenticular nucleus; and (5) fibres arising from the external surface of the caudate nucleus. It is even probable that a sixth set may be added, namely, fibres from the superior peduncle of the cerebellum. The lenticular nucleus is limited on its inferior surface by a layer of fibres which arise from its cells. These are directed outwards, and ascend on the external surface of the nucleus, where they form a thin layer of white substance called the external capsule. These fibres pass to the convolutions along with those of the corona radiata.

(To be continued.)

THE LAWS WHICH REGULATE MORTALITY FROM MEASLES.

By H. COURTENAY FOX, M.R.C.S.

Few diseases are better known or more widely distributed than that which forms the subject of the present paper. We have almost all of us passed through an attack of measles in early life. Nor does it appear to be a particularly dangerous complaint, excepting in the period of infancy, and in those cases where it gives rise to pulmonary affections (more to be dreaded, perhaps, than the original disease). But that measles is still capable of assuming something like a malignant form, when implanted in virgin soil, has been unhappily proved by the lamentable results that have recently followed its accidental introduction into the Fiji Islands.

My object in writing the present paper is to furnish the most correct answers that I have been able to obtain to the following questions:—1. What is the average annual mortality(a) from measles in England and in London? 2. How is this mortality affected by difference of sex? 3. What is the nature of its distribution at different ages of life, and at what age is the mortality from measles at its maximum? 4. In what way is the death-rate influenced by the changes of the seasons? And 5. What do we know of the frequency, duration, and intensity of its epidemic visitations? The answers to the last two questions will be deferred to another occasion.

1. The average annual mortality from measles. In the annual reports of the Registrar-General, the number of deaths from measles occurring in England is recorded for each year from 1838 to 1842, and from 1847 to 1874, periods amounting to thirty-three years. If these numbers be severally divided by the populations living at the middle of each year, we obtain a series representing the annual mortality or death-rate of every year. The mortality for London is similarly derived from the quarterly returns, and it relates to the thirty-seven years 1840 to 1876. To avoid the inconvenience of writing decimals, the mortality may be expressed in terms of the number of deaths out of every million living.

(a) Mortality is the *ratio* between deaths and population, and its use should be carefully restricted to this meaning. The number of deaths, taken alone, is of little value. For instance, to compare the deaths in London to-day with those of ten or twenty years ago would be very misleading, did we not take into account the growth of the population in the interval.

The mean annual mortality from measles is as follows:—For England (average of thirty-three years), 439 per million; for London (average of thirty-seven years), 567 per million. The death-rate for Lancashire—a county which, next to the metropolis, is perhaps the most populous and important part of our island—has been worked out for me upon the same principles for the period from 1848 to 1876, with the following result:—For Lancashire (average of twenty-nine years), 673 per million. There is considerable diversity in these numbers, but in comparing them together it should be borne in mind that the populations of these localities are distributed in different proportions with regard to sex and age. The ratio to the whole population of children living under five years of age (at the period of life when 91 per cent. of all the deaths from measles are found to occur) is much larger in a thriving manufacturing district such as Lancashire, than it is in London. The proportion which obtains in London is again somewhat smaller than that which exists in England as a whole—owing, probably, to the great number of single persons engaged in domestic service, and in other situations, which is so marked a feature of the metropolis. Making due allowance for these inequalities in the distribution of the population, the death-rate from measles, as compared with the number of children living under five years of age, is one-third as large again in London as it is in England, and one-eighth greater in Lancashire than in London. If density of population were the chief factor in the production of measles, should we not expect to find a much *higher* mortality in London, whose teeming millions are concentrated within a narrow area, than in Lancashire, which comprises large rural districts, in addition to its towns? But the figures given above will hardly support this conclusion, and we must look to other sources for an explanation of the heightened mortality from this disorder in the northern county. Perhaps the cold and moist climate may be partly responsible for the result; but it is not unlikely that the early marriages and mode of life of the operative classes is somewhat unfavourable to the successful rearing of young children.

How does the mortality from measles compare with that caused by some other zymotic diseases? On referring to some "Statistics of Scarlatina" in the *Medical Times and Gazette* for November 21 and December 19, 1874, it appears that the average death-rate from measles is about half as great as that from scarlatina. A similar numerical relation subsists between the average deaths from measles and those from diarrhœa. On the other hand, the average mortality from measles is considerably larger than that from small-pox, as may be surmised by reference to some papers on the statistics of small-pox contributed by my brother, Charles A. Fox, to the *Medical Times and Gazette* of February 11 and May 13, 1871. The total deaths attributed to measles during a period of more than thirty years, in England and in the metropolis, have been respectively 34 per cent. and 70 per cent. greater than all those which occurred from variola in the same time (and this was inclusive of the extraordinary epidemic of 1871). We should hardly have formed such a conclusion as this upon *à priori* grounds; yet it does not appear altogether improbable, if we consider that measles attacks nearly everybody at one time or other, whilst the activity of small-pox has been happily restricted within comparatively narrow limits by the application of Jenner's immortal discovery.

2. I pass on to consider in what manner the mortality from measles is affected by the question of *sex*. It may be assumed that during the thirty and odd years under our review the mean ratio subsisting between the sexes remained the same as we find it recorded at the census of 1861, which occupied nearly the middle of this extended period. Then for every million of males at all ages, and for every million of females living, the mean annual mortality is as follows:—

	Males.	Females.
In England . . .	457	422
London . . .	620	522
Lancashire . . .	704	642

The mortality thus appears to be constantly against the stronger sex (so-called). But does this appearance agree with the fact? Let us be careful how we draw our deductions from hence, for we are, as it were, just upon the brink of a fallacy. These numbers are, as I have said, founded upon the ratio subsisting between the sexes, irrespective of age. The deaths from measles, however, are not evenly distributed, without regard to the ages of the population. They fall almost wholly upon the early years of childhood, at which age, as is well known, the proportion between males and females living is very different from that which obtains during the remainder of life. The above figures may therefore be quite true, so far as they go; but they tell us only a small part of the truth, and must be valued accordingly. The influence of sex will be more fully, though incidentally, elucidated in the sequel.

3. How is the mortality from measles distributed at different *ages* of life, and at what age does it attain its maximum? To obtain the answer to this question it is necessary to compare all the deaths from measles at the different periods of life with the numbers that were living at the same ages. This has been effected, and results in the following table:—

Measles: Mortality of Males and Females at Specified Ages (Mean Annual Deaths out of One Million of each Sex living at each Age).

	England.		London.	
	Males.	Females.	Males.	Females.
Under 1 year . . .	3,022	2,530	3,571	2,987
1 year and under 2 years	6,086	5,825	8,630	8,050
2 years and under 3 years	3,178	3,255	4,683	4,757
3 „ „ 4 „	1,730	1,851	2,594	2,620
4 „ „ 5 „	980	1,028	1,358	1,446
All under 5 years . .	3,032	2,921	4,195	3,976
5 years and under 10 years	255	278	301	316
10 „ „ 15 „	29	38	24	32
15 „ „ 20 „	9	13	9	11
20 „ „ 25 „	7	9	5	7
25 „ „ 35 „	5	8	5	7
35 „ „ 45 „	3	5	2	3
All ages . . .	457	422	620	522

This table shows us that for every million of male infants who are under one year of age, the average number who die of measles in England within the year is 3022, and that for every million of females at the same age the death-rate is 2530. In the parallel columns which refer to London it will be observed that the corresponding rates are higher than is the case for the country at large. In the second year of life the mortality is more than doubled. A million of English boys at one year and under two years of age will lose no fewer than 6086 of their number during the year from this cause alone. The violence of measles reaches its culminating point in this year, and the death-rate declines with great rapidity, as the foregoing table shows. How great, for instance, is the contrast between the mortality for the first and for the second quinquenniads of life! The age of maximum mortality is thus quickly attained, and is rapidly left behind again. It occurs in both sexes in the latter half of the second year of life; but it appears to be attained a little earlier by boys than by girls. The ratio between the mortality at the second year and the mortality at all ages is very considerable; the former is more than thirteen times as great as the latter. We may compare this with the corresponding ratio in the case of scarlatina. In this disease the maximum mortality (which occurs in the third year of life) is only about six times as great as the total mortality at all ages. There is also this further difference between these common fevers: the mortality in measles rises suddenly in the second year, and with equal suddenness falls again, and in a few years it tapers off to almost *nil*; in scarlatina, on the other hand, the second, third, fourth, and fifth years have each a high death-rate, and the subsequent decline is a much more gradual process. Its curve is broad, and has a rounded summit, whilst that of measles is narrow and sharply pointed. Of the two diseases, measles is the more active destroyer during the first two years of infant life; beyond this point, however, its relative mortality speedily diminishes, and during the quinquenniad five years and under ten it is only one-seventh as great as that of scarlatina.

The foregoing table also throws further light upon the interesting question of the influence of sex upon the deaths from measles. *Cæteris paribus*, males die of this disease in much larger proportions than females in the first and second

years of life. For some inscrutable reason the former sex appears to possess less power of resistance to disease in very early life than is possessed by the latter. Expressed in old-wives' language, girls are more easy to rear than boys. Nevertheless, after the second year we find the conditions are reversed, and the male exhibits a greater power of overcoming the morbillous poison than does the opposite sex, so that the excess in the mortality passes over to the female side, where it continues through the remainder of life.

(To be continued.)

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

LONDON HOSPITAL.

INJURIES INVOLVING THE KNEE-JOINT.

Case 1.—Lacerated Wound extending into the Left Knee-joint—Extensive Extravasation of Blood in the Thigh—Severe Traumatic Fever—Death on the third day.

(Under the care of Mr. RIVINGTON.)

JOHN E., aged fifty-two, a farm labourer, was admitted into the London Hospital on December 23, 1872, about 4.30 p.m. Whilst trying to stop two runaway horses who were drawing a waggon loaded with more than two tons of potatoes, he was knocked down, and a wheel went over the lower part of his left thigh. As he fell on some dung there was no fracture of the femur. On admission the thigh was very much contused and swollen, especially above the knee-joint, and there was a considerable quantity of extravasated blood on the inner side. The leg was œdematous and swollen, owing to the pressure on the veins caused by the effusion of blood. There was a lacerated wound, about two inches long, above and to the outer side of the patella, communicating by a rounded aperture indirectly with the knee-joint. This aperture was discovered accidentally by Mr. Cooke, the House-Surgeon, whilst examining digitally the external wound. Subsequently a consultation was held, and it was decided not to amputate, but to close the external wound with lint and collodion. Some discussion took place on the propriety of injecting the joint with carbolic lotion, as was done in a reported case of wound of the knee-joint which occurred two years previously at the hospital; but the doubt which existed, whether in that case the carbolic lotion was actually injected into the joint or not, led to the adoption of the treatment with lint and collodion. Primary amputation of the thigh was rejected on account of the excessively unfavourable prospect of the operation. Strips of wet lint were applied to the thigh, and arrangements made for continued irrigation. A hypodermic injection of morphia was administered. Temperature 99·4°.

December 24.—He passed a restless night; inflammation set in in the knee-joint; irrigation was discontinued and ice-bags were applied; he felt cold and shivered, but did not have any actual rigor. He was very restless during the day, constantly wishing to get out of bed. Hypodermics were continued. Temperature 101·4°, and constantly rising; pulse 120 to 132; respirations 20 to 28.

25th.—Still very restless; lint and collodion came away, and pus could be squeezed from the wound; inflammation around the knee-joint was acute, but there were no signs of suppuration in the thigh; he had chills, but not rigors. The temperature, which had been regularly rising, reached 105·7°; the pulse, small and thready, ranged between 122 and 144; respirations 30 to 33. Some bullæ formed over the knee-joint. Frequent doses of morphia were administered; the question of amputation was discussed, with a negative result.

26th.—Was delirious during the night. He died at 4 a.m., about sixty hours after the accident.

Autopsy, December 27, 1872, made by Mr. Cooke.—All the viscera were found healthy with the exception of the lungs, which were generally emphysematous and congested at the posterior part. Blood was extravasated generally throughout the planes of areolar tissue of the thigh, and deeply in the neighbourhood of the femur. The tissues in the lower third of the thigh and about the joint were contused and lacerated. There was no pus in the knee-joint, but there were small patches of ulceration on the cartilaginous surfaces of the patella and the condyles of the femur. Death appears to have resulted from severe traumatic fever.

Case 2.—Compound Fracture of the Right Femur at the Lower Third, extending between the Condyles into the Knee-joint — Osteo-myelitis — Low Typhoid Symptoms—Death on the seventeenth day.

(Under the care of Mr. RIVINGTON.)

Francis B., aged thirty-seven, was admitted on November 22, 1872. Whilst the patient was helping to unload a waggon filled with large stones, a sudden movement caused either the waggon or a stone to hit him on the thigh. On admission there was a fracture of the right femur at the junction of the upper two-thirds with the lower third. A small wound existed on the inner side of the thigh, altogether above the knee-joint; through this opening the finger introduced could feel the fragments, but no communication with the knee-joint could be traced. There was no swelling of the joint itself. Flexion and extension movements of the patella, etc., elicited no crepitus, and the distance of the seat of fracture from the joint was greater than that which usually accompanies vertical splitting of the bone into it. There was no shortening and very little displacement. The fracture was treated antiseptically for the first week, and during the greater part of that time he was frequently sick, and could retain little but the brandy mixture. His thigh swelled considerably; nothing but a little healthy pus discharged from the wound. In the upper half there was a good deal of congestive inflammation, especially on the inner side next the scrotum. Œdema was also present. Very shortly an erysipelatous blush appeared, reaching upwards on to the abdomen three inches above Poupart's ligament, and backwards to the buttock. At the seat of fracture there was little or no inflammation. The thigh had evidently been bruised high up.

	Temperature.		Pulse.		Respirations	
	Morn.	Even.	Morn.	Even.	Morn.	Even.
November 22 . .	98·6°	100·6°	90	84	22	18
„ 23(a).	103·0	103·4	116	140	—	—
„ 24. .	103·4	103·2	148	150	30	36
„ 25. .	102·4	101·2	136	148	28	32
„ 26. .	102·0	102·6	132	136	28	29
„ 27(b).	102·4	102·2	119	132	28	33
„ 28. .	102·6	103·2	126	142	30	31
„ 29. .	103·4	103·8	120	148	24	32
„ 30. .	102·6	102·2	136	134	28	28
December 1. .	102·4	103·4	118	130	30	30
„ 2. .	103·2	102·8	120	136	30	36
„ 3. .	103·4	103·2	132	132	30	30
„ 4. .	102·8	102·8	136	—	26	—
„ 5. .	101·6	101·6	124	—	36	—
„ 6. .	101·8	101·8	136	—	42	—
„ 7. .	101·8	101·8	140	—	38	—
„ 8. .	103·8	—	164	—	60	—

At no period of his illness did the patient's condition present any favourable opening for operative procedure. The only method which would have been applied to his case was amputation of the hip-joint; but the necessary flaps were already affected with erysipelatous inflammation, and the patient had incontinence of urine and fæces, and was so low that it was thought that he would not long survive the shock of the operation. His limb was therefore kept at rest between sand-bags, and steadied by a four-pound weight. As there was little or no displacement, there was no need for splints, which for other reasons were inapplicable. So far as could be judged, the treatment by carbolic acid was decidedly injurious and of an irritating character. When it broke down, and the wound was simply covered with lint soaked in carbolic lotion, the swelling in the thigh began to decrease, and the vomiting, which had much interfered with his progress, left him. He died on the seventeenth day.

At the post-mortem examination, osteo-myelitis was found affecting the shaft of the femur above the fracture, which extended across the shaft at the lower third vertically, and into the knee-joint between the condyles. The planes of areolar tissue in the thigh were disorganised.

It may be thought that, notwithstanding the unfavourable

(a) Tongue dry; very thirsty; incontinence of urine and fæces.
(b) Carbolic acid treatment broke down.

condition of the patient, disarticulation at the hip-joint presented a faint prospect of recovery. In any similar case such a procedure would certainly be justifiable, although far from hopeful.

OLDHAM INFIRMARY.

CASES UNDER THE CARE OF DR. GEORGE THOMSON.

Case 1.—Lithotomy at Seventy-two—Rapid Recovery.

J. D., aged seventy-two, had a mulberry calculus weighing four drachms and a half removed by lateral lithotomy (without chloroform). Rapid recovery took place, the urine being passed entirely per urethram on and after the sixth day from operation, and the wound completely cicatrised on the seventeenth day.

Case 2.—Excision of the Hip-Joint—Subsequent Amputation and Removal of a Large Portion of Pelvis—Recovery.

T. C. O., aged fourteen years, was operated on for advanced hip-joint disease by Sayre's method of exsection, a small portion of the acetabular rim, which was carious, being scooped away. Immediate improvement in health followed, but in a few weeks it became apparent that disease was extending both in the femur and the pelvis, and three months after the exsection amputation was performed. The pelvis was found now to be extensively carious, and accordingly a large proportion of the pelvic bone was chiselled away, extending for about two inches in the neighbourhood of the acetabulum, through the whole thickness of the bone. It is worthy of remark that on the fourth day from operation suppression of urine with general œdema ensued. The urine was found to be free from albumen, but of greenish-black colour, as dark as ink. Suspecting the dressings (lint dipped in carbolic lotion 1 to 40), Dr. Thomson replaced them by water-dressing, and ordered a diuretic. The colour speedily became normal, and the quantity increased from six fluid ounces per diem to thirty-two, the œdema gradually disappearing. The boy now slowly improved, and at present (April, 1878, five months after operation) is in good condition, but with a sinus still open, from which a small piece of necrosed bone was discharged some weeks since. Exploration has failed to reveal further pelvic disease.

Case 3.—Excision of the Wrist-Joint after Severe Injury, resulting in a Useful Hand.

M. E. H., a girl of fifteen, suffered compound dislocation of the wrist, with division of the extensor tendons and injury to the bones. The first row of carpal bones, being all more or less injured, were removed, along with the articular ends of the radius and ulna to the extent of half an inch. A drainage-tube was laid along the bottom of the wound and brought out at the dependent angle, and the hand and arm laid prone on Lister's splint. Simple water-dressing was used, and the wound healed kindly, the drainage-tube being retained until cicatrisation was nearly complete. The patient left hospital on the forty-second day from operation, and three months afterwards had an excellent hand, with complete command of the flexor movements of wrist and fingers. The extension movements of the fingers were tolerably good, but there was little or no power over the wrist. The girl has since been able to return to her occupation in a mill, which requires considerable dexterity of manipulation.

Case 4.—Fracture of the Femur at Both Epiphyses from Muscular Action.

C. D., aged fourteen, was admitted suffering from this somewhat rare form of fracture. The accident occurred during the effort to recover his perpendicular after jumping over an open drain on to a slippery bank of clay. He left hospital in six weeks with a good limb, unshortened; the treatment having been the ordinary long splint, followed by plaster-of-Paris bandage.

Case 5.—Amputation of Thigh after Severe Injury, at Seventy—Recovery.

Thos. C., aged seventy, sustained a compound comminuted fracture of the leg, extending into the knee-joint, the tibia being split longitudinally. Amputation at the junction of middle and lower third of the thigh was performed immediately, and followed by extensive sloughing of the muscles. Recovery took place slowly, and was complete on the 113th day from operation.

Case 6.—Compound Fracture of the Skull with Laceration of Brain—Trephining—Recovery.

Peter McG., aged seventeen, was struck by a broken machinery strap with a rivet in it on the inner and upper angle of the right orbit. The result was a comminuted smash of the bone as if a bullet had entered, with brain-substance oozing from the wound. It being found impossible to extract the spicula of bone, the trephine was used on the frontal bone to the right of the mesial line. Some twelve or fourteen spicula of the thin orbital and nasal bones were removed, and a small punctured wound in the dura mater disclosed, through which brain-substance was oozing. The wound was syringed out, and a small drainage-tube introduced. The man's condition previous to operation was symptomatic of "cerebral irritation," which speedily disappeared after operation. Slight delirium followed for some hours, and afterwards recovery proceeded unimpeded, and the man left the hospital cured on the twenty-sixth day from the operation.

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Medical Times and Gazette.

SATURDAY, JUNE 1, 1878.

THE MEDICAL ACTS AMENDMENT BILL.

Not the least frequent, perhaps, of the many accusations brought against her Majesty's present Prime Minister is the assertion that he has dominating melodramatic instincts; that he is given to startling "situations," and is fond of surprises. It will, perhaps, be said also, and with at least equal show of truth, that his Lordship, whose power as an educator is historical, is educating his Cabinet in these special tastes, and has found at least one very apt pupil in the Lord President of the Council, the Duke of Richmond and Gordon: for his Grace certainly has most effectually surprised the medical profession, and probably the House of Lords, by the all-important and radical amendment which, at the last moment, he introduced into his Medical Bill. The history of the Bill, indeed, though it is yet very young, has already been a series of surprises. We need not again describe how the measure as at first drawn made the formation of a Conjoint Board of Examination in each of the three divisions of the kingdom compulsory; nor how it was

so altered that when introduced in the House of Lords this long fought for change was still left, as it had been for twenty years, a permissive one only. Our readers will remember that innumerable remonstrances were made to his Grace on this subject, and that those from the English medical authorities were especially weighty, inasmuch as they assured the Duke that his Bill would not only not promote the formation of Conjoint Boards, which he himself admitted to be highly desirable, but would break up and destroy the only Conjoint Board already agreed to—that for England. But it seemed that all these representations would be altogether in vain till at the beginning of last week, when his Grace announced, in reply to a fresh stream of deputations, that he had resolved to make combination compulsory on the Corporations in the three divisions of the kingdom, but to leave the Universities free. It was at once apparent that the intended change, though an additional proof of the Duke's sincere desire to meet the wishes of the profession, as represented to him, was also a proof that he did not understand the difference that exists between the Universities in the different divisions of the kingdom; that it was a compromise of the most unfortunate and least defensible kind; and that it could not possibly be accepted. The Scottish Universities stand, in respect to the mass of the profession, in the same position as do the Corporations in England. Both qualify the general practitioner, and the former grant every year qualifications to hundreds of men who practise in England But the Corporations would have in future to contend with tied hands against the attraction of the Universities, which—while like the Corporations they qualified the general practitioner, unlike them, could give him the coveted title of doctor—were left their former freedom of action. It was felt, therefore, that the effect might be a lowering of the standard required for the minimum qualifications granted by the Universities, rather than a raising of the standard for the diplomas of the Corporations; that the Bill, instead of lessening or removing the alleged tendency to competition downwards, could rather accentuate it; and that it must consequently still be strenuously opposed. In this position matters stood till the evening of Friday, the 24th ult.; but, to the general surprise, on that evening when the motion for going into committee on the Bill came on, the Duke of Richmond moved that it should be committed *pro formâ* only, and announced that he had decided to go back to his first idea, and make the formation of Conjoint Boards compulsory upon all the medical authorities in each division of the kingdom, instead of only upon the Corporations. His Grace very frankly described the various phases of mind he had passed through with regard to the Conjoint Board question, and explained why he had come to his latest-final decision. He reminded their lordships that, when asking leave to bring in his Bill, he had expressed the opinion that there ought to be a uniform minimum standard of examination for all who sought to enter the medical profession, and his concurrence in the belief that the formation of a Conjoint Examining Board in each division of the kingdom was a desirable way of establishing such a standard. But he had been frightened by the assured opposition of the Scottish Universities; and he had consequently not been able to see his way to the introduction of a clause rendering Conjoint Boards compulsory. He had, however, asked for free criticism of his measure, and the medical profession had readily responded to his request. He had had the pleasure of receiving various deputations on the subject, and medical men in all parts of the country had written to him upon it. The result was to make it quite clear to him that a Conjoint Scheme would be very desirable, and he thought to promote it by a compromise, which he hoped would prove acceptable. But having circulated his compromise scheme through the country, he found that it was anything but acceptable. The English Corporations condemned it on the ground that nothing short of a Conjoint Board including the Universities would be acceptable. The English Universities took the same view; and the representations that he received from Ireland, and from various medical societies in London, were all to the same effect. He had not been able to resist the arguments that had been brought under his consideration; and "desiring to put the Bill into a shape in which it would be of real advantage to the medical profession and satisfactory to the country, he had reluctantly come to the conclusion that he must ask to be allowed to amend it so as to make a Conjoint Board for each of the three portions of the United Kingdom compulsory." The Duke again stated that the chief opposition to such a plan had come, as is well known, from the Universities of Scotland, and he thought that his efforts to effect a compromise should show them that he had as far as possible deferred to their wishes. But he had not been able to find any good argument against a compulsory Conjoint Scheme; and he ventured to hope that the Scottish Universities would therefore appreciate his motives, and recognise that he was doing what he believed would be best for the medical profession and for the public generally.

We think that the Duke is entitled to great credit. When commenting on the Bill, on March 4, we suggested to his Grace to seriously consider whether it would not be better to have the courage of his own opinions, and, reconstructing his Bill in accordance with them, gain the support of all the English medical authorities, and of the Marquis of Ripon and his party, and brave the Scotch opposition, rather than to endeavour, with the help of the Scotch, to carry the Bill as it then stood. But we confess that we had very little hope that the Duke would do this. It requires rare courage in a Minister to amend and re-amend his own Bill in one of its most vital and important points. This, however, the Duke of Richmond has done, and he has gained by it the adhesion of the Marquis of Ripon and Earl Granville, which will greatly add to the probability of the Bill becoming law. Whether he has done enough to secure for this measure the loyal support of the English authorities and of the profession at large remains to be seen, for there has not been time enough yet to permit of a full examination and consideration of the Bill as amended. The chief amendments are, as we have stated, for the purpose of providing for the formation of Conjoint Boards; a Medical Board is to be established in each part of the United Kingdom "before the last day of December, one thousand eight hundred and seventy-nine, or such later day, not after the last day of July, one thousand eight hundred and eighty, as her Majesty may by order in Council appoint"; any power given by the Act to, and anything authorised or required by it to be done by, "the medical authorities of any one part of the United Kingdom may, in the case of England and Scotland, be exercised and done by not less than five, and in the case of Ireland by not less than four, of such medical authorities"; and if a Medical Board fails from any cause to be established in any part of the United Kingdom, at any time after the commencement of the Joint-Board system, the General Medical Council is to "cause to be framed and sanction a scheme for the establishment of a Medical Board for that part of the United Kingdom," and to submit such scheme to the Privy Council for confirmation. Clause 1 of the section on "examination-rules" is altered from—The General Medical Council "shall from time to time frame, and when framed may revoke, alter, and add to rules," to "shall from time to time cause to be framed and approve, and when approved may revoke, alter, and add," etc. The clause ruling the examination of women is altered, and runs thus—"The examination-rules shall pro-

vide for the admission of women to the examinations, with such distinctions, if any, as may be judged necessary between the examinations for men and for women; so, however, that the examinations for men and for women shall guarantee equal proficiency." Power is still given to medical authorities to constitute new medical diplomas, to be granted only to persons who have passed a Medical Board, which shall confer no rights or privileges in connexion with the authorities, "but only the right to be registered in the Medical Register"; and an authority may give its ordinary diploma to a woman without thereby entitling her "to any share in the government, management, or proceedings" of that authority. But we must defer to another opportunity the consideration of the effect and value of these and the other amendments proposed, as the amended Bill has been so recently issued that it is impossible to fairly consider them now.

"COUNTER PRACTICE."

THE question as to whether a chemist and druggist has the right to prescribe for persons who may apply to him for medicine at his own shop, is one which has for a considerable time past caused no little excitement both among medical men and among chemists. On behalf of the former it has been contended that by the Apothecaries Act of 1815 chemists were prevented from doing more than dispensing, compounding, and vending drugs, whilst on the other hand the chemists claimed that the Act in question expressly reserved to them the right of carrying on their business in the same manner as before the passing of the Act, and that at that time prescribing over the counter in simple diseases was well recognised as coming within the legitimate function of a chemist and druggist.

The question here raised is one of very considerable importance, not only to the rival interests, but also to the public, and we are glad to see that the law courts have been appealed to to set the question at rest. Two cases bearing upon this point have recently been decided in the High Court of Justice, and the verdicts very effectually dispose of the pretensions of the chemists. The first case was argued in the Common Pleas Division of the High Court of Justice, before Mr. Justice Lindley. The nominal plaintiffs were the Society of Apothecaries, although the actual proceedings were taken by the Medical Alliance Association, an offshoot of the Defence Association. The defendant was a chemist and druggist named Hamilton, carrying on business in Oxford-street, who has gained a certain amount of notoriety by advertising himself as "Dr. Hamilton, of the Metropolitan College of New York." The Alliance Association had previously prosecuted him under the Medical Act, 1858, but as it could not be proved that he had pretended to be a *registered* practitioner, the case was dismissed. In the present instance proceedings were taken under the Apothecaries Act for illegally practising as an apothecary. The facts were not disputed, and the case was, by consent, tried before Mr. Justice Lindley, without a jury, it being felt on all sides that the question was one of law rather than of fact.

In delivering judgment Mr. Justice Lindley said that the question he had to decide was whether the Apothecaries' Company were entitled to recover one or more penalties against the defendant under Section 20 of the Act 55 George III., chap. 194, which enacts that if any person, with certain exceptions, shall act or practise as an apothecary in any part of England or Wales without having obtained the licence of the Apothecaries' Society, he shall for every such offence forfeit and pay a sum of £20. He had carefully gone through the evidence, and was satisfied that the defendant had acted and practised as an apothecary within the true meaning of Section 20 of the Act. But the defendant contended that he was protected by Section 28 of the Act, which runs thus:—"Be it further enacted that nothing in this Act contained shall extend to prejudice or in any way affect the trade or business of a chemist and druggist in the buying, preparing, compounding, dispensing, and vending drugs, medicines, and medicinable compounds, wholesale and retail, but all persons using and exercising the said trade or business, or who shall or may hereafter use or exercise the same, shall and may use, exercise, and carry on the same trade or business in such manner and as fully and amply to all intents and purposes as the same trade or business was used, exercised, or carried on by chemists and druggists before the passing of this Act." On this point Mr. Justice Lindley said that he did not know what the exact duties of a chemist and druggist were in 1815, when the Act was passed, neither had any evidence been laid before him to enlighten him on the subject. But if he looked at the section of the Act of Parliament, he saw that the duty and privilege of a chemist and druggist in 1815 was to *buy, prepare, compound, dispense*, and *vend* drugs, medicines, and medicinable articles. "Dr." Hamilton, however, had gone further; he had invited patients to come to his house, he had seen them, consulted with them, examined them more or less, and then given them medicine which was sold at his shop. This decidedly was going further than either of the Acts enumerated in Section 28, and consequently he could not be brought within the protection of that section. It had been suggested to him that as the defendant was a registered chemist he was within the protection of the Pharmacy Act, 1868, but by Section 16 of that Act he found that "registration under this Act shall not entitle any person so registered to practise medicine or surgery or any branch of medicine or surgery." It was clear from this that if a chemist is practising medicine or surgery or any branch thereof, he is doing that which the Act does not authorise. On the question of fact it was impossible for him to say that the defendant was not practising a branch of medicine, and therefore he should give judgment for the plaintiff for the sum of £20 and costs.

The second case to which we have referred was tried in the Queen's Bench Division of the High Court of Justice, last week, before Mr. Justice Field and a jury. The defendant is a duly registered chemist named Wiggins, who carries on business in Bermondsey; and the nominal plaintiffs were the Society of Apothecaries, while the prosecution was instituted and carried on by the law officers of the Medical Defence Association. The defendant was, we understand, supported in defending the action by the Chemists' Trade Association. Four cases were brought forward in which the defendant was said to have acted as an apothecary. All the patients were children, and in neither case did the defendant visit the patient at home. In two of the cases the children were brought to him at his shop, and he felt their pulses, asked certain questions, and gave medicine, for which he charged 7d. in each instance. In the other two cases the mothers of the children called and described the symptoms to the defendant, who prescribed medicines and gave other directions. These children were afterwards attended by medical men, and it turned out that one was suffering from bronchitis, another from pneumonia, the third from scarlet fever, and the fourth from convulsions. Three of the children ultimately died, but it was not suggested that the defendant's treatment was improper. The object of the action was simply to try the question whether "counter-prescribing" by chemists in medical cases is in contravention of the Act or not. Of course the same defence was made as in Hamilton's case, but in this instance several venerable chemists were called, who gave evidence as to the custom of the trade before the passing of the Apothecaries

Act in 1815. All stated that what is known as "counter-prescribing" was generally practised by chemists before 1815. Some of the witnesses said they should only treat simple cases; but one said that he used, when in practice, to treat bronchitis and serious maladies, and was very successful. In the end the jury found that the defendant had practised as an apothecary, and that the complaints under which the children were suffering were not such complaints as a chemist would have prescribed for before the passing of the Act. Judgment was accordingly entered for the plaintiffs.

The profession cannot but feel satisfied with the result of these actions, and the prosecuting Associations may fairly be congratulated on their success in vindicating their rights as legally qualified practitioners of medicine. It is now clear that the Apothecaries Act affords the public and the profession all the protection that is necessary, and all that is really demanded. The general body of medical practitioners do not wish to prevent chemists from giving their customers a bottle of mixture for any simple ailment, but they do object to the practices of those chemists who hold themselves out to the public to give medical and surgical advice, and who systematically prescribe for and treat disease without regard to the nature or gravity of the case.

POISONING BY COAL-GAS.

In the recent Chantrelle case the question arose, whether the death of Madame Chantrelle was not due to gas-poisoning. It was proved that there was gas escaping when the deceased was first seen by a medical man (Dr. Carmichael), but there was no evidence to show that there was any accumulation of gas in Madame Chantrelle's room when found by her servant in the morning lying in an insensible condition. Indeed, the state of the door, which was partly open and which did not fit closely, was such as to prevent any fatal accumulation of gas in that apartment without the smell being perceptible all over the house. It was held by both Professor Maclagan and Dr. Littlejohn that the chief noxious ingredient in coal-gas is carbonic oxide, the same substance which causes fatal results in cases of poisoning by the fumes of charcoal. No doubt this is partly true, though the carburetted hydrogen of which coal-gas is so largely composed must not be overlooked, even if its volume only were to be taken into consideration. Now, it so happens that carbonic oxide gives tolerably characteristic symptoms, and leaves fairly marked post-mortem results. Unlike most other asphyxiating agents, it does not kill by arresting the oxidative changes in the blood through a diminution of the contained oxygen together with a corresponding increase of carbonic acid; rather it seizes upon the hæmoglobin or colouring matter of the living blood with such a firm grasp that oxygen can no longer be taken up by it, nor carbonic acid given off. In colour, even by the spectroscope, this compound nearly corresponds to that of oxidised hæmoglobin, as unlike to that of reduced hæmoglobin as well may be. Hence the blood and the tissues in poisoning by carbonic oxide are bright-red in colour, whilst, as we all know, in ordinary cases of asphyxia the blood is dark, almost black.

Coal-gas, moreover, contains besides these substances ill-smelling sulphur and hydrocarbon compounds, especially naphtha, which, however objectionable in many ways, have this beneficial quality—that they speedily give us the alarm on an escape of gas, which might otherwise prove fatal. Putting for a moment on one side, therefore, all other ingredients of coal-gas, we have one dangerously potent asphyxiant, carbonic oxide, and one well-known ill-smelling substance, namely, naphtha, and perhaps some of its congeners. Hence, in a person who has been poisoned with coal-gas we should expect to find the peculiar bright-red condition of the blood, and the peculiar smell of coal-gas to be exhaled from the blood and tissues, even for a considerable time after death. The importance of these phenomena is all the greater when we bear in mind that it was admitted by Dr. Littlejohn that the symptoms exhibited by Madame Chantrelle during life were not inconsistent with gas-poisoning. Dr. Douglas Maclagan, however, owing to the absence of all smell of gas about the patient's clothes or in her breath, coupled with the other phenomena of the case, came to the conclusion that he had to deal with a case of narcotic, probably opiate, but not of gas poisoning.

By far the most careful and accurate account we have of poisoning by coal-gas is that founded on the famous Strasburg case, where a whole family, with a single exception, were poisoned by coal-gas. This case was investigated by M. Wurtz (now professor of chemistry at Paris) and M. Tourdes, the latter of whom undertook an important series of investigations in connexion with the subject, whereon he founded a memoir, even now the most important of its kind. Another very carefully studied, and consequently valuable, case was recorded by Dr. W. Taylor in 1874. And it was this case which was much referred to in the Chantrelle trial. In this case a man aged sixty slept all night in a room where coal-gas had been escaping; not more than 3 per cent. was, however, present in the atmosphere. In the morning he was found unconscious, the breath smelling strongly of gas; the pupils were insensible and dilated, and the breathing was laborious. Later on there were convulsions, the eyeballs oscillated in a peculiar manner, the jaws were rigid, and death ensued. Too much was perhaps made of this oscillation of the eyeballs; it was in all probability peculiar to the individual, though clonic spasms have been frequently noted. In these cases of coal-gas poisoning there have been almost invariably found red patches on the face, neck, and chest, sometimes also on the insides of the thighs. The windpipe is reddened; the right side of the heart is distended, but with florid blood. In some cases, however, the blood has been found blackened, as in a case recorded by Mr. Bloxam, so that we cannot be sure that carbonic oxide is invariably the fatal agent. It is needless to remark that such appearances were not discovered in the case of Madame Chantrelle.

One point in connexion with coal-gas poisoning is well worth bearing in mind—that is, its extreme insidiousness. Even with a small quantity of coal-gas—for it will explode if only 10 per cent. be present in the atmosphere—sleep may easily pass into death; and it is just possible that it was Chantrelle's object first to stupefy his victim with a dose of opium, and then to let the coal-gas escaping from the broken pipe finish the fatal work.

THE WEEK.

TOPICS OF THE DAY.

The annual Conference on the Health and Sewage of Towns, originally inaugurated by the Society of Arts, was held last week in John-street. This was the third anniversary of the Conference, and was presided over by Mr. Stansfeld, M.P., who, in his opening remarks, expressed an opinion that the time had come when they might somewhat enlarge the scope of their discussions, and not restrict themselves entirely to the question of the disposal of sewage. He looked forward to the day when local government should be better understood by the public, since, largely viewed, the question of health was very much a question of education. He trusted, therefore, that before long the science of health would be taught in all the schools of the community. A paper was afterwards read by Mr. Alderman Taylor on his experience at Rochdale in the

gradual abolition of cesspools and middens, and the substitution of the pail system with speedy removal. This paper gave rise to considerable discussion. Other papers were read on the "Sewage and Irrigation Farm at Bedford," by Mr. George Hurst; on "Intermittent Filtration through Natural Soil," with a description of the works at Abingdon, by Mr. J. Bailey Denton and his son; and on the "Progress, if any, made in Treating Water-carried Sewage," by Mr. C. N. Cresswell. Dr. Ainsley also communicated a paper on "Ventilation of Sewers and Drains" on Stott's principle, by which the foul gases from the sewers of Halifax were made to pass through the furnaces of the mills, and were thus burned and rendered probably quite innocuous. Dr. Alcock, of Sunderland, insisted upon the importance of having the connexion between the house-drains and the sewers made by the local authorities; and Dr. Hamilton, Dr. Elliott (of Carlisle), and others, including the President, expressed their concurrence with Dr. Alcock on this point.

One of the most popular of the London charities, the Hospital for Incurables, held its anniversary festival in aid of the funds of the institution last week. The report last issued stated that the charity had received the most liberal support. There are at the present time 187 inmates, and 380 pensioners, each of whom receives £20 per annum; these pensioners being distributed over the whole of the United Kingdom. The chairman, Mr. R. N. Fowler, in proposing the toast of the evening, reminded his hearers that the class of diseases treated, though they might not lead to a speedy death, were hopelessly incurable. He found from the statistics of the Hospital that the average mortality amongst the patients was a little over 8 per cent., and among the pensioners 5 per cent. He complimented the Committee on the fact that, notwithstanding the great claims on the institution, it was free from debt. The Hospital was now full, but the Committee were thinking seriously of enlarging it. During the evening subscriptions amounting to the sum of £2500 were announced.

It is satisfactory to find that the Treasury has decided to prosecute Henry George King, the wholesale chemist of Kingsland-green, on charges of manslaughter, and also of misdemeanour, for having sold violet powder containing arsenic in such quantities as to cause injury or death to several children in Loughton. We recently gave particulars of this case, and it now appears, from inquiries instituted by the medical officer of the district, and other officers of the Local Government Board, that the powder sold by the defendant to retail traders at Loughton contained as much as 48 and 49 per cent. of white arsenic. The Treasury had communicated with the defendant, who had explained that he made up the powder of ingredients which he had purchased from wholesale grocers, and that he had no knowledge that they contained arsenic. The preliminary inquiry was commenced last week at the Epping Petty Sessions, and, after a large amount of evidence had been adduced, was adjourned.

A serious warning to chemists and druggists has been given by the recent case of the Society of Apothecaries *v.* Wiggins, to which we have referred more at length elsewhere. The defendant is a chemist in business at Bermondsey, and he was proceeded against for having practised as an apothecary without an apothecary's licence. The evidence showed that two children were taken to his shop and he prescribed for them; in two other cases the mothers of the children called and described the symptoms, and he gave some medicine and directions. It was not contended that the treatment of the defendant was in any way improper from a medical point of view, or that he was doing anything which he had any reason to believe was wrong; the object of the action was simply to try the question whether what the defendant did, and what is doubtless done by chemists every day, is in contravention of the Act or not; and some chemists who had been in the trade in the early years of this century were called, who gave evidence as to what was done before 1815, and deposed that what was known as "counter practice" was practised then. The jury found, in answer to questions put to them by the judge, that the defendant, in doing what was complained of, was acting or practising as an apothecary, and that the complaints under which the children were suffering were not such complaints as a chemist would have prescribed for before the passing of the Act; and upon these findings judgment was entered for the plaintiffs. The importance of this decision is manifest, and if it acts as a check upon the present unsatisfactory system of counter prescribing, one factor in the large ratio of infant mortality will, no doubt, have been removed.

Dr. Francis Reid, Chief Medical Officer of the Island of Mauritius, who has recently been invested by the Queen with the Companionship of the Order of St. Michael and St. George, was formerly in the Army Medical Department, from which service he retired some time since with the honorary rank of Deputy Inspector-General.

The rather important announcement is made that Mr. Robinson, the House of Lords' Examiner, has decided, with respect to the Manchester Water Bill, that the standing orders have not been complied with, the new provisions having materially enlarged the scope of the Bill, and no notice having been given of them.

The Chairman of the Metropolitan Board of Works last week formally opened some new baths and wash-houses in Whitfield-street, Tottenham-court-road, designed for the use of the southern portion of the parish of St. Pancras. The building, which is in the Moorish style, contains two swimming baths, and upwards of 100 private baths provided with hot water, and has been erected at a cost of about £5000 for the land, and £30,000 for the structure; and from the experience of similar cases, it is calculated that, in addition to proving a great boon to the public, the establishment will eventually realise a very handsome profit. Sir James Hogg, in speaking of the sanitary importance of the building, and with reference to the subject of water for baths, emphatically denied the statements which had been made with regard to the present state of the river Thames. He said it was reported that the river was being silted up, and was now in as bad a state as it was formerly, but reports which would shortly be made public would prove the groundlessness of these assertions.

Lord Belper has offered the Corporation of Derby the Derwent Bank Estate (comprising a mansion and sixty acres of land) as a public park, for the sum of £70,136, promising the town authorities a gift of the sum of £5000 if they complete the purchase. The liberality of Mr. Bass, M.P., and Lord Belper will reduce the money required to secure the park to a sum a little over £60,000. At Bradford, on Saturday afternoon last, the third public park in the borough was formally opened by the Mayor. It is situated in the Horton Township, is about forty-five acres in extent, and has been purchased and laid out at a cost of over £40,000. At Portsmouth, also, on Saturday last, the Victoria-park, consisting of about twelve acres leased from the War Department by the Corporation, was opened by the Mayor of that town in the presence of a large number of the inhabitants.

Our contemporary *Iron* says:—"It is possible that we are to have another Commission, this time a permanent one, on

our sources of water-supply, as the result of the late Conference, suggested by the Prince of Wales, at the Society of Arts. Though little that was not previously known appears to have been evoked by the Conference, some good will be done if only attention be drawn to the immense waste of water which is perpetually going on. The proposed double supply to every house in London, as we have already shown, is likely to be useless as regards its main object; and if we are to have a double supply, Dr. Frankland's suggestion to use one for outdoor purposes only, and sell the other for domestic use by meter, is a very good one. It is in domestic use that water is chiefly wasted, and such waste of a necessity of life is almost criminal. Another good point brought out was the ridiculous nature of our persistent adherence to the parish principle of local government. The proposal to divide the country into districts of convenient area according to its watersheds is so sensible a one, that on that ground alone we fear it will never be carried into effect. But possibly this question may be more fortunate in getting settled than such matters generally are, seeing that besides being of vital consequence to the nation at large, it has been taken up by a powerful and influential society, and publicly advocated by a member of the Royal family. A movement which is only important may often be safely neglected, but a fashionable one will generally insist upon being attended to."

Two proposals have been made for the disposal of the Mitchell bequest to the City of London. The first is to establish a public swimming-bath, and the second to erect and endow a school for girls. To these the *City Press* adds a third suggestion, viz., the institution of a convalescent home for patients discharged from the two City hospitals, St. Bartholomew's and the Metropolitan Free. Every week there are numbers of patients discharged from these hospitals, cured of their ailments, but still unfit to resume the active duties of their several callings; and our contemporary thinks that the Mitchell bequest would be spent in a truly Samaritan manner if an opportunity were afforded to these poor people to regain health and strength before again beginning their daily toil.

We may remind our readers that the special service for our profession is, by the permission of the Dean, to be held in St. Paul's Cathedral this (Friday) evening, May 31, at 8 p.m., when the sermon will be preached by the Rev. George Body. The seats under the dome have been reserved for members of our profession and their friends, who will be admitted at the north and south doors of the Cathedral on presenting the cards issued by the Guild of St. Luke, Physician and Evangelist, or their own visiting-cards.

THE LEAMINGTON PROVIDENT DISPENSARY.

The ninth annual report of the Leamington Provident Dispensary for the year 1877 claims for that institution an increasing amount of popularity and usefulness amongst that class of the community for whose benefit it was established. Thus, although the benevolent contributions have somewhat fallen off, the number of provident members has considerably increased, as is evidenced by the fact of their payments being more by £46 than during the preceding year. The Committee are decidedly opposed to the pernicious system of giving medical assistance to all comers indiscriminately (a practice which, they say, is unfair to the medical profession, and injurious to the poor themselves); at the same time, they exclude no applicants whose circumstances, on investigation, fairly entitle them to the benefits of the institution. The medical officers report that, owing possibly to the depression of trade, a larger number of the working-classes have availed themselves of the advantages of the Dispensary during the past year, and it has manifestly taken a hold upon the people for whom it was designed, many of whom have expressed their thankfulness for its beneficial aid. Taking into consideration that the fees from members amount to nearly £600, whilst the subscriptions and donations are only £122, it may be said that the Provident Dispensary of Leamington sets a very good example to all institutions of a similar character.

STIRLING LUNATIC ASYLUM.

In the eighth report of the Stirling District Lunacy Board for the counties of Stirling, Dumbarton, Linlithgow, and Clackmannan, the Medical Superintendent, Mr. James McLaren, states that the general health of the inmates was good, and no epidemic of any kind occurred during the year, although the Asylum was exceptionally full during the period. Several of the admissions were cases of great excitement, requiring much supervision and care to prevent them injuring themselves or others; but Mr. McLaren says it is a noteworthy fact, and surely one bearing strongly on the benefit of asylum treatment, that the whole twenty-four male recoveries, and thirty-two out of the forty female recoveries, were resident in the Asylum for periods of under one year. In the individual cases where excitement has occurred, Mr. McLaren adds that little reliance was placed on narcotics or other so-called soothing medicines. He states that it has struck him very forcibly that in attacks of acute mania the recovery has been more rapid and the intellect much clearer and brighter where these have been avoided. They may undoubtedly produce temporary quiet, but the condition in many cases seems rather one of stupefaction than anything else. The dull, hazy, muddled condition in which large doses of chloral and other similar drugs leave a patient is certainly often not a very hopeful state as regards the ultimate recovery of nervous tone; on the contrary, it has often seemed to him that the combined effects of acute excitement and large doses of narcotic medicines have been something bearing a strong resemblance to a complete wreck. Mr. McLaren allows no patient suffering from acute mania to go beyond the first day without food; if he persists, as they often do, in refusal, a good and sufficient meal is administered by means of the stomach-pump.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

At the meeting on Wednesday, May 15, Mr. S. T. A. Salter, F.R.S., President, in the chair, Mr. T. Lyons showed a patient (a female) who, when four years of age, had an attack of measles, from which necrosis involving the superior maxillary bone supervened. An operation was then performed, whereby part of that bone, consisting of the alveolus, extending from the right first temporary molar to the left canine, and part of the vomer and palate, were removed. The disease also extended over the right ala. She first came under Mr. Lyons' notice a few months since, being then twenty years of age, and presented a most unprepossessing appearance, through inability to close the right side of her month, owing to the contraction of the cicatrices, which drew the lip upwards. On March 18 she was placed under chloroform, and the folds of mucous membrane connecting the cheek with the bone were carefully divided. The operation was so far successful that she was at once able to close her lips upon each other, and allow an artificial piece, as well as an artificial ala, to be inserted; and with most satisfactory results as regards her personal appearance.

Mr. Gaine read a paper on some forms of Trismus arising from Dental Irritation. He prefaced his remarks by observing that some of these cases of trismus were very obscure in their origin, but the majority of them arise either from difficulty in erupting the wisdom teeth, owing to an overcrowded condition of the teeth generally, or to peri-

odontitis or necrosis. The majority of those cases that came under his notice occurred in young women, and were associated with hysteria; and in the diagnosis it would be well to separate those which arise from dental irritation from those which are mixed up with hysteria. The former, if seen at an early stage, are much more readily dealt with than the latter, though at the same time the local symptoms may be much more severe. In those cases arising from dental irritation when the jaws are closed, recourse must be had to some anæsthetic in order to forcibly separate them, when some lesion will generally be found connected with one or more teeth, which should be at once removed. A notched wedge or Mr. Maunder's screw-gag were of great service in these cases, and the patient should be instructed to constantly wear it, and move it backwards and forwards at frequent intervals, until natural mobility is re-established. In cases of long standing, Mr. Gaine found it the best practice to force a piece of tapered ivory between the molar teeth, and gradually work it on until the screw-gag can be inserted. The other class of cases—those connected with hysteria—are frequently difficult to diagnose, the closure of the jaws usually occurring suddenly, and many of the symptoms of tetanus being present. Mr. Gaine then related three cases of trismus, associated with this hysterical condition, which had recently come under his notice, arising from tooth-irritation. In all the cases he had seen he did not know that he could point to one that came on suddenly that was not more or less associated with hysteria—of course alluding only to cases of trismus unconnected with tetanus. He believed it was generally an accepted fact that spasm of some form or other, affecting in nearly all cases the masseters and pterygoids by what is termed reflex action, was the cause of the muscular rigidness which had to be contended with. Nor was it only these muscles that were affected, but indirectly, through the connexions of the fifth nerve with the seventh, nearly all the facial muscles sympathise, and frequently the glosso-pharyngeal nerve through the otic ganglion affects the muscles of deglutition. Mr. Gaine concluded by observing that he thought much light might be thrown upon the pathology of these cases, which are so closely mixed up with hysteria, by a physiological investigation of the connexion of these nerves with the sympathetic.

A discussion ensued, in which the President, Mr. W. A. N. Cattlin, Mr. Napier, and Mr. H. Cartwright took part. Mr. Gaine replied.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.

The eighth and last meeting of the twenty-second session was held at the Royal Kent Dispensary, Greenwich-road, on Friday, May 3, W. Johnson Smith, F.R.C.S., President, in the chair. In accordance with Rule 15, Drs. Gooding, Moon, and Mr. Lockhart were appointed auditors of the treasurer's account. The following members brought forward cases for discussion:—Dr. R. Gooding: Pregnancy complicated with small-pox. Dr. Creed: Intra-cardiac thrombosis (recovery). Mr. C. P. Creed: Compound comminuted fracture of skull in a boy aged nine, followed by very large hernia cerebri (recovery; boy shown in very good state of health). All the cases were of great practical interest, and gave rise to a lively discussion, in which nearly all present joined. The annual dinner is fixed for Tuesday, June 25, at the "Ship," Greenwich, at 6 for 6.30 p.m. precisely; morning dress.

COLLEGE FOR LIVERPOOL.

At a very large and influential town's meeting, summoned by the Mayor of Liverpool, and held at the Town Hall on the 25th ult., it was resolved that it was desirable "that a college be established in Liverpool to provide such instruction in all the branches of a liberal education as would enable residents in the town and neighbourhood to qualify for degrees in arts, science, and other subjects, at any of the universities granting degrees to non-resident students, and at the same time to give such technical instruction as would be of immediate service in professional and commercial life"; and a representative committee of thirty, with power to add five to their number, was appointed to draw up a scheme, and submit it to a future meeting.

THE SMALL-POX EPIDEMIC IN DUBLIN.

At the weekly meeting of the Board of Poor-Law Guardians of the South Dublin Union, on May 23, Mr. W. O'Brien, Inspector of the Local Government Board (Ireland), said he possessed returns for the past two months supplied by the Public Health Committee of the Corporation of Dublin, showing the progress of the epidemic. On March 22 the number of cases in all the hospitals in the city was 136, consisting of 93 acute and 43 convalescent cases. On April 22 the numbers had increased to 218, consisting of 151 acute and 67 convalescent cases. On May 22, after the lapse of two months, the number had increased to 315, consisting of 208 acute and 107 convalescent cases, and it appeared there had been a further increase since that date. This showed that the epidemic had been steadily on the increase, and at no time since the outbreak had the numbers reached the figures returned on May 22. The Registrar-General's weekly returns of deaths also show that the worst of the outbreak is by no means yet over. In the four weeks ending March 23, 32 deaths from small-pox were registered; in the four weeks ending April 20, there were 41 deaths; and in the four weeks ending May 18, the number of deaths had further risen to 71.

MEDICAL PARLIAMENTARY AFFAIRS.

In the House of Lords, on Wednesday, May 22, the reported amendments on the Contagious Diseases (Animals) Act were received, and the Bill ordered to be committed on the following Monday.

The Contagious Diseases Act.—In the House of Commons, Sir Harcourt Johnstone introduced, without sufficient notice, a Bill for the repeal of the Contagious Diseases Act. After a good deal of wrangling about the proposal to clear the ladies' gallery during the debate (which proposal was not adopted), the further consideration of the Bill was adjourned while Mr. W. H. Smith was still speaking in defence of the Act.

Sale of Food and Drugs.—The Lord Advocate, in reply to Mr. Holms, said that the decision of the High Court of Justice for Scotland had not rendered this Act inoperative, as it only affected Clause 6; but he admitted that the practical effect would be to stop prosecutions under the Act. He understood that an appeal from a decision of the magistrates of Sheffield upon the same question was now pending; and he thought it better to wait and see what might be the judgment of the superior courts before taking steps to remedy this defect.

Metropolis Waterworks.—Sir J. McGarel Hogg moved that the order for the second reading of this Bill be discharged. He regretted the opposition which the Bill had experienced, rendering it impossible to carry the measure this session. The Metropolitan Board of Works had not in the least changed their opinion relative to the desirability of purchasing the waterworks of the metropolis. If, as is probable, the Bill become law next session, the cost of purchasing will then be much greater.

The Medical Act (1858) *Amendment Bill.*—The Duke of Richmond suggested that as he had amendments to propose, it would be better to have the Bill reprinted, and postpone the discussion for a future evening. He had allowed a considerable interval between the second reading and the reference to the Committee, in order to give ample time for the full discussion of the measure by the medical profession and the public. He had received several deputations and letters from all the parishes of the country, criticising or approving of the Bill. When introducing the measure, he expressed an opinion that there ought to be a uniform minimum standard

of examination for those who sought to enter the medical profession; and he expressed concurrence in the opinion that a Conjoint Board for each part of the United Kingdom was desirable for this purpose. The Scottish universities presented considerable difficulties with respect to this question, so that at that time he did not see his way to introduce a clause to make it compulsory to establish a Conjoint Board. Fully assured of the desirability and practicability of such an arrangement, he ventured to propose a compromise which he thought might be acceptable. He thought it would be sufficient if all the medical corporations of the country were to form a conjoint scheme, leaving it to the universities to come in if they thought fit. Having circulated this proposal throughout the country, he received replies—all adverse to the proposal, as they desired to have the universities included. The views advanced by the corporations were very impartial, and he could not resist the strong arguments which had been adduced against such a compromise. He had very reluctantly come to the conclusion to ask their lordships to allow him to amend it, so as to make it compulsory to form a Conjoint Board for each division of the United Kingdom. He hoped the universities of Scotland would appreciate his motives, and see that he was doing what he believed would be best for the profession and the public. The Marquis of Ripon, Earl Granville, and Viscount Powerscourt having spoken in favour of compulsion, the Bill passed through Committee *pro formâ*.

Contagious Diseases (Animals) Bill.—This Bill was considered in Committee, especially with regard to quarantine arrangements for foreign animals afflicted with disease during transit. The Duke of Richmond explained that compulsory slaughter at the port of debarkation of all fat animals being the principle of the measure under consideration, quarantine arrangements would only be required for store cattle. The Marquis of Ripon complained that the Bill refused discretion to the Privy Council in respect of cattle coming from European countries as regards compulsory slaughter. He thought it unjust to impose severe restrictions on the foreign trade when the same restrictions were not to be enforced with the home trade. He feared that the price of meat would be considerably raised by such stringent measures. This 33rd Clause differed from the rest of the Bill, in that it seemed to be framed with the special object of protecting British agriculturists. He desired to add to the clause a qualifying provision, allowing the Privy Council power at their discretion to suspend the operation of this clause relating to slaughter and quarantine. The Duke of Richmond said that the country had been remarkably free from contagious diseases during the past eighteen months. He would meet the amendment with the direct negative, as he must deny that the clause as it stood would have the injurious effects ascribed to it. The Marquis of Salisbury explained that the producer in this country furnishes the consumer with sixteen-seventeenths of all that is consumed, and the producer must therefore have some confidence that his interests are duly protected. The amendment was lost, and the clause added to the Bill. Lord Emly desired the omission of Clause 78, as it applied to Ireland. The Duke of Richmond agreed that the veterinary department in Ireland should be strengthened, so as to command more respect. The remaining clauses being agreed to, the Bill was reported.

In the House of Commons, Mr. Cross, in reply to Mr. P. Taylor, said that he had been in communication with the Commissioners of Lunacy on the subject of post-mortem examinations. They had expressed a very decided opinion upon the subject. He referred the hon. member to their report.

Public Health Act (1875) *Amendment Bill.*—In the House of Lords, on Tuesday, May 28, the Earl of Kimberley moved the second reading of this Bill, which had come up from the Commons. Its object was to enable rural sanitary authorities to provide or require provision of a sufficient water-supply where it appeared to them that any house within their jurisdiction was not properly supplied; such supply to be provided at a reasonable cost not exceeding a capital sum the interest on which at the rate of 5 per cent. would amount to 2d. per week. Or the owner of the house might be required by the Local Government Board to provide the supply, and, in case of non-compliance, to provide it themselves and charge the owner with the expense. All houses built after the passing of this Act must have a certificate from the rural sanitary authority certifying to the existence of an efficient supply of water, without which the house could not be inhabited. By adopting this measure the same powers would be extended to the water-supply as already existed with reference to the prevention of overcrowding and other nuisances. The Duke of Richmond, while approving the Bill generally, said that it would require amendment in Committee. If there were no available supply it would be rather hard to condemn the owner. The Marquis of Salisbury said that in many country districts good water was brought from a distance, and also by storage of rain-water in tanks. It might be well to have a declaration in the Bill that rain-water was wholesome, as there existed a prejudice against it. The Bill was read a second time.

Metropolis Management and Building Acts Amendment Bill.—Viscount Midleton moved the second reading of this Bill, which had been fully discussed in the House of Commons. The first part dealt with the erection of houses, etc., at less than a prescribed distance from the centre of the road or highway; the second part contained provision for by-laws in reference to foundations; and the third part dealt with powers of inspection. The Bill was referred to a Committee of Selection, as there were several petitions against it.

CLINICAL LECTURES
ON THE CONNEXION OF THE DISEASES OF THE THROAT AND CHEST.

DELIVERED AT THE HOSPITAL FOR DISEASES OF THE THROAT AND CHEST.

By ROBERT HUNTER SEMPLE, M.D., F.R.C.P.L.,
Physician to the Hospital.

My colleagues in this Hospital having done me the honour of requesting me to open the course of lectures proposed to be delivered in the present spring session, I have much pleasure in acceding to their request, although I am rather embarrassed by the extent of the subjects I am called upon to illustrate, and also by the want of acquaintance with my probable audience, some of whom may perhaps understand my theme as well as, or better than I do myself, while others may be mere novices, and require elementary instruction. The use of the laryngoscope, and the nature of the information conveyed by its means, are by no means yet universally known, and even those who are well acquainted with the principles of the construction of this instrument may have much to learn in its practical manipulation, in bringing the laryngeal structures by its means fully into view, in arranging the position of the patient, in reflecting the light, and, in fine, in observing all the details necessary for a full examination of the larynx, and for the due application of local remedies. For the acquisition of this kind of information this Hospital affords abundant materials, and the room in which we are now assembled is fitted with all the necessary apparatus for laryngoscopic researches; and those who please to remain after this lecture will have an opportunity of practical observation of cases now under treatment in the institution.

The large diagrams hung on the walls, and the models on the tables, will convey some idea of the structures of the larynx and of the functions performed by its various parts, but I must draw particular attention to the mechanism by which the aperture of the glottis is adapted to receive the air, and to produce or modulate the voice. The glottis is opened by the crico-arytænoidei postici muscles, which are thus the abductors of the vocal cords, and it is closed by the joint action of the crico-arytænoidei laterales and the arytænoideus proprius, which are thus the adductors of the same cords. These cords, again, are tightened or made tense by the crico-thyroid muscles, and they are relaxed, and the tone or pitch of the voice is regulated, by the thyro-arytænoidei. Some of the diagrams exhibit the appearances presented by the laryngoscope, and you will observe that, owing to the laws of the reflection of light, the image presented by the mirror exhibits the parts in a different position from that which they really occupy. Thus the epiglottis, which is anterior, appears at the upper part of

the image, while the arytænoid cartilages, which are really behind, appear below and in front.

Having thus explained and illustrated the structure and functions of the larynx and its different parts, and having shown the appearances presented by the mirror, I proceed to the proper subject of this lecture, namely, the connexion existing between the diseases of the throat and chest; and the first subject is laryngitis, which I divide into three forms, namely, acute laryngitis, subacute laryngitis, chronic laryngitis, and infantile laryngitis. The last, although not pathologically distinct from the others, presents such remarkable peculiarities as to demand separate and special notice.

Acute laryngitis in the adult is not a very common disease in the present day, at least if by that term we indicate the affection described in books as marked by inflammatory fever, increased temperature, rapid and full pulse, great difficulty of breathing, stridulous cough, and threatening of suffocation. If I may trust my memory, such cases were more common many years ago than they are now, but judging from practical experience and the clinical records of this Hospital, it may, I think, be affirmed that acute idiopathic laryngitis in the adult is now a somewhat rare affection. The word *idiopathic* eliminates from the category all those constitutional maladies and complications which make laryngeal diseases specially dangerous. Still, acute laryngitis does sometimes occur, and it demands active treatment, the most important medicinal agent being tartar emetic; and when œdema of the glottis supervenes, as it may do, tracheotomy is imperatively demanded.

Subacute laryngitis is a disease treated literally by hundreds of cases every year at this Hospital. It is caused by those ordinary agencies to which all persons are exposed, although some classes suffer much more than others; and its results are very different in the various classes of life. Thus, although it is very common in persons exposed to the vicissitudes of weather, such as cabmen, omnibus drivers and conductors, policemen, stokers, night porters, mariners, costermongers, postmen, and others engaged in similar ways, it does not entail in them the heavy pecuniary losses which it does in professional persons, such as clergymen, singers, and actors, who depend for their living more or less on the exercise of their voice. One characteristic feature of this affection is hoarseness; and a degree of inflammation which would not materially interfere with a porter or a policeman in the performance of his duties, would be ruinous to an opera singer or an actor, whom only a slightly increased vascularity of the vocal cords would materially affect in the exercise of his or her vocation. In the case of clergymen the malady is sometimes called "clergyman's sore-throat," which I do not regard as a special affection, but as one caused by the ordinary agencies giving rise to subacute laryngitis, and perpetuated by continuance of the efforts in public speaking. The various forms of this affection as involving the vocal cords, the arytænoid cartilages, the ventricular bands, I now demonstrate on the black board by means of coloured chalks, and you will presently have an opportunity of verifying the appearances on the living subject. The treatment of this form of laryngitis, although often tedious, is generally satisfactory, and local measures are far more valuable than constitutional ones. The direct application of alterative solutions to the vocal cords will often be of immediate service in cases which have been previously treated in vain by general medicines, sedatives, and gargles, which last pass over the epiglottis into the pharynx, and do not touch the seat of the disease. The subacute laryngitis, although often productive of great and protracted suffering, is rarely fatal; but I wish particularly to observe that this remark applies only to idiopathic subacute laryngitis, and not to those numerous cases where the disease is complicated by constitutional or specific morbid influences.

Dr. Fordyce Barker.—The Board of Trustees of Columbia College have done a graceful thing, which will cause great satisfaction in many and widely different circles on both sides of the Atlantic. They have conferred the degree of LL.D. upon Professor Fordyce Barker, of New York, by a unanimous vote. It is rarely such an honour is so deservedly conferred, and Dr. Barker's numerous friends in England will be much gratified by the compliment paid to him.

EPIDEMIOLOGICAL SOCIETY.

At a meeting of this Society on the 11th ult., the President, Surgeon-General Dr. John Murray, in the chair, a paper was read by the President, "On the Plague and Typhus Fever in India."

Dr. Murray said: Plague or bubonic typhus was first noticed in India during the present century. It appeared in Katywur, on the west coast, in 1816, and caused great mortality till 1821. It crossed a range of hills and appeared at Rajpootana, at Palee, in 1836, and spread to the surrounding towns till 1838. The typhus fever, with prominent symptoms of yellow fever, appeared to extend northward in 1837-38 to the Doab and Rohilcund. In 1836 the plague was reported to be causing great mortality in Gurhwal and Kumaon, in the Himalaya Mountains. On investigation it was found that this disease had first appeared in 1823 in Gurhwal, at a temple in Kidarnath, where the people said that it was an infliction from the gods for a neglect by the high priest of the ceremonies prescribed in the Shaster; it killed the high priest and all the Brahmins of the temple, and spread with the pilgrims to the surrounding country. It continued to spread to the surrounding country, with occasional aggravations, from that date down to 1877. In 1852 a typhus fever, with symptoms of yellow fever, and in addition buboes in the groins, axillæ, and neck, made its appearance in the hilly country of Eusofzai, about forty miles north of Peshawur, and proved very fatal during that and the following years. A detailed account of the symptoms, as given by Dr. Forbes of Palee, Dr. Farquhar at Eusofzai, and Dr. Plank at Kumaon, showed all the symptoms of plague as described in Egypt and Europe, and all the varieties and modifications usually found in those countries. A typhus fever with all the symptoms of yellow fever, and occasional suppuration of the glands of the neck, appeared in Saugor in the year 1859. In 1860 a virulent attack of the same disease broke out in the Central Prison at Agra, and proved fatal in 313 cases; in the same year a similar disease in the central prisons of Meerut, and Lucknow, and Allahabad proved fatal in 492 cases. In 1863 it appeared at Lahore, and subsequently in other prisons in the Punjaub. The disease still appears in the Punjaub; the total mortality up to 1875 having been 5346. The general symptoms in the most intense cases of all these diseases were alike—extreme prostration of body and mind, with torpor, followed by death in twelve or twenty-four hours, leaving no local symptoms of bubo or jaundice, only a black liquid state of the blood. Buboes were early and prominent symptoms at Palee. They did not appear till the fourth and up to the seventeenth day in Kumaon, whilst nearly all the cases proved fatal before the third day. In Eusofzai they did not appear till the eighth or eighteenth day. In the Doab, as in the subsequent gaol attack, the glands in the groin were very rarely affected; those in the neck were more frequently affected, but this was not a prominent feature in the disease. In all these diseases the approach of the hot season checked the attack in the same manner as plague is arrested in Egypt and Turkey. [This was shown in several interesting tables.] These diseases were regarded by all the medical officers as contagious and capable of being transmitted from a patient to a healthy person, and all concur in the dissemination being essentially promoted by crowding, bad ventilation, and defective sanitary arrangements. None of the medical officers engaged in investigating the outbreaks of plague in Katywur, Palee, Kumaon, and Eusofzai were attacked by the disease, nor were any of the civil surgeons in charge of the sixty-eight gaols in the North-West Provinces and Punjaub since 1860 attacked, with one exception, and he recovered. The native doctors and hospital attendants, more especially the sweepers, suffered severely in many instances. The opinion of the inhabitants of Kumaon of the contagious nature of the disease is shown by the practice of deserting the villages where the "gola" or bubo appears, and prohibiting the inhabitants of an infected village entering their houses. This principle guides the regulations of the Government of India for the removal of troops from cantonments, and of prisoners from gaol, on attacks of cholera or typhus fever. The result in saving life has been very satisfactory, as, had the mortality of European troops from cholera continued during the last thirteen years at the same rate

it was the previous thirteen years, it would have amounted to 5340, instead of 1994, which actually occurred. The disease, which is now proving so fatal among the Russian troops in Armenia and Bulgaria, under the various names of spotted typhus, black typhus, plague typhus, is probably induced by the same poison as plague, which produces the variety of local symptoms which are modified by season and temperature in India, and for practical purposes would indicate the same course of prophylactic treatment.

FROM ABROAD.

The Intravenous Injection of Milk.

Dr. Gaillard Thomas, in a paper published in the *New York Journal of Medicine* for May, observes that, notwithstanding all the efforts that have been made to render transfusion of blood a practically useful operation, it has met with but scanty success, so that "many of our boldest and most skilful surgeons have never performed it; and cases demanding it, according to the dicta of its upholders, are dying among us constantly without receiving the benefits which are claimed for it." The reason why the operation enjoys so limited an amount of the confidence of the profession is to be found, he believes, in its inherent difficulties and dangers, which almost all arise from the tendency to coagulation that exists in the fluid employed. The object of the present paper is to show that milk may be safely and advantageously substituted for blood, this being a liquid closely analogous to chyle, whence blood is made. This has now been employed in twelve cases in all, and the conclusions which Dr. Thomas draws from the results are as follow:—

"1. The injection of milk into the circulation in place of blood is a perfectly feasible, safe, and legitimate procedure, which enables us to avoid most of the difficulties and dangers of the latter operation. 2. In this procedure none but milk removed from a healthy cow within a few minutes of the injection should be employed. Decomposed milk is poisonous, and should no more be used than decomposed blood. 3. A glass funnel, with a rubber tube attached to it, ending in a very small canula, is better, safer, and more attainable than a more elaborate apparatus, which is apt, in spite of all precautions, to admit air to the circulation. 4. The intravenous injection of milk is infinitely easier than the transfusion of blood. Anyone at all familiar with surgical operations may practise it without fear of great difficulties or of failure. 5. The injection of milk, like that of blood, is commonly followed by a chill, and rapid and marked rise of temperature; then all subsides, and great improvement shows itself in the patient's condition. 6. I would not limit lacteal injections to cases prostrated by hæmorrhage, but would employ them in disorders which greatly depreciate the blood, as Asiatic cholera, pernicious anæmia, typhoid fever, etc., and as a substitute for diseased blood in certain affections which immediately call for the free use of the lancet, as puerperal convulsions, etc. 7. Not more than eight ounces of milk should be injected at one operation. 8. In conclusion, I would suggest that, if milk answers, not as good, but nearly as good, a purpose as blood under these circumstances, its use will create a new era in this most interesting department of medicine. That it will answer such a purpose I am convinced from lengthy consideration and some experience of the matter, and I should be false to my own convictions if I did not predict for 'intravenous lacteal injection' a brilliant and useful future."

Death from Chloroform.

An account is given in the *New York Medical Record* (April 13) of the proceedings which have been taken at Philadelphia against Dr. H. G. Winslow, a dentist, with respect to a death which resulted during the use of chloroform. A woman having gone to him to have some teeth extracted, he proceeded, after being assured that she was in perfectly good health, to administer chloroform, without examining the state of her heart. Three teeth were removed, and after the chloroform had been repeated another was extracted. But it was now found that respiration had ceased, and all efforts at restoration proved in vain. Whatever may have been the abuses of the coroner's court in some of the States of America, it seems to be managed in a very efficient manner in Philadelphia; for not only are autopsies performed by an officer of the court, but the jury is not selected in the haphazard way in which it is among ourselves, but rather resembles a jury of experts. On the present occasion, for example, it was composed entirely of medical men—the profession in America not claiming exemption from the office of jurors. The "coroner's physician" having detailed the results of the post-mortem, which showed that the heart had been diseased, the jury found a verdict of "Criminal ignorance in administering so powerful a remedy without having made any previous examination of the patient." The coroner, who from his address we suppose was also a medical man, delivered a severe censure on Dr. Winslow, first for having used chloroform at all for so trifling an operation, and next, for having done so without prior examination; and he committed him for trial. The *Medical Record* strongly approves the verdict, and has no doubt that the grand jury will find a true bill.

Morbid Local Temperature in Pleurisy.

Prof. Peter, in a communication to the Académie de Médecine (*Bulletin*, April 30), states that he is desirous of recording the results of a long series of investigations on morbid local temperatures in which he has been engaged. His first communication relates to the *temperature of the thorax in acute pleurisy*, and the variations which this undergoes according to certain determinate conditions, in relation to the normal mean temperature and the parietal temperature of the healthy side. This is not, he says, a piece of mere scientific curiosity, but has immediate useful clinical applications, enabling us, among other things, to establish a diagnosis in doubtful cases of commencing pulmonary tuberculisation.

The results of his investigations show:—1. On the side of the pleurisy the parietal temperature is always greater than the mean temperature (35·8° C.); this morbid excess, or *local hyperthermy*, amounting to from 0·5° to 2° and more, since the local temperature may reach 38°, 39°, or even 40°. 2. The elevation of temperature increases with the effusion, *i.e.*, this increase corresponds to the period of secretory activity of the inflamed pleura, and may amount to 2·5° or 3°. 3. This temperature decreases as soon as the level of the effusion remains stationary, that is, when it ceases to be produced. But, generally, the parietal temperature still exceeds that of the unaffected side by from 0·5° to 1·5°. 4. Not only does the pleurisy raise the temperature on the affected side, but also that on the opposite side; but the temperature is always higher (from some tenths of a degree to one degree or more) at the former than the latter. 5. The parietal temperature becomes gradually lower as the effusion is spontaneously absorbed, always, however, remaining higher (generally by some tenths of a degree) than on the sound side, such increase persisting for a considerable time. Such persistence is not to be neglected, as it indicates the continuance of the anatomical conditions which give rise to the effusion, and the possibility of a relapse. 6. In cases of pleurisy without effusion (as diaphragmatic pleurisy, for example) the local hyperthermy is less high, and the normal temperature returns more rapidly. 7. Perhaps one of the most interesting facts is that the *absolute elevation* of the local temperature of the bad side is more considerable than the absolute elevation of the axillary temperature, although the axillary thermic figure may be higher than the parietal thermic figure. This local hyperthermy precedes the axillary hyperthermy—two circumstances which demonstrate the predominant influence of the pleuritic morbid process over the general condition, or at all events over the general temperature. 8. When the effused fluid is evacuated—that is, the cavity of the pleura emptied—an unexpected phenomenon is immediately produced: the elevation of the parietal temperature on the punctured side; and one of two circumstances may take place. (*a.*) If the effusion is not reproduced, the temperature (which before the puncture was higher than normal and higher than on the sound side) may rise some tenths of a degree still higher. But this is the case only for from twenty-four to forty-eight hours, after which the parietal temperature sinks first to the figure it stood at before the operation, and then continues to decrease till it reaches the normal

figure, 35·8°. (*b.*) If the secretion is reproduced and then absorbed again, during the period of renewed secretion the local temperature rises very notably, as much as 1° some hours after the puncture. It hovers about this hyperthermy for some days, then decreases under the influence of medicinal agents, returns to the figure it stood at prior to the puncture, and finally returns to the normal state. It is remarkable that, both as regards the elevation and depression of the temperature, the parietal temperature always precedes the axillary temperature, the local malady seeming still to govern the general temperature. When for the reproduced effusion, puncture requires to be again resorted to, we have local preceding general hyperthermy, and then a stationary condition of the local temperature during the effusion. After a new puncture the same thermic and secretory phenomena are reproduced.

Paper Lint.

In a paper in the *Philadelphia Medical Times* (March 30) Dr. Keen calls attention to the great advantage derived from the employment of this substance, which is prepared by Messrs. Wyeth, chemists, Philadelphia. It is sold in sheets of about twelve by eighteen inches, as thick as patent lint, and consists of pure paper felt. Its absorbent power is far greater than that of patent lint, while it is vastly cheaper, viz., about three cents an ounce, while patent lint costs about twelve cents and a half per ounce. Estimated by the square foot, patent lint is nearly three times as costly as the paper lint. Having given it a full trial in his wards at St. Mary's Hospital, Dr. Keen states that—

"It has given great satisfaction, and is immensely superior in most cases to patent lint. As an absorbent, there is no comparison between the two; and as a means of applying moist dressings, such as lead-water and laudanum, warm or cold water and solutions, it answers as well as ordinary lint, except in one particular, that of tearing too easily. To remedy this, I have suggested to Messrs. Wyeth that a sufficient number of cotton or linen threads be added to the pulp to give it greater tenacity; and when this is done it will be better than ordinary lint. For salves and other dry dressings, on even or moderately uneven surfaces, it answers admirably; but on very uneven surfaces, as the ends of some stumps, it is not so pliable as patent lint, and does not so readily adapt itself to the inequalities of surface. I have also used it for belladonna plasters, etc., with good success. If, however, the plaster is so stiff as to require considerable rubbing, it is apt to scale off in layers—a defect which I expect the threads above alluded to may very probably remedy. Once that the proper tenacity, softness, and thickness are attained, it is easy to see to what excellent uses the paper-lint may be applied. It can be impregnated with carbolic acid, salicylic acid, chloral, or other antiseptics, and used dry or wet; with astringents and hæmostatics; and, coated with rubber on one surface, it will answer admirably for light poultices. I have used it covered with waxed paper with excellent results. This *waxed paper*, which I introduced into St. Mary's Hospital some years ago, has almost entirely replaced there the more expensive and scarcely more useful oiled silk. It is prepared in the Hospital from French tissue-paper, and is of excellent quality and very cheap."

Prof. Neumann on Chrysophanic Acid.

As our readers are aware, Mr. Balmanno Squire in 1876 introduced this substance to the notice of the profession as a valuable agent in the treatment of psoriasis. As the result of his trials with it at the Vienna General Hospital, Prof. Neumann (*Wiener Medizin. Presse*, Nos. 14-16, 1878) reports upon it in the most favourable terms. He concludes his paper as follows:—1. That chrysophanic acid derived from Goa powder is an excellent remedy in herpes tonsurans, pityriasis versicolor, and psoriasis vulgaris. 2. In its earlier stages psoriasis begins to disappear after a few applications of the acid, and that far more decidedly than under the use of any other remedy. 3. It is quite exceptional to find even inveterate forms of this disease opposing any protracted resistance to it. 4. Chrysophanic acid forms a perfectly painless application to the diseased skin. The morbid phenomena produced by it on healthy skin result apparently from the combination of resinous matter with the acid. 5. Psoriasis may thus be said to have ceased to be one of those diseases of the skin which cause so much misery to the patient, relapses having become easily curable.

REVIEWS.

The Materia Medica of the Hindus: compiled from Sanskrit Medical Works. By Udoy Chand Dutt, Civil Medical Officer. With a Glossary of Indian Plants, by George King, M.B., F.L.S., Superintendent of the Royal Botanic Garden, Calcutta, and the Author. Calcutta. 1877. Pp. 354.

The object and scope of this work are perhaps sufficiently indicated in the title, but we may remark that the English text is accompanied throughout with extracts from the original Sanskrit, and it is therefore easy to compare the modern interpretation with the ancient language. It may be thought by some readers that the results to medical science of the present day are hardly commensurate with the labour evidently bestowed upon this book by the learned author; but still the information conveyed is very interesting, not only to those numerous members of our profession who may be practising in India, but also to the cultivators of therapeutical knowledge throughout the world. Mr. Dutt states in his preface that "the book is not a literal translation of any particular treatise, but a compilation from standard Sanskrit medical works, arranged somewhat upon the plan of 'Waring's Manual of Therapeutics,' and intended to give a concise exposition of the materia medica of the Hindus." Dr. Wise had previously given a pretty full and accurate account of the anatomy, surgery, and pathology of this ancient people, but had not in his book touched on their materia medica, and Mr. Dutt has now attempted to supply the omission, under the impression that his volume will prove an acceptable contribution to the history of drugs, and that it may form a basis for further researches on indigenous medicines.

In illustration of the necessity which exists in India for the publication of a manual such as that presented to us by Mr. Dutt, the author states that Sanskrit medical works are so numerous and so indefinite as to require selection and arrangement in order to be made practically useful. Manuals and essays are to be found in abundance, and it would appear that, in the absence of printing, teachers of medicine formerly prepared small compilations, containing the preparations they were in the habit of using, for the guidance of their pupils, who copied them for personal use. But besides these miscellaneous productions, there are some few works which, owing to their comprehensive character, ancient date, or real merit, are well known throughout India. The oldest and most celebrated treatises on Hindu medicine now extant are those named "Charaka Sanhita" and "Susruta Ayurveda"; and an older work called "Ayurveda" is mentioned by both these, and is said to have been originally composed by Brahma the Creator, and to have consisted of a thousand chapters divided into very numerous sections. The work called "Susruta Ayurveda" is chiefly a treatise on the principles of medicine as bearing on surgical diseases, and it appears that from a very early age Hindu medical practitioners were divided into the two classes of physicians and surgeons. This work and the other called "Charaka" were regarded by succeeding writers as of divine origin and beyond human criticism, and consequently the more modern authors contented themselves with copying, or arranging, or compiling from the ancient writings, without daring to make any alteration in the general principles laid down. It is not very profitable, at least to European readers, to follow Mr. Dutt through the catalogue of Hindu medical books which followed or were founded upon "Charaka" and "Susruta," but it is interesting to note the gradual introduction into Indian practice of new drugs adapted to the treatment of new diseases, or at least of such as were new to the Eastern world. Thus, in one of the more modern works, the introduction of syphilis into India is mentioned as being due to the Portuguese, and not only had mercury been employed for that disease, but its use had extended to almost all diseases; and various preparations of gold, silver, tin, copper, orpiment, arsenic, and other such substances, had come into fashion, and superseded to some considerable extent the use of the vegetable drugs of the older writers. Opium also had been by this time largely employed in practice.

We may perhaps be induced to smile at what appear to be the absurdities of Hindu medicine, but it must be recol-

lected that mankind have been credulous as to the efficacy of drugs in all ages, including our own, and that the polypharmacy of our own ancestors, and the follies of some modern systems of therapeutics, as, for instance, of the so-called homœopathic system, are quite as contemptible as the dogmas of Charaka and Susruta and their followers. Without, however, criticising the doctrines of the Hindu physicians at any unnecessary length, it is perhaps more practically useful to observe the points in which their selection of medicines is founded upon reason and experience, and is in consequence analogous to our own. We find, accordingly, from Mr. Dutt's pages, that the parts of plants employed by the Hindus are the same as those used in European pharmacy, such as the root, the underground stem, the leaves, the fruits, the flowers, the extract, the bark, and the wood; and, as is well known, some of our most powerful drugs are those obtained from India, where they are used for the same purposes as among ourselves.

Opium appears to have been introduced into India by the Mussulmans, as its Sanskrit name is derived from the Arabic one, and it is not mentioned by the older Sanskrit writers. The capsules of the poppy and the seeds are both used, the former being regarded as "light, astringent and narcotic," and antaphrodisiac; and the latter being demulcent and nutritive, and useful in cough and asthma. Opium itself is supposed by the Hindus to possess properties analogous to those of the capsules, and is used as an astringent and narcotic in bowel complaints, cough, external inflammations, urinary diseases, fractures, skin diseases, etc. As an instance of the polypharmacy of the Hindus, we may quote the following formula for opium used in diarrhœa:—"Take of realgar, orpiment, cinnabar, white arsenic, borax, aconite, and alum, each one part; mercury, sulphur, and opium, each seven parts; soak them for seven days in each of the following fluids, namely, juice of the leaves of cannabis sativa, vitex negundo, datura, and nim; make into two-grain pills." This formidable combination of poisons is, we are told, to be given with ginger-juice.

Mercury is largely used in modern Hindu medicine, although it is not mentioned by Charaka and Susruta, and it is, indeed, now regarded as the most important drug in the Hindu Pharmacopœia, and its Hindu name implies "that which protects," and the metal is so called because it protects mankind from all sorts of diseases. It is said that the physician who does not know how to use this merciful gift of God is an object of ridicule in society. A great number of formulæ containing mercury are described by Mr. Dutt, but their details can be interesting only to native Indian practitioners. One of the preparations described is of so startling a character as to deserve special mention—namely, corrosive sublimate, given in a dose of eight grains(!) enclosed in a ball of wheat-flour, and covered with powdered cloves. Mr. Dutt tells us, however, that this substance, as sold in the bazaars, is not a pure perchloride of mercury, but is a mixture of calomel and corrosive sublimate in indefinite proportions, and therefore the patient sometimes escapes, but when it contains more of corrosive sublimate than of calomel, intense salivation, gastritis, and even death, may result.

It will be already obvious that it is impossible to give any lengthened analysis of Mr. Dutt's very learned work, which, however, amply deserves perusal by all those who are interested in Indian therapeutics, and we can only give in conclusion a brief sketch of the subjects introduced, and of the order in which they are treated. In the first instance, then, the introduction gives a general view of the material objects used in the materia medica of the Hindus, and the classification of medicines; the inorganic materia medica then follows, including descriptions of mineral medicines, such as metals, sulphur, precious stones, alum, borax, chalk, calcined cowries, etc. The vegetable materia medica comes next, and constitutes the largest part of the book, the objects being arranged in their natural orders, and having their Linnæan or other modern names given first, and their Sanskrit names afterwards. This will probably be found the most useful as well as the most striking and attractive feature of the book, especially to botanists and Sanskrit scholars. The animal materia medica is the shortest section, but it describes some objects employed in European as well as in Hindu medicine, as the leech, honey and wax, musk and bile, and others, which are, however, peculiar to Hindu practice, as the lac insect (*coccus lacca*), serpent poison, the pouch of the civet cat, urine (which, especially cow's urine, seems to be largely used), and animal flesh, which, in its different varieties, is prescribed in the treatment of special diseases. Thus we are told that the flesh of geese is useful in cephalalgia and nervous diseases, jackal's flesh is used in insanity, the flesh of snails in ear diseases, etc. Many of these details are, of course, interesting only as curiosities of medical literature, but the whole book abounds in such details amidst a great amount of modern knowledge and ancient research.

Sanitary Houses. Two Lectures to Builders and Plumbers, delivered in the Hall of the Scottish Society of Arts, Edinburgh, December 3 and 11, 1877. By J. A. Russell, M.A., M.B., Lecturer on Sanitation at the Watt Institution, and formerly Senior Demonstrator of Anatomy to the University of Edinburgh. Edinburgh: Maclachlan and Stewart. London: Simpkin, Marshall, and Co. 1878.

These lectures were merely intended, as the author explains, to bring before plumbers and builders some of the well-known facts of sanitary science which bear upon their occupation, and which are no doubt much too frequently neglected. They will be found to contain some very useful hints on ventilation, water-supply, drains, etc., assisted by illustrations to make several of the suggestions clear. Mr. Russell observes that he has wasted no time in alluding to the multitude of sanitary patents, because he is convinced that the great majority of them are utterly useless, or require the services of an engineer to make them work—a remark in which we entirely concur. Although professedly addressed to builders and plumbers, the lectures are free from any technicalities which would render them unintelligible to the public, and they may therefore be read with advantage by all who are desirous to make their habitations as healthy as circumstances will allow.

GENERAL CORRESPONDENCE.

DEATH DURING ADMINISTRATION OF CHLOROFORM AT KENSINGTON.

Letter from Dr. P. Black.

[To the Editor of the Medical Times and Gazette.]

Sir,—Mr. Thrupp's letter in the *Times* of the 17th inst. was evidently written with the generous intention of absolving the dental surgeon from all responsibility in the sad accident at Kensington, and his statement in this respect is as clear and explicit as it is honourable to the writer.

Such accidents are constantly occurring, not indeed less frequently in the hands of men of approved skill and eminence than of others of perhaps inferior credentials; and we need not regret this, for it helps to blunt the cruel shaft of imputed ignorance which might unduly wound the susceptibility or even kill the reputation of younger though not less able men.

The occasion now offered seems too precious to be lost, and I would ask permission to offer a few remarks on the subject in general, without any allusion to the case which has brought the opportunity before me.

1. Ether and chloroform are administered on exactly the same physiological principles. A person is made to breathe air which holds in solution or admixture a certain portion of either. The brain or organ of physical consciousness becomes gradually intoxicated, and finally complete unconsciousness is produced.

This process seems very simple and intelligible. How can danger suddenly arise in conducting it? In the following manner: Air may be very highly charged, even saturated, with either of these substances, and in this state is very *pungent*, so much so that a person cannot breathe it, and if it is forced upon him he is stifled or suffocated in exactly the same way as if brimstone matches were burnt under his nostrils. Death would thus occur without either chloroform or ether having entered the body. Their action would be pernicious in a "negative," not in a "positive" sense. They do not enter into the body and destroy by their presence, but their pungency restrains the vital act of respiration, which will not suffer interruption, and in this way insures their exclusion. Thus, with a teaspoonful of either narcotic, I could at will

destroy the lives of half a dozen persons in succession, and yet the narcotic shall not enter their bodies; or I may consume in six other cases a large quantity of either, which shall without difficulty enter the body by the lungs, circulate with the blood, and simply produce sleep or unconsciousness.

This most important fact has never been fully recognised and incorporated in the teaching of our medical schools, yet it furnishes the key to a large majority of the fatal cases which have been recorded for many years in the medical journals.

A patient dies suddenly, not because chloroform or ether has too quickly entered into and thus poisoned the body, but because their entrance has been prevented by their pungent or irritant property, which has restrained the necessary respiratory movements at the same time.

If this be true, the condition of safety is to administer either narcotic in that degree of dilution at which it is easily breathed; and when unconsciousness is thus gradually produced, it may then be given almost at the point of saturation, for, as sense or consciousness is gradually lost, the breathing is no longer restrained by that pungency which was a source of danger in the first instance, and—though this last point is of comparatively little moment—the air will still contain sufficient oxygen to satisfy the chemical requirements of respiration.

Some have thought that ether may be given with more safety than chloroform, and appeal to experience as being in their favour, but this is erroneous, and it has been clearly shown that there is in reality no difference. Both are equally free from or obnoxious to danger in accordance with obedience to or neglect of the precaution I have indicated.

2. The other anæsthetic of frequent use in dental surgery is nitrous oxide gas. This physiologically is altogether different from the last two. Having no pungent or irritant property, it is easily breathed, so that a patient cannot be suddenly suffocated by it, as by air largely charged with ether or chloroform. But during its inhalation the venous blood is not aërated, and increasing lividity, if other signs were wanting, would warn an operator to desist. Death might doubtless arise from extreme narcotism; but this can never be sudden. In the case of the other narcotics, the movements of respiration may be checked by a too pungent air, and asphyxia is the result. I am, &c.,

11, Queen Anne-street, May 20. P. Black.

The Royal Irish Academy.—On Monday evening, May 27, Sir Robert Kane, F.R.S., President of the Academy, distributed the Cunningham Medals to the four gentlemen selected by the Council for that honour. The recipients were—Aquilla Smith, M.D., for his inquiries into Irish nnmismatics; John Casey, LL.D., for his important mathematical discoveries; Edward Dowden, M.A., Professor of English Literature in the University of Dublin, for his writings; and G. J. Allman, LL.D., for his researches into the natural history of hydrozoa. Dr. Aquilla Smith, by a valuable series of papers, had supplied important materials for the elucidation of many obscure points in Irish mediæval history.

Glisson on Suspension in Rickets.—Dr. Hunter, of Philadelphia, has forwarded to Dr. Sayre an extract from Glisson on Rickets, 1668, showing that suspension in spinal disease had long since been recommended as a means of treatment:—"The artificial suspension of the Body is performed by the help of an Instrument cunningly made with Swathing-Bands, first crossing the Breast, and coming under the Arm-pits, then about the Head and under the Chin, and then receiving the Hands by two handles; so that it is a pleasure to see the child hanging pendulous in the Air, and moved to-and-fro by the Spectators. This kind of Exercise is thought to be many waies conducible to this Affect, for it helpeth to restore the Crooked Bones, to erect the bended Joynts, and to lengthen the short Stature of the Body. Moreover, it exciteth the vital Heat, and withall allureth a plentiful distribution of the Nourishment to the external and first affected parts, and in the meantime it is rather a pleasure than a trouble to the Child. Some, that the parts may the more be stretched, hang Leaden Shoes upon the Feet, and fasten weights to the Body, that the parts may the more easily be extended to an equal length. But this exercise is only proper for those that are strong."—*New York Med. Record,*

REPORTS OF SOCIETIES.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, May 1.

James H. Aveling, M.D., F.R.C.P., Vice-President, in the Chair.

The following gentlemen were elected Fellows of the Society:—George Brown, M.R.C.S., and Stacey S. Burn, M.R.C.S.

Effusion of Blood into the Peritoneal Cavity.

Dr. Barnes exhibited two specimens illustrating two forms or causes of intra-pelvic blood-effusions. The first was a tubal gestation, which had burst. The gestation was estimated at seven or eight weeks. The sac was within an inch of the left angle of the uterus. The patient had undergone a fatiguing journey, and died under symptoms of shock and collapse. The other specimen was an illustration of a more rare description. A patient was admitted into St. George's Hospital suffering from retroflexion of an enlarged uterus, causing much pelvic distress. The displacement was reduced under anæsthesia without much difficulty, and a "Hodge" applied. Though relief followed, on the second day pain set in, and the pessary was expelled while coughing; and three days afterwards she died rather suddenly. At the autopsy the abdominal cavity was found full of blood; the source of the hæmorrhage was traced to the pelvis, where an imperfect cavity had been formed by the adhesion of the retroflexed uterus to the omentum and intestine.

Dr. John Williams, Dr. Hayes, Dr. Wiltshire, and Dr. Heywood Smith made remarks.

The Uterus during Menstruation.

Dr. Cory showed some microscopical sections of a uterus taken from a subject who died suddenly the same day as menstruation commenced. These showed well the appearances described by Dr. John Williams. The mucous membrane was separating from below upwards; that part of it nearest to the cervix had already separated; and immediately above this some remains of it could be seen hanging in shreds, while still further towards the fundus it was still intact.

Case of Fracture of Cranium in a New-born Child.

Dr. Poole, of Sidcup, exhibited the cranium, lungs, and heart of a recently-born child. When called to the mother (a servant-girl), she stated that six hours previously, whilst in bed, labour came on, and the child, on being expelled, fell over the edge upon the bare boards. She was lying upon her right side with her back close to the edge. The left frontal bone had three fractures, proceeding from the coronal suture; the left parietal had three, an inch and a half long, from the sagittal suture; and the right parietal had one long fracture, starting from the same suture. The lungs gave evidence of respiration having been well established. The funis was twenty-four inches long, and was ruptured eighteen inches from the umbilicus. The bed was twenty-six inches from the floor; and the question was, could the fall, broken by the resistance of the funis, have caused the fractures?

Dr. Aveling thought it very doubtful whether this case should be discussed by the Society while still *sub judice*, and he submitted this point to the Fellows.

After remarks from Dr. Braxton Hicks, Dr. Routh, and Dr. Wiltshire,

Dr. Murray proposed that the discussion should be deferred until the case had been adjudicated.

The resolution was seconded by Dr. Brunton, and carried unanimously.

Cæsarian Section.

Dr. Braxton Hicks communicated a case in which the above operation was performed. The patient, eight months advanced in pregnancy, was admitted into Guy's on account of malignant disease of the vagina, etc., seriously impeding the passage. The rectum was surrounded by a malignant deposit, and the recto-vaginal septum was consolidated into a dense and unyielding mass, nearly filling up the vagina, and almost preventing the finger from reaching the os. Delivery *per vias naturales* being impracticable, it was decided to perform Cæsarian section about a week before the full term. Feverish prostration and pains of labour

occurred, however, three days after admission, and the operation had to be undertaken under these disadvantageous circumstances. The placenta was found to be seated beneath the incision; there was, however, very little bleeding. The uterine wound was brought together by grasping the uterus; and eight interrupted sutures of carbolised silk were passed through the peritoneal coat. The external wound was then closed, and a catheter was passed through the os uteri, so as to facilitate the breaking up of clots, and to allow of irrigation. Bilious vomiting soon set in, and the patient sank about twenty-four hours after the operation. On post-mortem examination the whole of the uterine wound was found gaping, every stitch having been torn away. There was a small quantity of grumous purulent fluid in the pelvic peritoneum. Dr. Hicks considered that the accession of irritative fever previous to the operation had much influence in the fatal termination, and that the very severe vomiting, coupled with a vigorously acting uterus, had doubtless caused the tearing away of the uterine stiches.

Dr. Godson referred to the successful cases of Cæsarian section lately brought forward by Dr. Edmunds, where no uterine sutures had been employed, and asked Dr. Hicks what circumstances induced him to use sutures in his case, for the result showed how useless they had been.

Dr. Heywood Smith asked to what depth the sutures had been introduced.

After some remarks from Dr. Murray,

Dr. Braxton Hicks stated, in reply, that he had put in the sutures to the depth of from a quarter to half an inch through the uterine wall. He was led to employ them because the wound gaped to such an extent. He thought it might be said that where a case promised well, sutures were not required; and when the reverse, sutures were of little use.

Case of Pregnancy complicated with Malignant Growth in the Vagina and Rectum.

Dr. Potter contributed this case, which occurred in the Westminster Hospital in January, 1876. The patient, aged twenty-nine, was five months pregnant, and on vaginal examination a hard lobulated mass was found occupying the upper and posterior junction of the canal, and extending to within two inches of the vulva. The cervix and os uteri were not implicated; per rectum a large fungating mass could be felt, evidently identical with that occupying the vagina; the bowel was almost impervious. When about seven months and a half pregnant, premature labour was induced by means of a gum-elastic catheter. In eight hours labour had fairly commenced. The presentation was vertex and footling, and delivery was completed by pulling down the feet, the head ultimately being brought through the narrowed space with the forceps. The child was born alive, and the mother made a good recovery from her confinement. Colotomy was subsequently performed, and the patient died seven days after from peritonitis. No autopsy was permitted.

Membranous Dysmenorrhœa.

Dr. Cory recorded a case which strongly supported Dr. Hausmann's view that such are due to imperfect impregnation. The patient, previous to her marriage at the age of thirty, had never passed any membrane. She aborted three times, between the second and third months, during the first two years of married life. Since then she had almost invariably passed at her menstrual periods membranes, which proved to be very perfect casts of the uterine cavity, and presenting all the naked-eye and microscopical appearances of its mucous lining. The membrane usually came away on the second day of menstruation, previous to which the dysmenorrhœa was acute. Later on she lived apart from her husband for nine months, during which time she had menstruated regularly without passing any membrane.

Dr. Godson showed, as bearing upon this case, a specimen of a decidual membrane, with a very small ovum upon it, and he remarked that, had it not been very carefully examined, the ovum would probably have escaped notice, and the membrane have been looked upon as dysmenorrhœal.

Dr. Galabin said that the facts of Dr. Cory's case appeared to establish the interpretation adopted by the author, that the membrane thrown off in successive months was the product of conception repeatedly occurring. On this assumption it afforded interesting evidence as to the rate in the menstrual cycle at which conception may occur. Since the period was never delayed more than two or three days over time, conception must have occurred shortly after the preceding period on each occasion, since otherwise there would have been no time for the decidua to develope.

Dr. John Williams thought there could be no doubt that the membrane exhibited by Dr. Cory was the decidua containing an impregnated ovum. The fact that the membrane was only passed when the woman was living with her husband favoured the view that it must be a kind of abortion, and for this reason he objected to the case being quoted as one of membranous dysmenorrhœa. Such a name ought not to be given to any case in which the lining membrane of the uterus was not expelled.

Dr. Aveling said that he had some hesitation in accepting the view put forward in the paper. He thought that a hyperæmic condition leading to membranous dysmenorrhœa might have been caused by the irritation of sexual intercourse.

Dr. Potter and Dr. John Brunton also made some remarks.

Treatment of Chronic Inversion of the Uterus.

Mr. Lawson Tait contributed a note on this subject. After alluding to the proposals of Simpson and Tyler Smith to rectify the displacement by continued pressure, and mentioning the disadvantages of the operation recommended by the latter, Mr. Tait referred to the instrument devised by Professor White, of Buffalo. It was apparent to him that no plan could so efficiently diminish the size of the inverted uterus as pressure upon it by a conical cup, and it was equally evident that the best way of dilating the contracted and inverted cervix was to make it do the work, as it were, by pressing upon itself. He therefore, abandoning the pelvic curve of the older instruments as useless, had box-wood cups made of three different sizes, each with a straight stem of about six inches long, with notches at the end for strings. The case to which the treatment was applied was that of a young woman aged twenty, who had been delivered by a midwife ten weeks previously. The uterus was completely inverted, and thorough involution had taken place, so that the inversion had passed into the chronic stage. After she had been in the hospital for six weeks, the large rigid cup was introduced under ether, and a double thread of elastic was applied to the stem, and fastened to the waist in such a way as to give a strain, probably not exceeding a pound at the utmost. The next morning the uterus was found reinverted, and enclosing the cup. On the removal of the latter, it was found that the reinversion was not complete, and the smallest cup was therefore introduced with the effect of securing perfect reduction. The simplicity of the treatment in this case, he thought, entitled him to say that in future very few cases should be submitted to the extreme measure of amputation.

Dr. Aveling remarked that the case would serve to encourage us in the treatment of a very difficult condition, which till recently had been thought only relievable by amputation. The use of straight stems was, however, not a novelty—they had been first advocated by Madame Boivin; and Dr. Braxton Hicks had employed an instrument very similar to a stethoscope.

Dr. Godson said that the three cases recorded in the last volume of the *Obstetrical Society's Transactions*, of amputation of the uterus from inversion, which had been a subject of surprise to Mr. Lawson Tait, were taken from a large number of cases of inversion that had been treated in St. Bartholomew's Hospital, and were brought forward, not for the purpose of recommending the operation, but to show that the uterus might be amputated without any great danger to the patient's life. He thought there were two different kinds of inversion of the uterus. Some might be easily reduced by pressure; and he had seen one which reinverted itself the day after pressure had been applied by the hand alone. That treated by Mr. Tait appeared to belong to this category. Others seemed to defy all attempts at restoration. In such cases, if the life of the patient were in jeopardy from the profuse and uncontrollable hæmorrhage, which was an alarming symptom in the cases recorded by Dr. Godson, amputation was not only justifiable, but was demanded to save life. If bleeding to a dangerous extent were not present, it was, on the other hand, the duty of the practitioner to continue his efforts to restore the displacement.

Dr. J. Braithwaite, of Leeds, had recently had a case of inversion which had been treated by means of continuous elastic pressure. In order to apply this no special apparatus had been procured; an ordinary box-wood stem and cup

pessary had answered the purpose admirably. The cup was covered by a soft indiarubber circular pessary containing air, made to adhere to the cup by means of shellac. The proximal end of the stem is always set in an indiarubber band, and this was fastened to an abdominal belt. In the case named, after the pressure had been well sustained for four days, the inversion was found half returned, and no difficulty was then found in completing the reduction.

Dr. Hayes thought that in recording cases of inversion of the uterus the degree of involution which had taken place should be mentioned. The difficulty of reduction was directly dependent upon this, and only indirectly upon the duration of the displacement.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 14.

Charles West, M.D., F.R.C.P., President, in the Chair.

An Anatomical Remedy against Respiratory Obstruction from the Tongue, Epiglottis, and Velum Palati.

Dr. Benjamin Howard, formerly Surgeon of Long Island College Hospital, New York, contributed a paper, the object of which was to give the result of various and repeated examinations and experiments with regard to the alleged respiratory obstruction from the tongue, epiglottis, and velum palati in threatened apnœa from anæsthetics or other causes, in the ordinary supine position, and to show how such obstruction is promoted by the customary flexion of the head and neck. Traction upon the tongue, however firm, may open the pharynx its retreat had closed, but nothing more; the epiglottis remains unlifted. Other facts were then presented, proving how, by simple position, all these obstructions may be instantly and simultaneously removed. The position consists in elevation of the thorax and complete extension backwards of the head and neck. By this means the line of gravitation of the tongue is shifted from the back of the pharynx to the hard palate at or about its junction with the soft palate. The entire posterior wall of the pharynx is shifted backwards, its anterior wall is shifted forwards; thus its antero-posterior diameter, as much as is possible, is throughout increased, while by the shifting upwards and backwards of the nares their entrance is brought more directly over and in a line with the course of the pharynx. The larynx being pulled downwards and forwards by the sterno-thyroidei muscles and fixed there, the extensive motion upwards and backwards of the lower jaw puts upon the stretch the genio-hyoidei, mylo-hyoidei, and digastric muscles, causing the hyoid bone and, by means of the hyo-epiglottic ligament, the epiglottis to share together the motion of the jaw. Thus the epiglottis is instantly made vertical. The thyroid insertion of the palato-pharyngeii muscles being brought downwards and forwards by the sterno-thyroideii and fixed, the palato-pharyngeii muscles are put upon the stretch their whole length by the extensive movement upwards and backwards of the head, and thus the posterior pillars of the fauces, the arches of the palate, and the velum palati, into which latter membrane they are inserted, are all pulled downwards and forwards; they are thus made tense and kept so. The velum thus stretched some distance in front of the back of the pharynx, a post-oral airway is secured, from which the tongue is doubly excluded. Hitherto in the treatment of apnœa or asphyxia the tongue had been withdrawn only in those exceptional cases where a surgeon with forceps had been present. The means of complete elevation of the epiglottis in apnœa cases had been hitherto unknown. The position described removes both these obstructions without assistant or instrument. The author, from the facts given and from other experience, urged that always in the induction and condition of anæsthesia the head should be kept lower than the shoulders; he also stated that complete extension backwards of the head and neck should be the first and instant measure in threatened or actual apnœa, both as a remedy and as the first step towards success in artificial respiration. The withdrawal of the tongue, when practicable, the author considered highly advantageous, though not necessary, but it should be accompanied with as little lowering of the lower jaw as practicable. Finally, the author was glad to believe that this simple way of managing the epiglottis, and of securing an unobstructed post-oral airway to the glottis, as above described, would be found to be additions to medical science and to the professional and public means of saving human life.

Contribution to the Pathology of Hæmophilia.

Mr. P. Kidd, in this paper, gave a description of a case of hæmophilia in a child of six years old, in which fatal hæmorrhage occurred from the mucous membrane of the mouth. A short clinical history of the case was given with an account of the post-mortem examination. The blood was found on examination to be very watery, and to contain a large excess of colourless corpuscles. A microscopical examination was made of the aorta and vena cava, and of that part of the mucous membrane of the mouth from which the fatal bleeding took place. This examination revealed an extensive affection of the small vessels, arteries, veins, and capillaries, especially the smallest veins. This affection, which mainly consisted in a great proliferation of the endothelial cells lining the vessels, was seen in the small vasa vasorum of the aorta and vena cava, as well as in the vessels of the sub-mucous tissue of the mouth. The coats of the aorta and vena cava themselves were healthy. Drawings were given of the affected vessels, and also of a portion of the surface epithelium of the mouth, which had undergone a peculiar change, described at length in the paper. A certain number of small arteries of the oral mucous membrane had undergone a further change in addition to the endothelial proliferation. This consisted in a degeneration of their muscular coat, which was seen to contain only a very small proportion of its normal structural elements. The conclusion drawn by the author was that in this case there was a general disease of the small vessels. But as the blood was also affected there still remained the question whether this was primarily a disease of the blood or of the bloodvessels.

The Pathological Traces of Pulmonary Hæmorrhage.

Dr. Reginald Thompson read this paper. The author said that the traces of pulmonary hæmorrhage most frequently found in the lungs after death are small rounded or ovoid masses, whose size ranges from a pin's head to a filbert, and which vary in colour, according to their age, from a blood-red to an ivory-white; they are smooth, firm, and tough in texture, and are found to consist of blood-corpuscles and fibrin, packed closely in the alveoli. Their position is peculiar, and the special localities which they haunt show that the force of inspiration is the active power by which the blood is impacted in the alveoli. Hence these traces indicate hæmorrhage transferred from some other distant part in the lungs. Their future condition appears to depend upon the absence or presence of other pulmonary disease. There are other traces which point to extravasation of blood *in situ*. In these cases, which are more rarely met with, there is considerable pigmentation of the neighbouring tissue, and occasionally laceration. In either case, whether the blood be transferred from a distance or deposited *in situ*, softening and elimination may occur, so that a cavity may be the result; but it is very difficult to form an opinion with reference to the relation of these hæmorrhagic deposits and tubercle.

Dr. Symes Thompson considered the paper of great value from a pathological point of view. It showed that important secondary changes might follow hæmorrhage into the lung-substance.

Dr. C. T. Williams thought there was too great a tendency to call all masses found in diseased lungs by one name; but he did not think that Dr. Thompson had succeeded in proving that the putty-like masses were altered blood.

Dr. Douglas Powell was doubtful as to the varying power of inspiration in different localities in the lung. He hardly thought that blood could be found recognisable after many months.

Dr. R. Thompson said, in reply, that he had found altered hæmoglobin in the masses. He did not think that all portions of the lung expanded equally.

Brain in Congenital Absence of One Hand.

Dr. Gowers read a paper as above. The subject was a man in middle life. The left hand was absent from birth in

front of the carpus, the carpal bones being imperfectly developed and united. They were covered with a fibrous capsule, into which most of the forearm muscles were inserted. None of them were absent except the extensor minimi digiti. The ganglia at the base of the brain were equal in size. The convolutions of the frontal lobes were equal in size, including the ascending frontal convolution. The middle third of the ascending parietal convolution on the right side was only half the size of the corresponding part of that on the left. The upper and lower extremities of this convolution were equal on the two sides. Microscopical examination showed no alteration in the structure of the affected part, the smaller convolution having layers of grey substance of the same thickness, and presenting cells as numerous and as conspicuous as the other. The only difference was in the extent of the convolution. The other convolutions of the parietal and occipital lobes were equal in size. It was pointed out that the smaller area is precisely that stimulator which, by the experiments of Ferrier on monkeys, causes movements in the hand, which were in this case wanting. The absence of any change in the structure of the convolution might be due to the persistence of all the forearm muscles, or to representation and localisation in the brain being not exclusive, merely preponderant.

Abscess within Thorax, accompanied by Pulsation.

Dr. John Topham read notes of the above case. The enlargement, which was consequent upon a blow from a mangle, received by a laundress, aged twenty-one, in March, 1871, was not noticed till nine months after, having been preceded by pain in the part injured at six months from the accident. There was a hemispherical enlargement at the left margin of the sternum between the third and fourth ribs, pulsating synchronously with the heart. Both heart-sounds were audible through the swelling. The conclusion arrived at by the author was that the case was one of abscess; but, it being supposed to be aneurism, the patient was confined to bed in an infirmary during three years, the enlargement gradually increasing. At the end of six months both sounds of the heart became audible in the back. Pressure did not change the size of the swelling, but the skin became inflamed over the prominent part. In June, 1876, ulceration having set in, there was a discharge of thick pus, followed by a quantity of cheesy-looking substance, consisting under the microscope of large round corpuscles, resembling white blood-corpuscles, or those of pus, which were undergoing fatty degeneration. Both sounds of heart were audible in the back; pulse at wrists irregular (between fifty and sixty a minute); systolic murmur at heart's apex, none at base; loud "*bruit du diable*" in neck; at lower outer edge of sterno-mastoids loud bruit with first sound, but louder and of higher pitch on the left. Patient left the infirmary, and in March, 1876, the heart was in natural position and sounds natural, but pulsations irregular. In November, 1877, there was still occasional discharge from the aperture, but the patient (now a domestic servant) was able to labour at her employment.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

Friday, May 17.

Dr. Stevenson, President, in the Chair.

A letter from the Ladies' Sanitary Association, asking the Society for advice with a view to check the spread of measles in schools, was referred to the Council for consideration, and the following precautionary measures were drawn up, to be submitted to the Ladies' Sanitary Association:—1. In any suspected case (such as swelling or watering of the eyes, especially where measles is known to be prevalent) have the child isolated from the other scholars. 2. If the child develope measles, disinfect all the rooms, and separate other suspicious cases. 3. Refuse to receive other children from the house or houses whence the cases affected were derived, as they may carry poison in their clothes. 4. Bear in mind that the contagion occurs at a very early period, so that precautionary measures often fail from not being taken soon enough. 5. Fourteen days after the eruption has ceased is a proper interval to allow before the child returns to school. 6. Disinfect by burning a quarter of a pound of sulphur to each 1800 cubic feet of air-space. In large rooms several centres of sulphur-burning should be made.

Small-pox and Hospital Accommodation at Ipswich and Harwich.

Mr. Ellison read a paper on the above-named subject. In 1872 Ipswich was visited by a very severe epidemic of small-pox, the mortality being 3·2 per 1000. The Town Council erected a temporary hospital outside the town. Directly means for isolation were provided, the epidemic rapidly declined. During the Christmas week of 1876 the infection was brought from London to two different parts of the town. The first case was that of a man who had been for years an active anti-vaccinator, and had taken a prominent part in agitating against compulsory vaccination. The infection in the second case was brought to Ipswich by a young man who came from a house of business in London, in which small-pox had recently been; he brought with him a bundle of linen, which the servant opened and washed, and twelve days after she was found to be suffering from small-pox. During the next three months nine cases of small-pox occurred in various parts of the town, and in five of them the infection was distinctly traceable to London. A young woman who had been under treatment as a patient at the Highgate Small-pox Hospital brought with her a small woollen shawl that she had worn during convalescence, but which had not been disinfected. Fourteen days after her arrival her sister was attacked with small-pox, and just before she fell ill she went to a neighbour's house and did some washing, where there was an unvaccinated boy nine years of age. In due course this boy was attacked with hæmorrhagic small-pox, and died in the hospital two days after removal. Isolation and disinfection were strictly carried out, and in not a single instance did the infection spread to a second inmate in the house, although it was planted in some of the most dangerous and thickly populated localities. After a few weeks small-pox also made its appearance in Harwich, where it obtained such a firm hold that a most fatal and disastrous epidemic has been the result. With the exception of a high "fever" rate, Harwich has enjoyed a fair standard of health during the last seven years, and during that period only one death from small-pox was returned. The district appears to have been fairly vaccinated during the last three years, but previous to that the Vaccination Act was not efficiently worked. The recent epidemic of small-pox first made its appearance in Harwich at the commencement of October. By the end of December there had been from seventy to eighty cases and seventeen deaths. The medical officer of health frequently urged the necessity of isolation and revaccination, but no steps were taken by the Corporation to provide hospital accommodation until the last week in December. With the united help of the hospital and extensive revaccination it took thirteen weeks to stamp out the disease. The peculiarity of this outbreak of small-pox in Harwich has been the virulent type of the disease; the mortality in the hospital was excessively high, being over 24 per cent. of those under treatment. Of the seventy-four cases admitted into the hospital since its opening, eighteen died; there were also twenty-one fatal cases in the town itself, making thirty-nine deaths from small-pox since the commencement of the epidemic. A large proportion of those first admitted were suffering from confluent small-pox. Of the deaths one was an unvaccinated case, and thirteen were said to have been vaccinated in infancy; but in not one of these were the cicatrices well marked, and in some they were entirely absent. There were also three fatal cases of hæmorrhagic small-pox, and a fisherman of intemperate habits died of a malignant form of the disease, being at the time deeply pitted from a severe attack in early childhood. No case was admitted into the hospital after successful revaccination. Thus it would appear that successful revaccination is a greater protective against small-pox than a previous attack of the disease. With the exception of the two anti-vaccinators' houses, the disease did not in one single instance attack a second inmate in the house, which fact alone shows the value of isolation and vaccination. There are not more than four or five leading agitators against compulsory vaccination in this district, and it is rather singular that two of their families should have been so severely visited in a comparatively limited outbreak. The number of cases of small-pox

admitted into the Ipswich hospital amounted to thirty; of these twenty-five were discharged cured, and five died. It may be fairly assumed that had Harwich possessed in October the same machinery for dealing with infectious disease as in Ipswich, the town would in all probability have been spared this epidemic. In the year 1872 Ipswich was visited by a very severe epidemic of small-pox, which swept off the unvaccinated, and caused a large proportion of the population to be revaccinated; on the other hand, Harwich has remained nearly free from the disease for several years. With regard to the high mortality in the Harwich hospital, there can be little doubt that the small amount of 576 cubic feet of space allowed to each patient greatly influenced the result. During the recent outbreaks he had had repeated proofs that small-pox is not so intensely infectious in its early stage. The ease with which small-pox is stamped out in its early stage, by removal to hospital, ought to be sufficient inducement for every sanitary authority to provide hospital accommodation. All districts, both urban and rural, should be compelled by law to make suitable provision for the isolation of infectious cases.

Dr. Stevenson, in commenting upon the paper, said that in recent years, with improved sanitary machinery at our service, it had not been so difficult to deal effectually with alarming epidemics, for an efficient method of isolation was all that was wanting to keep the disease under control. A few years back vestries and district boards were very unwilling to spend money for the construction of temporary hospital accommodation. He did not consider that it was possible to communicate variola during the period of incubation. He referred to cases of scarlet fever to show that persons may be susceptible of the disease at one time and not at another.

Dr. Tripe said that the paper was valuable, as it confirmed the opinion of authors as to the length of the incubation period, *i.e.*, about twelve days. If plenty of cubic air-space be given to the patients, as at the small-pox hospitals, the disease is not so easily propagated.

Mr. Jacobs referred to a case, showing that the disease was infectious on the first appearance of the eruption. Twelve days after one short visit of a neighbour at this period the disease was developed.

Mr. Lord was of opinion that peculiarities of constitution do not so much favour immunity from the disease as the collateral circumstances under which the exposure to the chances of contagion may have rendered the virus more or less potent; *e.g.*, the amount of ventilation, disinfection, etc., adopted varies so much. When the disease is taken from a second exposure, it is probably due to greater concentration of the poison.

Mr. Ellison, in his reply, remarked that he had three distinct cases, showing the intensity of the infecting processes during the last stage and after death. The driver of the fever cab had failed to take the disease from the cases he carried to the hospital, but the first time he assisted to lift the body of a person that had died of small-pox he took the disease. Some of the cases had spread from the medical men not detecting the disease early enough.

Mr. Lovett remarked upon the facilities afforded by railway companies for carrying infection from town to town.

Dr. Churchill thought it was incumbent upon medical officers of health of seaport towns and fashionable watering-places to give due warning to the public through the press of the prevalence of infectious disease, even at the risk of offending the district boards. The intensity of infection before and after death showed how important it is that no effort should be spared to put a stop to Irish "wakes" and large assemblies of friends and relatives at the funerals of persons dying from small-pox.

On the Relation between Sewer-Gas and Diphtheria.

Dr. Tripe read a short paper as above. He said that an outbreak of diphtheria occurred in February, March, and April, in the Hackney district, in which there was evidence of a relation between the disease and sewer-gas. The important questions of the specific or non-specific character of this disease, or how far sewer-gas can cause an attack unless some germs be suspended in it, were not alluded to. The arrangements in the houses were of long standing. A few days before and at the time of the outbreak very offensive smells were noticed coming from the gullies—a most unusual occurrence—and the sewer-gas was charged to a greater or less extent with matters which are usually extraneous to it. Whether or not a large heap of house-refuse could cause an attack in persons residing at a distance of more than an eighth of a mile, can be answered in the negative. The offensive contents of dust-bins immediately below an open window have been supposed to have acted as an exciting cause. On making an inspection of the first house it was found that a direct communication existed between the interior and the sewer. Some of the gullies close to the house were found to be untrapped. Messrs. Toulmin had cases in their practice, but did not give any names or addresses, so he was unable to state the number of cases except as regards those in the 134 houses visited. On February 16, three cases which terminated fatally occurred at Powell-road, Warwick-road, and Clapton-common. Powell-road is more than a mile away, Warwick-road half a mile, and the Clapton-common case about a quarter of a mile from the accumulation at Craven's-park, the only feature common to the three being the state of the drainage arrangements, which allowed sewer-gas to enter all the houses. On the 21st, another case that terminated fatally occurred at Leabridge-road, within a short distance of Powell-road. On February 28, another case terminating fatally happened at Clapton-common; and a sixth on March 1, at Warwick-road. Out of 134 houses examined, as many as 120 had good drainage arrangements, whilst in thirteen they were so imperfect as to have a direct communication between pipes leading to the drains and the cisterns, or with wash-basins in the house. In another house there was a water-closet opening directly into a passage in the basement which smelt very badly, and was found to be imperfectly trapped. In the 120 houses with good arrangements only one case occurred, whilst the fourteen houses in which defective arrangements were found revealed this additional information, viz., that four drained into a different system of sewers. No case occurred in the last-mentioned houses, although they are nearest to the dust accumulation; whilst in the ten having defective arrangements, which were connected with the ordinary sewers of Clapton, cases of the disease occurred in all but one. Nearly all the Clapton sewage is carried into the high-level sewer, whilst the four houses above named drained into a sewer which opens into a system of sewers connected with the low-level sewer. Dr. Baylis considers the endemic at Bromley to have been induced by bad drainage arrangements. Dr. Russell, of Glasgow, has, in an address lately published, described diphtheria as a disease originating in, or at any rate dependent on, fæcal matter for its propagation. He does not consider it to be in any way analogous in its mode of spreading to scarlatina or measles. Diphtheria is undoubtedly infectious, but to a decidedly smaller extent than scarlatina; so that persons living in the same house often suffer in a very different degree. Several cases occurred in those members of the family who slept in a room near to the open top of an untrapped rain-water pipe which was connected with the sewer. Kissing, at school and elsewhere, amongst children has been suggested as one very probable cause of the spread of this disease. Only one cause ordinarily exists, viz., defective drainage arrangements, by which emanations from fæcal matter can obtain access to the interior of houses. Overflow-pipes from cisterns should be carefully examined; and the rain-water pipes also if they enter the drains. There is one great objection to allowing rain-water pipes to be connected with the drains, even if trapped, unless the pipe be placed at some distance from any windows, because during continuous dry weather the water in the trap evaporates, and the trap becomes consequently unsealed.

Dr. Stevenson alluded to the frequent error of diagnosis in calling a disease diphtheria which was really scarlatina *sine eruptione*, or even cynanche tonsillans.

Mr. Lord spoke to the same effect. Two fatal cases had recently occurred at Hampstead, said to be diphtheria, and yet they came out with an eruption shortly before death. Measles was known to be prevalent close by. We are hardly ever able to trace the propagation of diphtheria by contagion.

Dr. Tripe, in his reply, said that endemic diphtheria is a specific disease; ordinary sewer-gas will not cause it. Three days may be considered as the period of incubation. He believes it to be essentially of fæcal origin.

Mr. Ellison remarked upon the defective means of removing fæcal matter in country districts as probably the cause of the prevalence of this disease in these parts.

Mr. Jacob referred to the compulsory closure of schools at the request of the sanitary authority, and the unfortunate decision of a county-court judge that the school managers might recover compensation from the sanitary authority for the loss of school fees, etc.

LIVERPOOL MEDICAL INSTITUTION.

Thursday, March 28.

Dr. Oxley, Vice-President, in the Chair.

Dr. Alexander showed a specimen of ulcer of the stomach and an ovarian tumour, from a patient, a single lady, aged forty-six, who suffered for many years from indigestion relieved by taking food, whose mother died of some cancerous affection, and whose sister had had an ovarian tumour successfully removed. In July, 1876, the patient in question found that her left leg was beginning to swell; then the right leg enlarged; and by the end of the year both lower extremities were greatly swollen, and presented an appearance resembling elephantiasis. In January, 1878, her neck and upper extremities were swollen and œdematous. She died the following month, of œdema of the lungs, passive effusion into the pleura, and hæmorrhage from the bowels. The patient had been seen by many eminent consultants, and the diagnosis made had been some form of "lymphatic disease." A post-mortem examination showed that the left vena innominata and internal jugular were occluded by thrombosis, obstructing completely the flow of lymph from the thoracic duct. The lungs were œdematous; the pleuræ contained six pints and a half of serous fluid. A chronic ulcer of the stomach, two inches in diameter, completely perforated that viscus, the aperture being closed by the pancreas. A sebaceous tumour, containing hair, and weighing two pounds, was attached to the left ovary by a pedicle three inches long. It was free and movable, but filled up the pelvis.

Dr. Pollard exhibited a mass of greatly hypertrophied mediastinal glands from a case of lymphadenoma. The patient was a lad aged eighteen years, whose illness lasted fifteen months, and whose chief symptoms were debility, shortness of breath on slight exertion, inability to lie down, anæmia, and extreme emaciation. There was no leucocythæmia. Most of the glands accessible to the finger were enlarged, those on the left side of the neck being first affected. There was also evidence of intra-thoracic tumour, and of effusion into the left pleura. After death, the upper part of the left pleura was found to be filled by a mass of enlarged glands, in which the great vessels and the roots of the lungs appeared to be embedded. The thoracic duct was obstructed; the liver and spleen were somewhat enlarged, and displayed a faint amyloid reaction; the abdominal glands were also hypertrophied.

Mr. Paul showed a tumour removed from the abdominal wall by Mr. Reginald Harrison. The growth occurred in a female, who two years previously had first noticed it as a little lump not bigger than a horse-bean, in the skin above the pubes. It was not painful; it grew fast for seven or eight months, and then increased slowly. It was always very hard. On admission into the Royal Infirmary, there was a hard pendulous tumour just above the pubes, more or less globular in shape, and somewhat "bossy," from two to two and a half inches in diameter, encapsuled, and movable under the skin. After its removal, a section of it presented a stratified arrangement; the layers (irregular in distribution) consisted of compressed epithelial scales, in which were "bird's-nest capsules" on the one hand, and slightly vascular tissue on the other. It was so hard that it could with difficulty be cut with a knife.

Dr. John Cameron exhibited a specimen of rupture of the thoracic aorta, giving rise to a false aneurism, and proving fatal in about forty hours after the first appearance of the symptoms, and probable rupture of the artery. The subject of it, a stoker, aged fifty-eight, was suddenly seized, whilst throwing coal into a furnace, with pain across the chest, and a sense of choking, and shortly afterwards he spat a little blood. Up to that time he had enjoyed excellent health, he said. He came to the Royal Southern Hospital half an hour afterwards; the pain had then subsided; there was no dyspnœa; the pulse was 64, regular. He was, however, admitted (early on the morning of March 14), and continued through the day in the same state; coughed occasionally, and spat up a little blood. During the following night he had a slight attack of pain in the chest, which only lasted for a few minutes, but about 10 p.m. of the 15th it suddenly returned, and the man, after a few gasps, died. A post-mortem examination showed the pericardium full of blood; the heart enlarged, weighing twenty ounces, the left ventricle dilated, walls thickened, the valves healthy and competent. The aorta, at its origin and for some distance upwards, was slightly atheromatous. At a quarter of an inch above the valves was seen a rent, extending upwards in a vertical direction, one inch in length. A clot of blood was found separating the inner from the middle coat, and extending from the slit downwards towards the heart. At its lower extremity was an oblique rupture of the outer coat, three-quarters of an inch in length. Through this the blood had passed into the pericardium. The circumference of the aorta on a level with the inner rupture was three inches.

Dr. Wallace showed a large fibroid tumour, eight pounds in weight, which he had removed by abdominal section from a woman aged twenty-nine, the mother of two children. It was attached by a narrow pedicle to the right ovary. Its starting-point was found to be from a true "corpus luteum," thus resembling the cases described by Rokitansky. He also showed a large fibro-cystic mammary tumour which he had removed a few days previously from another patient.

Mr. Banks brought before the Society a healthy boy, ten years old, who had been under his care in the Royal Infirmary. There was a history of some inflammatory affection in or about the right elbow-joint, of an idiopathic origin, some months previously. When admitted, there was no inflammatory swelling around the elbow; there was very slight enlargement of the joint, but the arm was stiff and straight. Several sinuses led down to the joint; one of them was laid open, the bone exposed, a probe passed through the bone into the joint, and a sequestrum felt. The hole in the bone was enlarged, and the piece of dead bone removed. This proved to be the capitellum upon which the head of the radius moves, entire, but in a state of necrosis. The case did well, and the boy had now complete power of flexion and extension, but not of pronation or supination.

Dr. Archibald Cameron read notes of a case of nerve-injury treated by operation. A young woman, aged twenty-three, when nine years old cut her wrist accidentally with a broken bell-glass. Some fragments of glass were removed at the time. Four years after, an attempt was made to find some more; and six years afterwards—*i.e.*, a year ago—the patient came under Dr. Cameron's notice, when her condition was as follows:—On the inner aspect of the wrist there was a soft, red, and very sensitive little tumour; the thumb was drawn towards the palm of the hand, and attempts to extend it caused great pain; the first metacarpal bone seemed shortened; the ball of the thumb was wasted. There was little or no sensation in the first and second fingers, which were tapering, but not glazed. The sensibility of the thumb was diminished. The wrist and forearm were wasted. Mr. Bickersteth saw the case, and agreed that the tumour was connected with the median nerve, and that its removal was desirable. The nerve was cut down upon with antiseptic precautions, Esmarch's bandage having been applied. The growth was found intimately connected with the nerve, which was therefore slit up, and as much as possible of the tumour cut away, the remainder of the nerve being stretched. Two or three days after the operation, severe burning pain was felt in the first and second fingers, which had previously been without sensibility. The parts healed well, but there was considerable trouble from crops of vesicles, which became pustular, and which continued for some weeks, in the neighbourhood of the wound (? herpes). Eventually the case did exceedingly well. Sensibility and power were restored to the affected fingers and thumb; and little or no tenderness remained at the site of the operation. In fact, the operation appears to have been completely successful.

Dr. Dickinson then read a paper "On (so-called) Tetanoid Pseudo-Paraplegia," illustrating the subject by exhibiting a patient whose case he related.

Mr. Alfred W. Stokes, of Guy's Hospital, has been appointed Analyst for the parish of Paddington.

OBITUARY.

JOHN WILLIAMS, F.R.C.S. Eng., Deputy Inspector of Army Hospitals.

Very many men, and especially officers of her Majesty's Indian Army, and old St. Bartholomew's men, will share in the deep regret we feel in having to record the death of John Williams, which happened last week, in the fifty-ninth year of his age, at the residence of his sister, Mrs. Curtis, of Cambridge-park, Redland, Bristol.

John Williams was born at Gwennap, Cornwall, in November, 1819, being the third son of Dr. Michael Williams, of Penponds; received his general education at Swansea Grammar-School, and then became a pupil of Dr. George Gwynne Bird, F.R.C.S., late Mayor of that place, with whom and all his family he was a great favourite. He entered the school of St. Bartholomew's Hospital, where he quickly distinguished himself, and was equally popular with his teachers and his fellow-students. In February, 1841, he became a Member of the Royal College of Surgeons, and shortly afterwards, being much interested in the study of comparative anatomy, he competed for and gained one of the studentships in human and comparative anatomy, then recently established at the College. Successful in the competition for this, he soon made his mark by his earnest diligence and application, and won the special friendship and regard of his master, Professor Owen. At the close of the three years for which he was elected he was offered, and accepted, an appointment as Surgeon in the Honourable East India Company's Service. At that time medical appointments in the Company's Service, in the British Army, and in the Royal Navy, were placed at the disposal of the College of Surgeons, for their industrious students, by the heads of those respective departments; but then, as now, the Indian Service was very much more popular than either of the other two; and we understand that not one of the students in anatomy of the College ever accepted any of the appointments except those in the Company's Service. In India John Williams speedily won the esteem and regard of his brother officers, and there, as elsewhere, his sterling qualities of head and heart gained him troops of friends. Enjoying excellent health, he did not return to England till 1859, and while at home then he was elected to the Fellowship of the College. Once more he went to India, and after serving for some time as Surgeon-Major, retired a few years ago from the Service with the well-earned rank of Deputy Inspector of Hospitals. He was a great lover of the "gentle art," which he ardently pursued year by year in the fine salmon streams of Norway, enjoying good health till on his return from one of these annual trips last year; when he began to suffer from deep-seated pain in the neck, and consulted his friends Sir James Paget and Mr. Cæsar Hawkins, who recognised the malignant character of the malady. The disease ran its course, causing great suffering—borne with admirable courage and patience—till it terminated in death on May 21. John Williams was unmarried, but he will be sadly missed in not a few homes, and many are they who will long feel that by his death they have lost a true, trusty, and warm-hearted friend and comrade.

An Improved Dover's Powder.—Dr. Piffard presented to the New York Therapeutical Society a specimen of an improved Dover's powder, being a preparation of uniform strength, and of a less disagreeable taste than the ordinary powder—opium (with 10 per cent. of morphia) one part, ipecacuanha one part, sugar of milk eight parts.—*New York Med. Jour.*, May.

Collegiate Elections.—The Fellows of the Royal College of Surgeons resident in the United Kingdom whose addresses are known to the Secretary have all been acquainted that the annual election of Fellows into the Council of the College will take place in that institution on Thursday, July 4. At the moment of going to press, we hear that at present only Messrs. Gay, Bryant, and Wood have been duly nominated. The time for sending in nomination-papers will not, however, expire until June 10. Others are sure to follow those already received.

MEDICAL NEWS.

Royal College of Surgeons of England.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 23rd ult., viz.:—

Andrews, Wilham Stratford, Dover, student of University College Hospital.
Apthorp, Frederick William, Lee, Kent, of Guy's Hospital.
Bisdee, Alfred James, L.S.A., Halton, Somersetshire, of St. Mary's Hospital.
Buckle, John, L.S.A., Catton, Norwich, of St. Bartholomew's Hospital.
Butler, George William, Appleton, Abingdon, of Guy's Hospital.
Candler, William John, L.S.A., Harleston, Norfolk, of St. Bartholomew's Hospital.
Clark, James Richardson Andrew, L.S.A., Cavendish-square, of University College Hospital.
Clitherow, Robert Edward, L.S.A., Horncastle, Lincolnshire, of King's College Hospital.
Crouch, Edward Thomas, L.S.A., Devonport, of Guy's Hospital.
Edwardes, William Whitfield, L.S.A., Llansantffraid, Montgomeryshire, of St. Mary's Hospital.
Fulton, James, M.D. Toronto and L.R.C.P. Edin., St. Thomas's, Canada, of St. Thomas's Hospital.
Good, Frederick Thomas, L.S.A., Highbury-hill, of St. Bartholomew's Hospital.
Hawkins, Howard, Lee, Kent, of Guy's Hospital.
Jackson, Thomas, L.R.C.P. Edin. and L.S.A., Great Torrington, Devon, of the Middlesex Hospital.
Ling, Maurice Edward, L.S.A., Saxmundham, Suffolk, of the London Hospital.
Shaw, George, L.S.A., Blackheath-park, of the Westminster Hospital.
Smith, Kenneth Rawlings, L.S.A., Stamford-hill, of University College Hospital.
Snowden, George Hugh, Ramsgate, of St. Mary's Hospital.

Six gentlemen were approved in Surgery, and when qualified in Medicine will be admitted Members of the College; and five candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for six months—making a total of fifteen out of the eighty-two who have been undergoing their examinations during the past week.

The following Members of the College having undergone the Primary Examination for the Fellowship at a meeting of the Board on the 27th ult., will be admitted to the Pass Examination when eligible, viz.:—

Andrew, George, diploma of membership dated January 21, 1877, student of St. Bartholomew's Hospital.
Brockman, Edward Forster, L.R.C.P. Lond., November 14, 1865, of St. George's Hospital.
Burton, Samuel Herbert, January 28, 1876, of University College Hospital.
Greenish, Robert William, May 27, 1875, of University College Hospital.
Leahy, Albert William Denis (not a Member), of the Charing-cross Hospital.
Miller, Richard Shalders, August 1, 1877, of University College Hospital.
Newby, Charles Henry, January 22, 1873, of St. Thomas's Hospital.

Thirteen candidates were rejected. The following gentlemen passed on the 28th ult., viz.:—

Atkin, Charles, student of Guy's Hospital.
Bassett, Henry Thurston, of Guy's Hospital.
*Bowlby, Anthony Alfred, of St. Bartholomew's Hospital.
Branson, Cecil Lugard Smyth, of St. George's Hospital.
Bredin, Richard, of the Liverpool School.
Fisher, Frederick Charles, of St. George's Hospital.
King, David Alexander, of St. Bartholomew's Hospital.
Kirsopp, Thomas, of St. Bartholomew's Hospital.
McDonnell, Denis, of King's College Hospital.
*Penny, William John, of King's College Hospital.
Phillips, John, B.A. Cantab., of King's College Hospital.
*Pratt, Reginald, of University College Hospital.
Savill, Thomas Dixon, of St. Thomas's Hospital.
Silk, John Frederick William, of King's College Hospital.
Whitehouse, John, of the Birmingham School.
Williams, William Roger, diploma of membership dated April 24, 1877, of University College Hospital.
Williamson, Robert Isherwood, B.A. Oxon., of St. Thomas's Hospital.

All the above gentlemen have passed the Primary Examination for Membership of the College; and those against whose names an asterisk appears are Prosectors of the College. Eight candidates were rejected. The following gentlemen passed on the 29th ult., viz.:—

Bond, Charles John, student of University College Hospital.
Bowe, Francis, of St. Bartholomew's Hospital.
Brett, James Thomas, of Guy's Hospital.
Dodd, John Richard, B.A. Durham, of St. Bartholomew's Hospital.
Garrett, Henry Edward, of the Charing-cross Hospital.
Greves, Edwin Hyla, of the Edinburgh School.
Horsley, Victor Alexander Haden, of University College Hospital.
Shearman, Percy Edward, of University College Hospital.

The above gentlemen have all passed the primary examination for the Membership of the College, with the exception of Mr. Edwin Hyla Greves, of the Edinburgh School. Sixteen candidates having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their

anatomical and physiological studies for six months, making a total of thirty-six rejections out of the sixty-eight examined. With this meeting the half-yearly primary examinations for the Fellowship of the College were brought to a close.

The following were the questions on Anatomy and Physiology submitted to the sixty-eight candidates who offered themselves at the Primary Examination for the Fellowship of the Royal College of Surgeons on the 24th ult., when they were required to answer all four of the questions, viz.:— 1. State the velocity of the blood in the several parts of its course, and describe the methods by which this has been ascertained. 2. What are the essential structures of a secreting organ? Describe the several types of secreting glands. Give evidence of the direct influence of the nervous system upon secretion. Describe the poison apparatus in *Ophidia*. 3. Describe the course and relations of the profunda cervicis artery, and the dissection required to expose it. 4. Describe the dissection required to expose the course and distribution of the obturator nerve.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 23:—

Hare, Evan Herring, Putney, S.W.
Jacob, Henry Garrard, Southsea.
Moorhouse, Edward Dobson, Manchester.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

HOGGAN, GEORGE, M.B., C.M. Edin.—Honorary Medical Officer of St. John's Hospital for Diseases of the Skin, Leicester-square, W.C.

NAVAL, MILITARY, &c., APPOINTMENTS.

ADMIRALTY.—Surgeon Edward Thomas Lloyd has been promoted to the rank of Staff-Surgeon in her Majesty's Fleet.

WAR OFFICE.—Surgeon-Major Alexander Thomson, M.D., from half-pay to be Surgeon-Major; Surgeon Alfred Pierce Green resigns his commission.

BIRTHS.

BLAKISTON.—On May 23, at Benenden, Staplehurst, the wife of A. Alex Blakiston, M.R.C.S. Eng., of a son.

FENN.—On May 26, at Richmond, Surrey, the wife of Edward Liveing Fenn, M.D., of a son.

GANDY.—On May 16, at Gipsy-hill, S.E., the wife of W. Gandy, M.R.C.S. of a daughter.

HOOPER.—On May 23, at 67, High-street, Wandsworth, the wife of J. Harward Hooper, M.D., F.R.C.S., of a son.

INGLES.—On May 27, at Rock Ferry, Cheshire, the wife of J. Chamberlayne Ingles, M.R.C.S. Eng., Fleet-Surgeon R.N., of a son.

LAMB.—On May 28, at 46, Kensington-park-gardens, the wife of W. H. Lamb, M.B., of a son.

LYLE.—On May 28, at 19, Westbourne-square, Hyde-park, the wife of William Vacy Lyle, M.D., of a daughter.

NEWMAN.—On May 15, at Winchcombe, Gloucestershire, the wife of A. C. Newman, M.R.C.S. Eng., of a daughter.

POPE.—On May 24, at Broomsgrove-villa, Shepherd's-bush, the wife of H. Campbell Pope, M.B., of a son, stillborn.

MARRIAGES.

AMYOT—ENGELHART.—On May 16, at the Chapel of the British Embassy, Paris, Thomas Howes E. Amyot, M.R.C.S., L.R.C.P.E., to Cathinka, elder daughter of Herr Engelhart, Chef-de-Bureau of the National Bank of Copenhagen.

BUSH—DE LA POLE.—On May 22, at Streatham, Richard H. Bush, M.D., fourth and only surviving son of Colonel R. Y. Bush, of York-terrace, Regent's-park, to Emily Charlotte Augusta, eldest daughter of Sir Wm. Edmund De la Pole, Bart., of Shute House, Devon.

DREY—SAMSON.—On May 22, at Norton House, Fallowfield, Oscar Drey, of Heald Grove, Rusholme, eldest son of Adolph Drey, M.D., of Munich, Germany, to Emily, youngest daughter of Leopold Samson, of Manchester.

NORTON—LANE.—On May 28, at Braunton, North Devon, Arthur Mangles Norton, of Lynton House, Lydon-road, Clapham-common, to Frances Eliza, second daughter of Stephen O. Lane, M.R.C.S., of Hillscourt, Braunton.

SANDERSON—CRONE.—On May 22, at Penrith, Thomas Drummond Sanderson, M.B., F.R.C.S.E., of Penrith, to Lily, elder daughter of John Crone, of Sandath House, Penrith.

THOMSON—WALKER.—On May 27, at the Church of St. Martin's-in-the-Fields, James Archer Thomson, M.B., C.M., eldest son of the late Samuel Thomson, M.D., of Wadham Hall, Jersey, to Charlotte, second daughter of the late Robert Walker, of Stratford-on-Avon.

WISE—MACALDIN.—On May 24, at St. Pancras Church, Middlesex, Berkeley Deane Wise, of Belfast, to Leah Maria Tyrer, younger daughter of J. J. Macaldin, M.D., of 15, Tavistock-square, London.

DEATHS.

FRAZER, THOMAS, M.D., R.N., Retired Deputy Inspector-General of Hospitals and Fleets, at 4, Nottingham-terrace, Regent's-park, on May 26, aged 72.

RUTTLEDGE, T. E., M.R.C.S E., of typhoid fever, at Salonica, on May 5.

STEVENSON, THOMAS, M.D., of Iver Heath, Bucks, and formerly of 37, Upper Grosvenor-street, London, on May 27, aged 77.

SWYER, EMILY ELIZABETH, wife of R. E. Swyer, M.D., of 25, Mile-end-road, E., on May 25, aged 47.

WHICHER, JAMES, M.D., Deputy Inspector-General Royal Navy, only son of the late James Whicher, Esq., of Petersfield, Hants, at the Royal Naval Hospital, Malta, on May 21, aged 53.

WILLIAMS, JOHN, F.R.C.S., Deputy Inspector of Army Hospitals, at 3, Cambridge-park, Redland, on May 21, aged 58.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

GENERAL INFIRMARY, HULL.—House-Surgeon. Candidates must be Members or Licentiates of the College of Surgeons of England, Edinburgh, or Dublin. They must be qualified as general practitioners, registered, and unmarried. Applications, with testimonials, to the Secretary, on or before June 7.

KENT AND CANTERBURY HOSPITAL.—Physician. Candidates must have been practising as physicians for the space of two years previous to election, and be registered as regular graduates in medicine of some University of Great Britain or Ireland, or Fellows or Members of the Royal College of Physicians of London. Qualifications and testimonials to be sent to the Board of Management on or before June 28.

RADCLIFFE INFIRMARY, OXFORD.—Surgeon. Applications, with testimonials, to the Secretary, on or before June 3.

WEST BROMWICH DISTRICT HOSPITAL.—House-Surgeon. Candidates must be surgically qualified, registered, and unmarried. Applications, stating age, with testimonials, to the Hon. Sec., Rev. F. Willett, on or before June 10.

WILTS COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Candidates must be unmarried, duly qualified, and registered. Applications, stating age, accompanied by not more than six recent testimonials, "To the Clerk to the Committee of Visitors," on or before June 15.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population in computed according to the census of 1871.

RESIGNATION.

Auckland Union.—The Escomb District is vacant; area 2280; population 6018; salary £20 per annum.

APPOINTMENTS.

Bewdley.—Edward H. W. Swete, M.D., M.R.C.S., F.C.S., as Analyst for the Borough.
Carnarvon.—Mr. Robert E. Owen as Analyst for the County.
Faversham.—Mr. Sidney Harvey as Analyst for the Borough.
Lincoln.—Charles Harrison, M.D., as Analyst for the City.
Paddington.—Mr. Alfred W. Stokes, of Guy's Hospital, as Analyst for the Parish.

THE FRENCH GENERAL MEDICAL ASSOCIATION.—The twentieth annual meeting of this body has just been held, under the presidency of Prof. Henri Roger. The report read states that its finances are in a flourishing condition, and that pensions have been accorded to every claimant. There have been added to the Association 344 new members, and it is now in possession of more than 1,000,000 francs. A remarkable recognition of the importance of the Association has been offered by M. Bardoux, Minister of Public Instruction, who has invited it to prepare and submit to the Government a *projet de loi* on the organisation of medicine in France. The annual banquet went off with its usual *éclat*, only damped by the absence, for the first time since the foundation, on the score of ill-health, of M. Amédée Latour, its founder, and M. Ricord. The Association numbers more than 7000 members.

PIGMENTATION IN PREGNANCY.—At the New York Obstetrical Society, Dr. McLane related a case of extraordinary pigmentation of the skin occurring during pregnancy, the disfiguration being so great about the eighth month as to compel the lady to stay indoors. There was a general deposit of pigment all over the body, in patches from an inch to six inches square, the largest being on the neck, back, and thighs. In these situations the skin was very much the colour of that of a negress—the patient being a blonde, with fair hair and blue eyes. Dr. Jacobi regarded the pigmentation in this case as a neurosis, brought on by pregnancy; but Dr. McLane was disposed to refer it to anæmia, the patient having been very anæmic. Dr. Noeggerath knew of only one similar case; and he believes that the discoloration is due to altered nutrition, as in bronzed skin, the chief cause being the anæmia of pregnancy.—*New York Med. Jour.*, May.

NEW YORK LUNATIC ASYLUMS.—The following petition was addressed by a committee appointed by the Medico-Legal Society of the City of New York to the Senate and Assembly of the State:—"The undersigned respectfully ask your honourable bodies to institute an investigation into the condition and management of the lunatic asylums of this State. The committee has great reason to believe that the unfortunate inmates are, many of them, treated in a manner which is disgraceful to civilisation, and not in accord with the present advanced state of medical science. In support of these allegations, which are made with all due solemnity, the committee not only appends a copy of a paper read by Dr. Spitska before the Society, but it affirms its readiness to substantiate that by the testimony of experts in psychological medicine in all parts of the State and country, as well as declarations by eminent foreign alienists, and by comparison with like institutions in Great Britain, France, and Germany. The committee asks the attention of your honourable bodies to the whole system by which the insane asylums of this State are managed, and especially to the State Lunatic Asylum at Utica, an institution against which grave charges have been made by responsible persons. The committee, therefore, for the accomplishment of the objects in view, respectfully requests your honourable bodies to appoint a joint committee of inquiry." The memorial has at once been incorporated in a resolution, which will shortly come under discussion in the Assembly.—*New York Med. Record*, April 13.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Transvaal.—We shall be glad to have a short sketch of the climate, as indicated in your note.

Mr. C. J. Egan, King William's Town.—Received, with thanks.

J. Fletcher Little.—Try Ballard's prize essay on Vaccination.

The Army Medical Service, Germany.—It appears from a statement in a German military paper that the Army Medical Service is as unpopular in Germany as in England. The pay of German army doctors during the last twenty years has been nearly doubled; a comparatively high relative rank has been conferred upon them; and not long since they have been made "hoffähig"—the state to which it is the greatest desire of every middle-class German to attain; albeit at the present time in the Prussian army there are vacant 49 per cent., in the Bavarian army 22 per cent., in the Saxon army 45 per cent., and in the Würtemburg army 61 per cent. of the appointments of assistant-surgeons, because candidates are not forthcoming. The causes assigned for this increasing unpopularity of the Medical Department are the tardiness of promotion, attributed largely to the fact that the surgeons of the higher ranks are allowed to remain in the service until incapacitated for performing their duty; the inadequate pay of the junior grades, in which a surgeon has the more than probable prospect of remaining for at least five-and-twenty years; and the difficulty under the existing conditions of service of obtaining practice. A considerable portion of the German army used, until a comparatively recent date, to be quartered about the country in small detachments. Garrison changes were rare; and the surgeons or assistant-surgeons serving with those detachments were frequently the only medical men in the small towns or villages in which the troops were quartered, and were therefore employed by the inhabitants. Latterly, the largest portion of these dispersed detachments has been concentrated in the large towns and fortresses, and the shifting of quarters are frequent; so that for an army surgeon to establish a profitable private practice is now a great difficulty—nay, in many instances almost an impossibility.

The Sewage of Whitby.—The pressing need of some scheme to improve the sanitary condition of Whitby has several times been urged by the Local Board upon the local authorities, but hitherto without any result. The inhabitants are now, however, taking active steps in the matter, with the apparent determination that something shall be done. A scheme was presented at the last meeting of the Local Board for a system of sewage, at an estimated expenditure of about £17,500. The local authorities have not accorded to the project a unanimous approval, but it is to be gone into fully at an early future meeting, when a report and proper plans are to be submitted.

Temperance.—The satisfactory and rapid progress of the coffee public-houses movement is shown by the fact that between May 1, 1876, and April 1 last, fifty-three companies have been incorporated for the establishment of coffee public-houses and taverns in various parts of England. Previous to 1876 there were no more than three in existence. Good profits have been made by most of them, and some are a great financial success.

Medical Missionaries.—It is stated that at the United Presbyterian Synod, after a prolonged deliberation in private, to consider the case of Dr. Valentine, of Jeypore (one of the medical missionaries of the church), whether he could continue to act as the salaried private physician of the Maharajah of Jeypore, Rajpootana, and remain as an agent of the Society as well, the Committee, by a small majority, have decided that it was an anomalous position, and not calculated to do good to their missions in India, and that it must consequently cease.

The China Famine and Opium.—An important and very stringent edict regarding the cultivation of the poppy appears in the *Pekin Gazette* of March 9 last. It is worthy of note that the largest number of victims, and the earliest victims, to the famine have been the opium-smokers The edict now issued speaks of the people as foolish, coveting wealth, and forgetful of the injury that is being done by the cultivation of the poppy instead of cereals, and it enacts that for the future the cultivation of the noxious drug must cease; disobedience thereto to be visited with severe punishment. This edict applies to the whole of China. The district magistrate of Tientsin has personally visited the opium-smoking resorts, and closed them all. Soldiers and officials are strictly prohibited from smoking, under heavy penalties.

Medicine in the East.—The Egyptian Medical School at Kasr-el-Aïn was founded in 1827 by Mehemet Ali, closed by Abbas Pasha in 1849, and reopened by Saïd in 1856. It has since then, under the teaching of Professors Clot Bey, Reyer, Lautner, Bilharz, Griesinger, and other French and German specialists, restored Egyptian medicine to the rank of a science, and replaced the Frankish quacks of the last generation by a native faculty which, probably, has no equal in the East. The Mahometan prejudice against dissection has here long been overcome, and the latest results of Western pathology having obtained free adoption, this College turns out physicians, surgeons, and apothecaries, many of whom would be a credit to our best European schools. Its curriculum extends over five years, the first two of which are appropriated to further pursuit of the general education previously begun in the lower schools, and the remaining three to exclusively medical studies. A large and well-organised hospital in connexion with this school furnishes ample means of clinical instruction to the students, and gratuitous medical treatment to all comers. Attached to it also is the School of Midwifery, in which thirty young native women are taught reading, etc., and the elements of medical science and obstetrics: passing through a three-years course of instruction, they are certificated, and sent into the provinces where the common prejudice of Arabs and Copts forbids male practitioners of the obstetric art.

An Infectious Hospital, Colchester.—The late serious epidemic of small-pox at Harwich has apparently produced a timely apprehension on some, at least, of the Guardians of Colchester, lest a similar visitation might occur in that town, in their unprepared condition for proper accommodation in such an emergency. A Guardian, at the last meeting of the Board, drew attention to the necessity of providing a hospital for the reception of small-pox and other infectious cases. He did not wish to excite alarm, but a case of small-pox existed in the town, and in a locality where, owing to the density of the population, it might prove most serious if it were not immediately stamped out. A joint committee of this Board and of the Corporation was appointed some months ago; and after they had met several times it transpired that the Guardians had nothing to do with providing such a hospital for the town, and the matter was accordingly shelved, and no further steps had been taken. The subject had now been before them for a considerable time, and the Board ought *at once* to take it up. In a town like Colchester it was highly incumbent on the sanitary authority to lose no time in providing a hospital, particularly after the great warning they had had at Harwich. Eventually it was decided that the Clerk should write to the Town Clerk, expressing the opinion of the Board that urgent necessity existed for immediate action.

Vitiated Air.—Mr. James Mactear gave, in a paper he recently read before the Society of Arts, some statistics of the quantity of sulphuric acid gases evolved by the consumption of coal in London. It was estimated that the coal annually consumed in London exceeds 8,000,000 tons, equal at 1 per cent. of sulphur to 80,000 tons, or as oil of vitriol to 245,000 tons. This is more than five times the quantity given off from all the sulphuric acid works in the country.

Sanitary Science at Birmingham.—An association has been formed, at Birmingham, for the diffusion of sanitary science. It is to undertake sanitary works, and the sale of sanitary apparatus and appliances. The objects of the association also comprise the improvement of ventilation, drainage, the water-supply of dwellings, and the prevention of disease. It is to be an incorporated limited liability company, with a capital of £5000, in shares of £5 each.

"*The Healing Art.*"—In the United States there is, it is estimated, one medical school to every 477,392 of the population, while Great Britain has only one to about every 1,705,895, and France only one to about every 6,000,000. Comparing the number of practising physicians with that of the possible patients, it appears in America there is one doctor to 618 people, while Great Britain has only one to 1612, France one to 1814, and the German Empire one to every 3000.

The Early Closing Movement.—We are glad to observe, by the last annual report of the Early Closing Association, that, despite the depression of trade, no falling off, had taken place in districts where the movement had taken root, and that many additional wholesale houses had adopted earlier closing. The income of the Association during the year had been £1046, which was adequate for all the wants of the Society.

COMMUNICATIONS have been received from—

Mr. R. W. Parker, London; Dr. James Edward Pollock, London; Mr. J. Chattc, London; Dr. James Russell, Birmingham; Mr. T. M. Stone, London; Dr. Godson, London; Dr. F. Churchill, London; Dr. Colter, Transvaal; Mr. G. P. Field, London; The Registrar of Apothecaries' Hall, London; Dr. Buckniil, London; Dr. Pernisch, Schu[illegible]; The Secretary of the Obstetrical Society, London; Dr. Hitchcock, Lewisham; Dr. J. Mitchell Bacce, London; Mr. Walter Reeves, London; Dr. Sullivan, London; Mr. T. Spencer Wells, London; Dr. Williams, London; Mr. J. Fletcher Little, London; The Secretary of the Royal Institution, London; Dr. Carter, Liverpool; Dr. Alfred Meadows, London; Mr. Eugene Rimmel, London; Dr. J. W. Moore, Dublin; Mr. J. T. W. Bacot, Seaton; The Registrar-General, Edinburgh; Dr. C. O. Will, Aberdeen.

BOOKS AND PAMPHLETS RECEIVED—

Prosser James, M.D., M.R.C.P., Sore-Throat, its Nature, Varieties, and Treatment—Julius Pollock, M.D., Notes on Rheumatism—P. Lodwick Burchell, M.B. Lond., A Brief Sketch of the Ancient History of Medicine, etc.—William Osler, M.D., Pathological Report of the Montreal General Hospital for the Year ending May 1, 1877—Borough of Portsmouth, Report of the Medical Officer of Health for 1877—Shirley Hibberd, Home Culture of the Water-cress—Stanford's Library Map of London and its Suburbs, Geologically Coloured by James B. Jordan—Ernest Hart, The Mosaic Code of Sanitation.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Medicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Pantiles Papers—Sunday at Home—Leisure Hour—Students' Journal and Hospital Gazette—American Practitioner—National Anti-Compulsory Vaccination Reporter—Ohio Medical and Surgical Journal.

APPOINTMENTS FOR THE WEEK.

June 1. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Henry Morley, "On Richard Steele" (additional lecture).

3. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Royal Institution, 3 p.m. General Monthly Meeting.

4. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Rev. W. H. Dallinger, "On Minute and Low Forms of Life."

5. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern; 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Obstetrical Society, 8 p.m. Specimens: Dr. Hayes—Extra-Uterine Fœtation. Dr. Bryden—Hand-behind-Head Presentation. Dr. Wiltshire—Drawings of a Living Double Monster. Papers: Dr. Aveling, "The Curves of the Forceps: their Origin and Use." Dr. Matthews Duncan, "The Revolutions of the Fœtal Head in passing through a Brim Contracted in the Conjugate Diameter."

Royal Microscopical Society, 8 p.m. Mr. F. A. Bedwell, "On the Framework of the Mastax of *Melicerta ringeus*." Rev. W. H. Dallinger, "On the Measurement of the Diameter of the Flagella of *Bacterium termo*."

6. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. Guthrie, "On Molecular Physics."

7. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal Institution Weekly Meeting, 8 p.m., 9 p.m. Mr. W. H. Pollock, "On Romanticism."

VITAL STATISTICS OF LONDON.

Week ending Saturday, May 25, 1878.

BIRTHS.

Births of Boys, 1196; Girls, 1153; Total, 2349.
Average of 10 corresponding years 1868-77, 2140·5.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	754	627	1381
Average of the ten years 1868-77	685·6	624·7	1310·3
Average corrected to increased population ...	...	...	1402
Deaths of people aged 80 and upwards ...	...	...	49

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	9	4	4	3	12	...	7	...	4
North ...	751729	15	1	3	11	18	...	3	1	7
Central ...	334369	...	1	...	...	9	...	2	1	...
East	639111	3	3	6	1	37	...	...	...	3
South	967692	16	5	4	5	40	2	3	1	12
Total	3254260	43	14	17	20	116	2	15	3	16

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·540 in.
Mean temperature	51·8°
Highest point of thermometer	65·5°
Lowest point of thermometer	38·2°
Mean dew-point temperature	44·6°
General direction of wind	W. to S.W.
Whole amount of rain in the week	0·81 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, May 25, 1878, in the following large Towns:—

Boroughs, etc. Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending May 25.	Deaths Registered during the week ending May 25.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values	Temp. of Air Cent. Weekly Mean of Mean Daily Values.	Rain Fall In Inches.	In Centimetres.
London	3577304	47·5	2349	1381	65·5	38·2	51·8	11·01	0·81	2·06
Brighton	103923	44·1	59	29	64·0	40·5	50·5	10·28	0·35	0·89
Portsmouth ...	129461	28·9	88	41	...	...	...	...	...	...
Norwich	84620	11·3	48	42	64·5	40·0	50·8	10·45	0·77	1·98
Plymouth	73599	52·8	57	29	62·0	46·0	51·7	10·95	0·63	1·60
Bristol	206419	46·4	155	80	61·6	37·4	50·8	10·45	1·25	3·17
Wolverhampton ..	74240	21·9	57	21	66·8	33·5	48·3	9·06	0·73	1·85
Birmingham ...	383117	45·6	326	146	...	...	...	...	...	...
Leicester	121473	38·0	93	39	63·8	36·8	49·5	9·72	0·73	1·85
Nottingham ...	165267	16·6	103	49	71·6	34·5	50·6	10·34	0·93	2·44
Liverpool	532681	102·2	422	264	59·1	41·0	49·1	9·50	0·85	2·18
Manchester ...	360514	84·0	242	172	...	...	...	...	...	...
Salford	170251	32·9	140	68	62·5	33·0	48·0	8·89	1·26	3·20
Oldham	107366	23·6	68	43	...	...	...	...	...	...
Bradford	185088	25·6	123	59	66·7	37·0	47·7	8·72	1·67	4·24
Leeds	304948	14·1	203	95	69·0	37·0	49·2	9·55	1·37	3·48
Sheffield	289537	14·7	205	133	60·0	37·0	48·6	9·23	1·16	2·95
Hull	143139	39·4	124	59	65·0	34·0	48·3	9·06	0·58	1·47
Sunderland ...	112458	34·0	86	53	62·0	40·0	49·3	9·61	0·98	2·49
Newcastle-on-Tyne	144570	26·9	96	61	...	...	...	...	...	...
Edinburgh	222371	53·1	123	89	60·7	37·0	47·4	8·55	0·92	2·31
Glasgow	566940	94·0	404	249	59·0	37·0	48·3	9·06	0·41	1·04
Dublin	314666	31·3	195	202	67·4	36·2	51·0	10·56	1·19	3·02
Total of 23 Townsin United Kingdom	8373953	37·9	5766	3393	71·6	33·0	49·5	9·72	0·92	2·34

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·54 in. The highest reading was 29·81 in. on Wednesday at noon, and the lowest 29·11 in. on Friday afternoon.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

ON THE BAEL FRUIT AND ITS MEDICINAL PROPERTIES AND USES.

By SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.

GENTLEMEN,—I have recently, through the kindness of a friend, received from Calcutta some very fine specimens of the Indian bael fruit. They have arrived in perfect order, and as the opportunity seems a good one, I desire to take advantage of it by directing your attention to a remedy of considerable repute in India in the treatment of some forms of bowel complaint; and one also that I think might often be of use here in similar cases, especially in those forms of chronic diarrhœa and dysentery that are seen in persons who return to Europe after residence in India or other tropical climates.

The Bael is already well known to many in England, and is included in the list of drugs in the "British Pharmacopœia," where it appears in the form of the dried fruit, and the liquid extract, which is "prepared from the half-ripe fruit of Ægle marmelos, brought from Malabar and Coromandel" —known in fragments of a brownish-orange-coloured dried pulp adhering to the rind of the fruit. "It has been," says Mr. Squire in his valuable commentary on the Pharmacopœia, "extolled in the treatment of diarrhœa and dysentery, and is given alone or in combination with other astringents, such as the red gum of the Eucalyptus rostrata."

This liquid extract of bael is prepared by macerating the dried fruit in water and rectified spirit. The fluid is to be evaporated, pressed, and filtered; an intensely brown fluid is the result, of which ʒj. to ʒij. may be given as a dose. This and the dried fruit are the only officinal forms in which it is known (so far as I am aware) in this country; and though I do not wish to disparage them, for I really know little of their properties in this state, yet I imagine they have neither deserved nor acquired much repute as medicines. I think the case is different in regard to the fresh fruit and its preparations, and it is to them, therefore, that I wish to call your attention, for it is quite possible now, in these days of rapid communication, to procure constant supplies direct from India; and even though it should not maintain its value here as it does in the East, yet, as some of you will probably serve in India, it is well that you should be acquainted with a remedy that often proves valuable there. Do not suppose that I wish you to think of the bael fruit as an unfailing or actively specific remedy in acute disease; it is nothing of the kind, but simply one that is occasionally very useful in some forms of chronic disease, and successful where other remedies fail. It has the advantage, moreover, of being simple, common, and easily procured. Now, I am a great advocate for utilising the local remedies of the countries in which one may live, and would recommend you to make yourselves acquainted with them as much as possible, not merely as a matter of economy, but because it renders you more independent of costly European drugs, and because it is right to develope and encourage the use of such as are really reliable and effective; and I can tell you that there are many native remedies that might with advantage be introduced into European practice. This is a consideration that I would urge on those especially who are likely to exercise their profession abroad; and it is one that I have recently pressed on Government, with the effect, I trust, of providing for the more general use of native indigenous remedies, and for the extended use of such European drugs as are found to be capable of cultivation or preparation in India.

The particular example to which I now invite your attention is the fruit of an aurantiaceous tree, known to botanists as the Ægle marmelos. It is common nearly all over India, and everywhere is held in much esteem, and indeed veneration. By the Hindoos it is regarded as a sacred tree, its ternate leaf being considered as a type of the Hindoo trinity, or of Sivà, a member of the sacred triad. It is, moreover, thought to be pervaded by the presence of Durga, or Kali, the wife of Sivà, and hence has a double odour of sanctity, and is much grown around pagodas and temples. It is valued not only on this account, but because its fruit, leaves, bark, and wood are all considered to be endowed either with medicinal properties, or to be of value in other ways. I propose to consider only the medicinal properties and uses of the fruit.

Descriptions of the tree may be found in most works on the trees and plants of India. Dr. Cleghorn—a high authority on all that regards Indian forest and plant life—has given an account of it in the *Indian Annals of Medical Science*, and he tells us that it has many synonyms, of which the following are some:—Ægle Marmelos (Wight and Arnott), Feronea Pellucida (Roth), Cratœva Marmelos (Linn), Beloa Silva, Marida (Sir W. Jones in "Asiatic Researches"), Cov-alum (Bheade Hort. Malabar), Bael, Bil, or Bela (Hindi Bengali), Beli (Cingalese), Niaraido (Telinga), Tanghala (Malay), Williamaram (Tamul), Bengal Quince, Stone Apple (English).

In Bengal and Northern India, where I have known it, it is commonly called Bael or Bel.

The tree is moderately large—twenty, thirty, to forty feet high; the branches are irregular and not numerous. The leaves are ternate, and dotted like those of other orange trees; flowers are whitish and sweet-scented. It has sharp strong axillary thorns, which are more numerous in the wild, uncared-for, stunted trees growing on poor ground than in the cultivated trees, on which also the fruit are much larger and more highly flavoured than on the former. The fruit is, as you see, a large globose or obovate hesperidium or orange, of various sizes, from a small orange to that of the individual before you, with a hard, woody rind, with a fragrant aromatic epidermis. The interior is a yellowish aromatic and astringent pulp, with a pleasant and peculiar flavour. It contains ten to sixteen cells, each lodging a tormentose seed, embedded in a tenacious viscid transparent mucus, which has a peculiar, somewhat terebinthinate flavour. The rind is pungent and aromatic, with essential oil. As I have already remarked, the tree is sacred to Siva, and the worship of this god, under the name of Mahadeo, is prevalent everywhere throughout India. "The daily ceremonials are of a severely austere and simple character," says Monier Williams; "water from a sacred river is poured over his symbol, with perhaps a few oblations of flowers, but often there is nothing presented by the worshippers but the Bilva, or bael leaf."

The following is the best full description of the tree I can find, by Dr. Brandis, F.R.S., the Director-General of Forests in India:—

"*Ægle Correa*.(b)—Leaves alternate, trifoliolate; leaflets pellucid, punctate. Flowers bisexual. Calyx small 4, 5, dentate, deciduous. Petals 4, 5, imbricate. Stamens numerous, with short subulate filaments, and long linear anthers. Ovary on cylindrical disc, with a fleshy axis, and 10-20 small cells near the circumference, with numerous ovules in each cell attached to the central angle. Stigma capitate, obtuse, deciduous. Fruit globose, with hard, woody rind, 8-16 celled, filled with an aromatic pulp. Seeds numerous, oblong, flat; testa woolly, covered with a viscid fluid. I. Æ. Marmelos, Correa; Roxb. Cor. Pl. t. 143; Fl. Ind. ii. 579; Wight and A. Prodr. 96; Wight Ic. 16; Bedd. Fl. Sylv. t. 161. The *Bael* tree—Sanscrit *Bilva, Mahura*. Vernac., *Bel, bil, bila, bili*. Local name *Mahaka-marra*, Gonds., C. P.; *Ushitben*, Burm. Glabrous, armed with axillary, straight, strong, sharp spines one inch long or more. Leaflets three, rarely five, ovate-lanceolate, crenate, terminal long-petiolulate, lateral nearly sessile. Flowers greenish-white, with a fine honey scent, on short lateral panicles; pedicles and calyx pubescent. Calyx flat, teeth indistinct. Petals oblong, coriaceous, thickly dotted. Filaments occasionally fascicled. Fruit globose, oblong, or pyriform, two to five inches diameter, with a smooth grey or yellow rind, and a thick orange-coloured, sweet aromatic pulp. Wild in Siwalik tract and outer Himalaya, ascending to 4000 feet, from the Jhelum to Assam; also in Oudh, Behar, Bengal, Central and Southern India, and Burmah. Often gregarious when wild. Cultivated throughout India, except in the northern part of the Punjab; frequently planted near Hindoo temples. Leaves shed about March and April; the new foliage appears in April and May. Flowers about May; and fruit ripens in October,

(a) The specimen on the table is prepared by Mr. Squire.

(b) The dried specimen of the plant now before you has been kindly lent me by Sir Joseph Hooker, K.C.S.I., F.R.S., from the Kew Herbarium. The fresh fruit were sent to me by Mr. W. Gibbons, of Calcutta; they came by a Canal steamer, and arrived last March.

November; remains long on the tree. When cultivated, a middle-sized tree to thirty-five feet high, with a short, erect, often fluted, irregularly-compressed, and scooped-out trunk, attaining a girth of seven feet; branches few, extremities often drooping, forming a narrow oval head. Wild (in North-West India), generally a small scrubby tree. Bark of trunk and larger branches half an inch thick and more, outside soft, corky, light cinereous or bluish-grey, with large dark stains, and irregular, longitudinal, shallow furrows. Wood light-coloured, mottled with darker wavy lines and small light-coloured dots; medullary rays indistinct; even, close-grained, forty to fifty pounds per cubic foot. The tree, being valued for its fruit, is not often felled; but the timber is esteemed for strength and toughness. Used in construction for pestles of oil and sugar-mills, naves and other parts of carts, and for agricultural implements. Twigs and leaves are lopped for cattle-fodder. The tenacious pulp of the fruit is used medicinally in diarrhœa and dysentery, as sherbet, and as a conserve (Pharm. Ind. 46). Dry, it keeps well as a hard, transparent substance. It is also considered as an excellent addition to mortar, especially in building walls. Snuff-boxes are made of the shell of the fruit; the leaves, root, and bark are used in native medicine; from the flowers a scented water is distilled.

In 1868 a Pharmacopœia for India was published, under the auspices of Government, edited by Dr. John Waring, a distinguished member of the Madras Medical Service. This valuable work is based on the British Pharmacopœia, and, while affording all the information contained in that work of practical use in India, embodies and combines with it such supplementary matter of special value in that country as should adapt it to meet the requirements of the Indian Medical Department. In this work the following description is given of the forms in which Bael is prepared for use:—

1. Bael Mixture (Sherbet): "Two ounces of the pulp, two ounces of white sugar, four ounces of water; mix them thoroughly and add ice; it may be strained through linen, and is an agreeable form in which to take it, and is so taken by many in India when the bowels are deranged; for its beneficial action in giving tone to the intestinal tract. It is generally taken early in the morning, and may be repeated twice or thrice daily to the extent of a large wineglass or small tumbler full."(c)

Waring says: "It possesses all the aroma of the fruit, and when prepared with ripe fruit is not only astringent when diarrhœa exists, but possesses the singular property of being aperient if the bowels be irregular or costive. When the patient is much reduced in strength, and the stomach is irritable, the above mixture sometimes disagrees. It might then be given in smaller and repeated doses, and if these are rejected the extract *may* be tried."

The Liquid Extract (Ext. Belæ Liquid.): "Take bael fruit 1 lb., water 12 pints, rectified spirit 2 fluid ounces; macerate the bael for twelve hours in one-third of the water, pass off the clear liquor; repeat the maceration a second and third time for one hour in the remaining two-thirds of the water; press and filter the mixed liquors through flannel, evaporate to fourteen fluid ounces, and when cold add the rectified spirit"; dose from one to two drachms. This extract, prepared from the dried bael imported into England, appears to possess much less medicinal power than the extract and mixture prepared from the fresh fruit in India.

This, indeed, is the preparation of the British Pharmacopœia about which I have already expressed doubts as to its activity.

The Extract of Bael (Extract. Belæ), made from fruits that are ripe and have thin shells or rinds: "Extract the pulp, place it in a vessel, add water sufficient to cover it, stir for two hours, and strain through stout calico. Repeat the process until the fluid which passes is tasteless; evaporate over a water-bath to the consistence of a soft extract." This preparation retains all the aroma of the fruit. Dose from half a drachm to one drachm, twice or thrice daily. It is said to keep better if made from the unripe fruit.

There are other forms in which it is administered, and I will mention the most important of them.

Mr. A. Grant, of the Bengal Medical Service, describes several (in a paper in the *Indian Annals*, vol. ii. of 1855) in use in Bengal; for example:—

"The unripe fruit, squeezed and kept exposed to the air for a whole night, is then boiled and strained and sugar added. Of this a wineglassful is taken twice a-day." He says the bael is known to be carminative in the form of preserve or syrup.

The syrup is prepared thus:—Pulp of bael and sugar, each 2 tolas = ʒxj.; Eusophgool (Plantago Isphagoola) bran, 6 mashas = ʒjss.; rose water or confection of roses, 1 tola = ʒvj.; water a wineglassful; mix; give three or four times a-day.

In dysentery the following formula is used:—Bael mixed with dried shell of Gorcinia mangostana, 4 mashas = ʒj.; flour of pomegranate, 4 mashas = ʒj.; syrup of bael, 1 tola = ʒvj.; mix for a dose three times a-day. As to the use of the bael sherbet I have already described, Mr. Grant makes the following remarks, in which I quite concur:—"It is not only astringent, but possesses the property of being aperient if the bowels are irregular or costive; this last quality it seems to derive from being stomachic and promoting assimilation. When the patient is much reduced in strength, and his stomach weak, the sherbet sometimes disagrees; it ought then to be given in smaller doses."

Bael marmalade, according to Mr. Grant, is prepared in the same way as orange marmalade. It is eaten on bread, and is said to keep well.

Dr. J. Jackson gives the following recipe for bael conserve:—Take forty bael fruit, pass the pulp through fine muslin (no water to be added), take six seers (12 lbs.) of fine white sugar, boil it into syrup, then add the bael, and boil them together over a slow fire until the whole is made into a jelly.

"But," says Mr. Grant, "as at times, however, all the above preparations will, either from their bulk or sweetness, disagree with the patient, it becomes an object to obtain the medicine in a more concentrated form, more convenient for prescribing." Accordingly, Mr. Scott, of the Government Dispensary in Calcutta, devised the following formula for an extract, which Mr. Grant says he tried with favourable results. This extract will keep for any time; it retains the aroma and taste of the fruit and its medicinal principles, the starch and other insoluble portions of the fruit only being rejected. Its consistence is uniform, like molasses; its colour dark brown; its smell that of bael. The dose is from ʒss. to ʒj. two or three times in the day, or even oftener. It should be used recent, but he thinks it does not keep so well as stated by Mr. Scott. The extract prepared from the unripe keeps better than that from the ripe fruit. This is the formula:—Take the pulp of the ripe fruit with their shells, put it into a vessel and cover it with water; then churn it as you would churn butter for a couple of hours. Throw this on a calico strainer, and when the whole of the clear solution has passed through, replace the contents of the strainer in the vessel with half the quantity of water, and churn again for a couple of hours; filter as before, and continue to do so until the liquid passes through the filter tasteless. While the process is going on, bruise the shells of six baels and boil them well in two pounds of water, filter the solution through the calico strainer, add to it the filtered solution of the fruit, and having put the mixed solution in an evaporating dish over a water-bath, evaporate them down to the consistence of a good extract. If the medicinal properties of the bael depend on the tannin it contains, this extract, which is made only from the soluble portion of the fruit, must contain it also in all its integrity.

Mr. Scott gave also a formula for concentrated syrup as follows:—One ounce of the extract dissolved in twenty ounces of water, adding eight or ten ounces of sugar-candy; then evaporate it in a water-bath to the consistence of a syrup. The late Dr. Chuckerbutty, Professor of Materia Medica in the Medical College of Calcutta, recommended a preparation of dried bael to be used when the fresh fruit is not procurable, which is the case for some time each year. The pulp is strained through a coarse sieve, and is then kneaded into cakes and baked, to be eaten like a biscuit. This contains all the astringent properties of the fruit, it is said. This process of preparing the dried bael was devised by Mr. Bowser, the energetic and intelligent Steward of the Calcutta Medical College Hospital.

(c) Sherbet thus made from the fresh bael fruit—made as it is used in Calcutta—by Mr. Squire, was exhibited to the class.

Other preparations are sometimes made with the bael after it has been partially roasted; and the Hakeems and Kobirajes, I believe, prefer to use it in this form. Dr. Chuckerbutty occasionally recommended the use of the burned bael in the treatment of bowel complaints.

Dr. O'Shaughnessy, in the "Bengal Dispensatory," says:—"The statements we find in works on Oriental materia medica are very various as to the qualities of this tree and its products. Rheade says a decoction of the bark of the root is considered in Malabar to be very useful in hypochondriasis melancholia and palpitation of the heart; and that the leaves are used in decoctions in asthmatic complaints. The same authority says that the unripe fruit is of use in diarrhœa.

"Among the Javanese the fruit is deemed very astringent. Roxburgh correctly states the fruit to be delicious to the taste and very fragrant."

In the "Asiatic Researches," vol. ii., page 349, it is stated that "the fruit is nutritious, warm, and cathartic (a curious combination of qualities), its taste delicious, its fragrance exquisite. Its aperient and detersive qualities, and its efficacy in removing habitual costiveness, have been proved by constant experiments. The mucus of the seeds is for some purposes a very good cement." It is, indeed, remarkable how hard the mucus becomes when dry.

In the *Transactions of the Medical and Physical Society of Bengal*, vol. iv., page 110, Baboo Ram Comul-sen gives an account of the uses of the fruit and various parts of the plant. His botanical description is that given by Dr. Carey, and the following is an extract from the work referred to, giving it in detail:—

"In Bengal the parts of the tree which are employed are the bark, the root and stem, the leaves, and the fruit, both immature and ripe. The bark of the tree is peeled whilst fresh, and a decoction of it is made, in the proportion of two tollas, or about an ounce, to eight chittacks, or about a pint, of water. It is boiled to one-fourth, and administered in bilious fevers.

"The bark of the tree is sometimes used in fever, but rarely alone, being more usually one of those mixtures which are known as combinations of fourteen or eighteen substances, and given in remittents. When used alone, it is given in a similar decoction as the bark of the root.

"The expressed juice of the leaves, diluted sometimes with a little water, is commonly given in colds and incipient fevers, when the patient complains of general dulness, pains in his limbs, and sense of fulness of the stomach. The juice is slightly bitter and pungent, and induces perspiration.

"The young leaves are also used in ophthalmia, and are made warm, and so applied to the eyes, to relieve pain and inflammation. The unripe fruit is cut into small slices and dried, and a decoction is formed of the dry pieces by boiling them in the same proportion as the bark. It is in this preparation that the medicinal properties of the plant are most decidedly manifested; and the decoction of the dried unripe fruit is a most valuable remedy in diarrhœa and dysentery. It is particularly serviceable in the bowel complaints of children, but is also of benefit in several stages of such diseases in adults. The other forms in which the fruit is employed belong rather to diet than medicine, but they deserve to be noticed as employed in such disorders. A preserve is likewise prepared from the fruit before it is ripe, by boiling with syrup, which is also given to patients labouring under bowel complaints, with benefit, when every other article of food is the cause of fresh excitement, and attended with a feeling of oppression after being taken into the stomach. The ripe fruit is also beneficial in the same way: a sort of sherbet is prepared from it with tamarind-juice, which has rather an opposite effect, but it is on that account beneficial in fevers and inflammatory affections attended with thirst. The glutinous matter about the seeds is used by planters as a size and varnish. The bael is not the less esteemed by the Hindoo that the tree is held particularly sacred to Mahadeo, and is always worshipped at festivals celebrated in honour of him or his house, at the Durga Pooja holidays and similar celebrations."

The medicinal virtues of this plant are probably due to the astringent, aromatic, and demulcent properties of the pulp. It contains a considerable quantity of tannin, essential oil, balsam, and aromatic principle in the pulp, in the rind, and in the tenacious mucus surrounding the seeds. These may be preserved to a certain extent in the dried preparation, but the fresh fruit is in all respects better and more active, and as it can be so readily imported, there is no reason that I know of why it should not be brought into use. There can be no doubt that the bael is a very ancient remedy among the native physicians of India, albeit Dr. Wise does not refer to it in his "System of Hindu Medicine." It is referred to in the Ayur Veda, book of Sushruta, or Hindoo System of Medicine, dictated to him by the "holy sage" and physician Dhanantwari—a work still of great authority among Hindoos. It continues to be a favourite remedy among medical men of all denominations in India in the treatment of chronic bowel complaints, and it is not unfrequently given in combination with astringents, such as the kutch or catechu. The specimens before you, which have been in England since March, and are perfectly fresh at the end of May, are remarkably fine ones, and rather larger than those commonly met with (they have been evidently selected) in the Indian bazaars. You will recognise the peculiar fragrant aromatic odour, the yellow colour of the pulp, and the viscid mucus surrounding the seeds, which, Dr. Brandis tells us, is used for various industrial as well as medicinal purposes; a great contrast with the dry form in which the fruit is generally imported, and as you see it here. Mr. Squire has kindly undertaken to reinvestigate the question in its pharmaceutical aspects, and I trust he will succeed in adding some useful preparations of this fruit to our list of remedial agents, and that both in the fresh and preserved conditions it will be brought into use in England.

The bael is not, as you will have gathered from what I have said, confined to the pharmacy of the Hakeems and Kobirajes (*i.e.* the Mohammedan and Hindoo physicians); it much used by European medical men, and I have given you most of the formulæ in which it is administered. I will not occupy your time by much further detail on this subject, but may just say that, in addition to the authorities I have already mentioned, others have written on the subject, and if you care to do so you will find descriptions of the plant by Pereira in the *Pharmaceutical Journal*, vol. x., page 165; by Sir R. Martin in the *Lancet* of July, 1853, page 53; by Dr. Horsefield in the *Transactions of the Batavian Physical Society*, vol. viii., page 25, and by various learned authors of the last two centuries, such as Burmann, Bontius, Garcias ab Horto, and Caspar Bauhin. Descriptions of the plant and its uses are also to be found in the works of Roxburgh and Wight, Shortt, Newton, Green, Bose, Bidie, Pogson. In a paper entitled "Remarks on the Indian Bael or Bela in Dysentery, Chronic Diarrhœa, and Dyspeptic Disorders," by J. Adolphus, published in London in 1853; also in "Notes on the Nature and Uses of the Indian Bael," by H. O. Renfry, London; Bibl. Manchester Medical Society, 1855; also "Bael ou Bilva, Fruit de l'Ægle Marmelos," A. Collas, *Revue Coloniale*, August, 1856. Dr. Macnamara, late Professor of Chemistry in the Calcutta Medical College, has also recorded an examination of the fruit, in which he compares the ripe and the unripe fruit, in reference to the proportions of tannin or other astringent principles contained in each, and in which he states that the ripe contains more tannin than the unripe fruit, in the proportion of five to three. It contains more sugar, more of the bitter principle and vegetable acids not tannic. He obtained also, by means of ether, a balsam having a strong odour, closely resembling that of Peruvian balsam. This exists in much larger quantities in the ripe than the unripe fruit. He says the astringent properties are due to tannic acid, and that the ripe fruit, containing more of this than the unripe fruit, is more potent.

Dr. Macnamara suggests that the good effects of the bael may be due to the tannin and the balsam. His remarks on this head are important:—"May not the astringent effects of the bael be due to the tone which it gives to the coats of the intestines, and to its balsam rendering the secretions of the mucous membrane more healthy? It would then decrease the number of stools in a dysenteric patient, or in an otherwise healthy one, but who is liable to to mucous diarrhœa; while in a person of constipated habit, given to good feeding, bael might act as a laxative, by keeping the mucous secretions healthy, preserving the tone of the muscular coat, and so enabling the intestines, liable to irritation by peccant matters, to expel the crudities—nay, probably such people would be very liable to diarrhœa if they intermitted the bael; and so, even with them, the bael may really be an astringent."

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

TWO CASES OF

PHLEBITIS OF THE CEREBRAL SINUSES.

By JAMES RUSSELL, M.D., F.R.C.P. Lond.,
Physician to the Birmingham General Hospital.

THE two cases I now record illustrate two different forms of the same disease, and they exemplify the different modes in which circumstances will modify a similar morbid process. The case which I have placed first is an instance of a not uncommon affection—otitis, suppuration in the mastoid cells, and extension of the inflammation to the lateral sinus; with the consequences, septicæmia and death. The second case is not of such frequent occurrence, but there can be little difficulty in interpreting its phenomena, though, unfortunately, the condition of the patient prevented our obtaining information as to certain particulars which are needed to make the report complete. The case was one of destructive disease within the ethmoid and sphenoid cells, extending to the neighbouring sinuses, and giving rise to meningitis of the base: from this meningitis, and from the sanious effusion which accompanied and in all probability produced it, resulted disablement of the third nerve, with paralysis of all the ocular muscles; and it is to the occurrence of this paralysis, together with the venous obstruction within the orbit, that we must ascribe the proptosis. The ocular symptoms occurred under our observation, and followed each other in regular order, the proptosis not making its appearance till several hours after the orbital paralysis had become complete. This delay, so far as the active condition of the muscles had a share in preventing the earlier development of the protrusion, would of course be due to the circumstance that the complete effect upon the muscles of destruction of the third nerve would not be developed at once. The ultimate result, as in the preceding case, was septicæmia, though, unlike that case, the evidence of septic poisoning was clinical only, and not pathological.

There can be no doubt that the changes within the ethmoid and sphenoid bones started from the attack of "cold in the head," spoken of by the patient's wife; and the bad taste to which she referred may have indicated an early imprisonment of secretion within the cells in question, which ended in destruction of the lining of the cells, and the production of the fetid matter found within them. It is worth notice, in passing, that at the time of death there was still some catarrh of the frontal sinuses. It is interesting also to observe the difference in the early stage of the two cases. In the first case the earliest severe symptoms were those of septic poisoning, the brain having enjoyed immunity from the morbid process going on in its immediate neighbourhood. In the second case, on the other hand, the first severe symptoms were those of active meningitis, and the first rigor, indicating the time when blood-infection had taken place, did not occur till thirteen days later. Yet, when once established, the septic symptoms absorbed all others, and in each case manifested the same succession of rigors, delirium, sordes on the teeth, with high temperature and rapid tendency to sinking.

CASE I.—*Otitis—Rigors—Symptoms of Septic Poisoning—Death—Suppuration in the Mastoid Cells—Thrombosis of the Lateral Sinus—Infarcts in the Lungs.*

The history of the patient was obtained by our House-Physician, Dr. Malet, but the details accessible to us were unfortunately very scanty. The patient's condition of course closed the chief source of information. The patient was aged fourteen; she was admitted January 26, 1878. It appeared that she had been ailing for about four weeks, but her parent could not describe any definite complaint; during this period she seems to have had pain in her left ear, and her mother put some wool in it; but the mother was not aware of any discharge having taken place from the meatus, though the girl had been rather deaf. On the 21st, five days before admission, the patient had a violent rigor, followed by severe vomiting. She then began to complain of pain in all her limbs, so that she could hardly be moved in bed; some undefined swelling of the limbs was spoken of. She was hot and thirsty.

When admitted she was in a typhoid condition, though entirely without any of the characteristic aspect of face belonging to a case of enteric fever. Her tongue was dry and caked, and there were sordes on her teeth. The pupils were large. The bowels were constipated; the abdomen was flat. She complained much of pain in the right shoulder and elbow, and was intolerant of movement of the limb, but no other local symptoms were presented by the affected joint. At 5 p.m. on the day of admission her temperature was 101·4°; pulse was 136, and respirations 52. She had a rigor soon afterwards, and her temperature had run up to 105° by 8 p.m., with a pulse of 150. Moist râles were heard over both lungs; slight dulness existed at the right base. At midnight the temperature was 104·2°. (The foregoing is taken from Dr. Malet's notes.)

The night of the 26th was passed in a state of noisy delirium; the evacuations were voided in bed; and in the morning, although the temperature had fallen to 102·4°, all the symptoms already described were aggravated. The urine had a specific gravity of 1020, and exhibited a trace of albumen. She was ordered salicylic acid. In the evening the temperature had declined to 98·6°, and never again rose above 100°. Several rigors occurred during the day.

No further change of importance took place in the symptoms until her death on the evening of the 29th. The pulse continued to rise; respirations varied from 36 to 48. The pain in the joint, however, ceased. One rigor occurred on the 28th, and on that day the patient passed a copious solid motion of bright gamboge colour. She was very delirious at night, but was quiet by day. The depression deepened; the sordes increased; the tongue remained brown and caked. On the morning of the 29th she fell into a state of semi-coma, but shortly before death she was most distressingly restless.

I was unable to be present at the post-mortem, and therefore copy the notes by our pathologist, Mr. Howard Lowe. Hypostatic congestion was well marked, and there were dark purple patches on the front of the lower limbs. The brain and its membranes were healthy, excepting that the latter were stained in the neighbourhood of the lateral sinus. The left membrana tympani was perforated, and the tympanic cavity itself, with the external meatus, contained a caseous material. The mastoid cells were filled with pus; their lining membrane was destroyed. In the posterior part of the mastoid region the bone exhibited a perforation capable only of admitting a pin, but establishing a communication between the cells and the corresponding lateral sinus; the sinus was filled with a greyish granular thrombus, and its inner coat was rough and of a dirty colour. The discoloration of the sinus extended down the length of the jugular vein, but the vein itself was free from thrombus, containing only fluid blood.

At the upper part of the petrous process a purple elevation of the dura mater, about the size of a sixpenny-piece, existed, containing cheesy purulent matter, and also communicating with the mastoid cells.

The right pleural cavity contained ten or twelve ounces of sero-purulent fluid; the pulmonary pleura was rough, and presented several small petechiæ. The right lung was much collapsed at the base and congested at the upper part; it contained several hæmorrhagic infarcts, which had gone on to the production of cavities containing thick black fluid. The left lung was congested throughout; it presented infarcts like those in the right lung, together with numerous small disseminated patches of catarrhal pneumonia. The larynx, trachea, and bronchi were much congested, and contained a large amount of thick mucus. The intestines presented occasional patches of congestion, and a few of Peyer's patches were injected and rather swollen. The mesenteric glands were enlarged. The spleen was large and soft, but free from infarcts. All the solid organs, with the exception of those described, were healthy. The right shoulder- and elbow-joints were quite healthy.

CASE II.—*Ozæna—Acute Meningitis—Rigors—Symptoms of Septicæmia—Sudden Paralysis of the Third Nerve—Proptosis—Death—Sloughing in the Cells of the Ethmoid and Sphenoid Bones—Thrombosis of the Cavernous and Circular Sinus, and of the Ophthalmic Vein.*

W. W. B., a labourer, aged thirty-four, admitted February 17, 1878. The history of the patient's illness before admission is taken from the notes of our House-Physician, Dr. Malet. There was an account of some falls upon the

head, but these accidents appeared to be in no way related to the present attack. The patient had found himself unusually fatigued by his work for some months; but at the close of last year he suffered *from a very bad cold*, during which he had copious discharge from the nose. His wife did not notice anything in particular connected with this cold, excepting that he complained of a bad taste in his mouth; and it is worth notice, in passing, that this last statement was volunteered to Dr. Malet. The patient's habits have been temperate. No evidence justifyiug suspicion of syphilis could be obtained from the wife, the only source of information accessible to us.

On January 29 last the patient was attacked, whilst at work, with giddiness, attended by severe pain in the head (seat unknown), and on the following day was compelled to take to his bed. Then followed acute pain in the left temple, with exacerbations morning and evening, and pain also behind the ears; and his wife added that as each attack of temporal pain subsided, he felt pain "in his upper teeth." The pain of every kind had ceased at his admission, and did not return. He vomited frequently during the fortnight.

On February 10, five days before admission, he said his sight was dim, he could not see his wife so plainly as usual, and on that day he had a severe rigor, and a second rigor less severe on the 14th, with several "heats and chills" on the intermediate days. His mind began to wander on the 13th, and he was very delirious on the 14th and 15th.

When admitted, the patient was conscious of not possessing full control over his mental operations; his eyes looked wild, and his head was hot; his tongue was thickly furred, and was brown in the middle. At that time no derangement existed in the muscular apparatus of either eye or of the eyelids. His pulse was 130.

Such was the patient's condition on the evening of the 15th. On the following morning he was found to have complete ptosis of the left upper eyelid, and on raising the lid it was at once apparent that the globe was absolutely immovable, the cornea occupying a central position. The right eye retained its normal power, and, when the left lid was elevated by ourselves, was moved rapidly and incessantly in all directions, and it was only by sharp command that the patient could be induced to fix the eye on any object. The conjunctiva of the left eye was somewhat injected; the pupil was in a medium state of dilatation, and merely oscillated slightly. A reliable account as to acuity of vision could not be obtained, but there was every reason to believe that at least a large amount of visual power was retained up to the time of death. There was nothing to call for remark in connexion with any other cerebral nerve. The patient talked unconnectedly when left alone, but probably answered rationally when roused by a question; he was very fidgetty in manner, and in his talk much like a man verging on delirium tremens. There were sordes on his teeth.

The remainder of this day and the night were passed in a state of delirium, at times with much excitement; three or four rigors occurred in the course of the afternoon, not followed by perspiration. During the afternoon Dr. Malet observed that the left cornea was insensible to contact. On the next day (17th) the condition presented a more markedly typhoid character: sordes had increased; the tongue was dry and brown; he lay on his back in a state of constant muscular irritation; his replies were quite unreliable.

On the previous evening the nurse had observed some prominence of the left eye, and this morning the globe was in a state of complete proptosis, the upper lid being much reddened; the conjunctiva was œdematous around the edge of the cornea.

Two more rigors occurred on the morning of the 18th; the general symptoms were the same in character, but had increased in gravity. The left upper lid had become œdematous, and the swelling of the conjunctiva had increased.

On the 19th the patient was incoherentand semi-comatose. The conjunctiva of the left eye formed a prominent ridge along the edges of the lids, and projected at the inner canthus. Some epistaxis occurred early in the morning. It was noticed that the right upper and lower extremities were weak. In the evening the limbs were in a state of continual automatic movement; evacuations were passed unconsciously, but he was able to swallow fairly. The cornea of the sound eye was insensible, and that of the left eye was dim. The patient became quite unconscious, and died in the evening of the 20th without presenting other change than increasing severity of all his symptoms.

The affected eye was examined several times by the opthalmoscope; during the first two days no important change was observed; subsequently the media became somewhat misty, but only sufficiently so to obscure the definition of the vessels, without concealing them. The pupil of the sound eye was persistently contracted during the last three days of life; that of the affected organ did not undergo any further change from its condition when first attacked by the paralysis.

The temperature in the evening of the first day (the 15th) registered 102°, and was at the same point next morning, but in the evening ran up to 104°, whence it had descended to the former point (102°) by the next evening. It then steadily rose so as to attain 105° on the evening of the 19th, but next morning sank again to 103·4°. The pulse rose from 112 to 120, and finally to 140. The urine at admission contained albumen one-sixth of the column, with hyaline and granular casts; on two subsequent occasions it contained some blood; and on the last day was ammoniacal, and only clouded by nitric acid; it was free from sugar.

I am much indebted to our pathologist, Mr. Howard Lowe, for the very careful dissection on which the following report of the post-mortem appearances is founded. The posterior ethmoidal and the sphenoidal sinuses were quite filled with fetid and very offensive sanious fluid of a blackish-brown colour; the mucous membrane was entirely stripped from the bone, and lay in the fluid; the bony walls were not necrosed. The anterior ethmoidal cells were healthy; the frontal sinuses contained a little catarrhal fluid, but otherwise were healthy. All along the body of the sphenoid bone, from the orbital foramina backwards to the basilar process, there was a broad effusion of half-decomposed blood beneath the dura mater. The left cavernous sinus, the circular sinus, and the left ophthalmic vein were obstructed by a soft, half-decomposed coagulum; the coats of these vessels were infiltrated with this sanious matter. The organs within the orbit were carefully examined, and all of them, including the fifth nerve, were found perfectly healthy and free from œdema; the bones of the orbit were also quite healthy. The septum narium, so far as could be seen from the outside, was healthy; but I have to regret that the vertical plate of the ethmoid and the spongy bones were forgotten. A copious deposit of lymph of sanious character covered the different parts which lay in the middle line at the base of the brain; it enclosed the vessels of the base, and completely surrounded the left third nerve; it was put aside for hardening, but, to the naked eye, had obviously sustained great damage.(a) Of the arteries, some were empty, some contained loose coagula; none were obstructed. The lymph ran along the vessels up each Sylvian fissure, but most abundantly up that of the left side, where the convolutions of the insula and of the tip of the temporo-sphenoidal lobe were much discoloured by infiltration. All the other sinuses of the dura mater—the petrosal, as well as those of a larger size—were quite healthy; the longitudinal sinus was nearly empty; the jugular veins were also in a healthy condition.

The ventricles of the brain were found to contain an unusual quantity of clear limpid fluid; they were, moreover, much dilated, as if they had been subjected to greater distension than was explained by the present amount of fluid. All the rest of the brain and its membranes, together with the large ganglia, were quite healthy, excepting that the surface of the brain was dry, and the vessels of the pia mater were finely injected. The bones of the skull were remarkably dense, and were unusually thick in the frontal region. The kidneys exhibited signs of passive congestion; all the other organs were quite healthy. The blood in the large veins was well coagulated.

Typhoid Fever in Berlin.—There occurred during the year 1877, 612 deaths from typhoid fever (*typhus abdominalis*)—viz., 169 before the age of fifteen, 179 between fifteen and twenty-five, 127 between twenty-five and thirty-five, 60 between thirty-five and forty-five, 49 between forty-five and sixty, and 28 above sixty.—*Deutsche Med. Woch.*, May 18.

(a) Subsequently, Mr. Lowe found the nerve generally disintegrated, especially in the part near the cavernous sinus, where the nerve-tubules could scarcely be recognised.

ON ABNORMAL VASCULAR CONDITIONS AFFECTING THE ORGAN OF HEARING.

By GEORGE P. FIELD, M.R.C.S.,
Aural Surgeon to St. Mary's Hospital.

VERY many cases come before one, in practice, of tinnitus aurium and deafness, in which, on examination of the auditory apparatus, no defect can be found therein, and we have to seek the cause elsewhere. This may be found in many, if not in most, of these cases to be due to certain vascular conditions, which I propose to indicate.

In the first place, I must once more draw attention to the extreme importance of a just pressure-equilibrium of the fluids and tissues of the internal ear; for but slight variations of either increase or decrease of pressure on these delicate structures may give rise to severe tinnitus. Anyone anxious to demonstrate the truth of this remark may readily do so by pressing inwards the tragus of his own ear. The pressure thus produced by compression of the air in the external meatus, forcing inwards the drum, and by its means the chain of ossicles and the fenestræ, immediately produces severe tinnitus by the increased pressure on the endo-lymph and nerves of the cochlea—a result being produced exactly similar in its nature and effects to suddenly striking the key-board of the piano, and setting in discordant vibration every note that it is capable of producing. The most common forms of tinnitus, such as are due to wax, polypus, or retained fluids in the tympanum, act in this manner, and I purpose to show that many less known, but no less important, cases of singing in the ears and deafness owe their origin to a similar but not so evident a cause. Anæmia and hyperæmia are powerful agents in modifying pressure-equilibrium. The high arterial pressure which occurs in Bright's disease is now well known, and readily recognised by the character of the pulse. We have then, under these circumstances, over-filled arteries and arterioles exerting undue pressure on the peri- and endo-lymph, and giving rise to tinnitus. If we turn to other conditions by which we may test the truth of this observation, we become impressed with its great importance.

There are many well-known conditions of vascular hyperæmia and turgescence giving rise to tinnitus. It is frequently seen in those cases of hemicrania due to gout or other causes, in which dilatation, hyper-distension, and cord-like rigidity of the external vessels of the head may be readily recognised and examined. These may be taken as sure indicators of the condition of branches inside the cranium, coming as they do from a common stock, and supplied by the same vaso-motor ganglia. Again, in venous hyperæmia due to heart disease, increased pressure, accompanied by tinnitus, is frequently produced; and we have a well-known and remarkable instance of a like and localised hyperæmia, which can be observed by means of the otoscope, as the result of an overdose of quinine or salicine—and probably alcohol has a similar effect.

In Bright's disease, where the tension is persistently high, the lymphatics have regulated the quantity of fluid to the altered circumstances, and therefore tinnitus is not constantly present; it only requires, however, an exacerbation of the symptoms of the disease, and a further increase of pressure, to immediately develope the noises in the ear. A like explanation may be given of the tinnitus frequently occurring in those so-called bilious attacks, in which a careful observer often detects an increase of arterial tension. So also during an acute attack of gout, or in those conditions of plethora frequently culminating in apoplexy, of which the tinnitus may be often taken as a sure forerunner.

Thus far we have seen increased pressure to be the cause of this distressing symptom: the like result is produced by decreased pressure, and is seen in anæmia. In ordinary cases of anæmia, tinnitus is often both a prominent and distressing symptom, but never more so than when the anæmia is of recent and sudden production, as in cases of hæmorrhage, when, again, the change has been too rapidly produced to permit the lymphatics regulating the pressure of the peri- and endo-lymph.

This condition, too, is susceptible of ready demonstration by experiment. Firm compression of the carotid immediately produces tinnitus in the corresponding ear.

It is not at all uncommon, especially in hospital practice, to meet with cases of chlorosis in young girls, in which tinnitus aurium is a prominent symptom. They come to get relief, not in consequence of a pallid face and suppressed catamenia, but from the constant annoyance of singing in the ears. We do not want the hæmacytometer to estimate the corpuscular richness of their blood, for the improvement in colour speaks for itself.

So much, then, for vascular conditions without changes of structure occurring in Bright's disease. There are, however, other causes for the deafness which is not unfrequent in this disease. It is a well-ascertained fact that, owing to the high arterial tension and the disease induced by it in the walls of the vessels, minute hæmorrhages are apt to occur in various tissues of the body, especially the softer ones, such as nervous tissue and the mucous membranes. Hæmorrhages in the retina under these circumstances have long been remarked, and Dr. Mahomed has recently described them in the brain-substance as a cause of uræmic convulsions. Their occurrence in the tympanum and other parts of the auditory apparatus as a cause of deafness in Bright's disease was first described by Schwartze,(a) and since been frequently observed.

This, then, being the pathology of their condition, the indications for treatment are immediately apparent. Remedies which reduce arterial tension are necessary, and as these conditions are of a temporary nature, drugs whose action is rapid and also temporary are most suitable; thus I have seen jaborandi, nitrite of amyl, or a few whiffs of ether, all of which rapidly reduce arterial tension, prove serviceable. Cases of relief afforded by nitrite of amyl have lately been recorded by Michael and other German writers. In some instances, however, more certain and severe measures must be resorted to; thus, in the case of a gentleman, Mr. T., aged sixty-five, whom I lately saw in consultation, suffering from severe tinnitus, dependent evidently on an extreme condition of plethora and very high arterial tension, with a cord-like pulse—recognising the probability of a speedy attack of cerebral hæmorrhage, I advised the abstraction of twenty ounces of blood from the arm, a procedure which was attended with immediate relief of his distressing symptoms, and was probably the means of saving his life.

TWO PECULIAR SURGICAL CASES.

By S. K. COLTER, M.D., M.Ch.

Case I.—*Extraction of a Bullet from the Pelvic Cavity by Trephining.*

IN December, 1873, during the Langalebelele disturbance, an able-bodied healthy young man, of about twenty-five years of age, belonging to the volunteer force, was wounded by the accidental discharge of a large-bore revolver. The weapon hung upon a clothes-line, and he was stooping close underneath to tie his boot, when the bullet, about an inch long by half an inch thick, penetrated inwards, downwards, and forwards, about from two to three inches below the top of the right sacro-iliac synchondrosis. On first examination, soon after the occurrence, the bullet was not found, the surgeon conjecturing that it was lodged in the pubis. After a journey of about one hundred miles he came under my observation, and on examination with a long probe I discovered the ball and touched it once or twice. I then made an incision, about five or six inches in length, completely down to the bone through the gluteal muscles—chloroform having been of course given—and with a small trephine sawed through a thickness of bone considerably over an inch, making a hole large enough to admit the index finger. With the tip of the nail I just succeeded in touching the ball as it lay loose behind the bladder amongst the bowels, beside the rectum. I again passed down the long probe, and upon it a uterine forceps (polypus forceps), and succeeded in gaining hold of the ball and extracting it.

The result of the operation was complete recovery, in spite of unfavourable symptoms previously, and the hopeless aspect of the case, and he returned to the very active employment of a farm and waggon-driving within about six weeks.

(a) *Archiv für Ohrenheilkunde*, Bd. iv., page 12.

Case 2.—Fracture by Muscular Effort.

Sergeant S., Royal Artillery, while leaning back in his chair on the night of November 28, 1868, the two front legs being off the ground, suddenly lost his balance, and threw back his arms to recover himself; the result was a sudden and acute pain in right collar-bone, followed by fainting. I found a fracture of the right clavicle at junction of inner and middle thirds—an uncommon situation,—doubtless from spasmodic action of the trapezius externally, and the pectoralis major and subclavius externally.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

HERNIA CASES.

GUY'S HOSPITAL.

Case 1.—Hydrocele of Hernial Sac simulating the Ordinary Hydrocele of the Testicle—Frequent Tapping—Incarcerated Hernia—Operation—Peritonitis—Death.

(Under the care of Mr. BRYANT.)
[Reported by Mr. G. W. BUTLER.]

THE following case is one of extreme rarity; it is the only instance of the kind that has come under Mr. Bryant's notice, and but few are on record; we therefore give it *in extenso* as reported:—

W. C., a waterman, aged forty-two, was admitted into Job ward on January 1, 1874, under Mr. Bryant's care, with what appeared to be hydrocele of right and left testicles, the right being much the larger. The man had always been healthy until he was twenty-two years old, when he received a blow on the right testicle, causing it to swell; it gradually got larger until eight years after, when it had become as large as a swan's egg. It was then tapped, and a good deal of fluid drawn off; it filled again in three or four months, was again tapped; and since then it had been often tapped at intervals of from three to six months. As soon as admitted, it was again tapped, three or four ounces of fluid coming away. He passed a bad night, having a great deal of pain at the lower part of the abdomen; hot fomentations were applied. He slept a little the following night, but the tenderness in lower part of abdomen continued, accompanied by hiccough; pulse 60; temperature 99°.

January 5.—His abdomen was swollen and tympanitic, and he got crampy pains every now and then.

6th.—An examination seemed to show that a portion of intestine had come down on his right side, as there was resonance over the upper part of the scrotal swelling and some gurgling on pressure. His left hydrocele was tapped, about three ounces of fluid coming away. He still had great pain over his abdomen, which was much swollen. The bowels have not been open for three days.

13th.—The right and left hydroceles were both tapped, and the left one was injected with equal parts of iodine and water.

17th.—He had been sick in the night, and again the following night.

23rd.—In Mr. Bryant's absence the Assistant-Surgeon was called to the case, and an exploratory operation was determined upon. The sac was cut down upon and laid open, and what was supposed to be a congenital hydrocele was found to be a congenital hernia of the cord. The finger passed easily along the vaginal process into the abdominal cavity. Into this sac protruded what appeared to be a large mass of omentum, or an omental sac. Percussion gave no evidence of the presence of bowel. This mass was therefore incised, and in so doing a mucous membrane surface was exposed. It was therefore concluded that the omentum had formed a sac, and that the bowel which it contained was quite adherent to its inner surface, and this bowel had been incised to the extent of an inch. This was closed up by gut sutures, and the incision closed. After the operation he vomited five or six times; temperature 101·4°. He was no worse the following morning, but vomited four or five times during the night (the effects of the chloroform).

25th.—Temperature 99·8°; pulse 108. He was much the same. The pains in hypogastric region were better; the wound had a fetid smell, but there was very little discharge.

27th.—The fæces passed through the wound.

29th.—The parts were all widely gaping; the omentum sac filling nearly the whole incision, and at the most prominent part it had a purple surface of mucous membrane of bowel discharging fæcal matter. Temperature 101°.

31st.—The omental sac was protruding very much, the fæces still passing through the wound. He had been very sick for two or three days, not being able to keep anything on his stomach.

February 1.—He had been able to keep down a little milk and egg. His respiration was catching from abdominal pain. Abdominal muscles were tense but not tender. Pulse 120.

2nd.—Pulse 110; temperature 100·8°; respirations 36. He still complained of pain over his abdomen; a poultice was applied, which relieved him considerably. About 5 p.m. he rallied and sat up in bed, but by 9 p.m. he became very much weaker, breaking out into cold perspirations. He then got gradually weaker, and died at 12.30.

Post-mortem.—Head: There was a deep pit in right parietal bone, formed by some Pacchionian bodies which had pressed the dura mater. Pleura: There was much pleurisy in left base; new lymph, and much fluid; no discoloration of diaphragm to show that it arose by extension from peritoneum. Heart weighed eleven ounces and a half; the right side looked large, and was distended with tough pale fibrin. Abdomen: There was general peritonitis. The liver covered on its under surface with a separable layer of lymph. The intestines marked with suction lines, and with puriform lymph between their coils here and there. The cæcum was in its natural position, but the lower end of the ileum, at about one inch distant from the valve, passed down into the right inguinal canal and scrotum; it there formed a loop and emerged again; it was adherent to the neck of the sac by old adhesions anteriorly and posteriorly, but on each side the finger could be passed into the abdominal cavity from the external wound, or *vice versâ*. There were some recent adhesions about the parts, but whether they completely cut off the peritoneal cavity from the wound before the parts were disturbed, I could not say. This coil of bowel had its coats exceedingly thickened, so that it did not look at all like intestine, and it was difficult to believe that it was not covered by some other structure. The omentum descended over the intestine to the mouth of the sac, but it was thin, and there was no indication of its having become indurated and adherent to the bowel; indeed, on tracing downwards the two ends of the loop of intestine, and separating the adhesions which bound them together, it was evident that there was no other structure involved. The thickening of the coats of the bowel did not include any marked hypertrophy of the muscular layer; it seemed to be chiefly the serous and sub-serous coats, which were greatly thickened and hardened. The wound made during life in the bowel was in the *descending* portion of the loop, which lay in front of the *ascending*. There was no hydrocele on the right side, and what had been mistaken and treated for hydrocele must have been the congenital irreducible hernia with hydrocele of the hernial sac.

MANCHESTER ROYAL INFIRMARY.

Case 2.—Unusually Large Inguinal Hernia—Operation—Death.

(Under the care of Mr. BRADLEY.)
[Reported by Dr. H. TOMKINS, Senior House-Surgeon.]

The following case of inguinal hernia is perhaps deserving of record on account of its enormous size, the scrotum containing the greater part of the intestinal canal:—

James S., a shopkeeper, aged sixty-three, a hale man, who had been for many years the subject of a left inguinal hernia, which he could easily reduce himself, was admitted into the Manchester Infirmary on March 8, 1878, suffering from symptoms of intestinal obstruction. The account he gave of himself was as follows:—Five days before admission the hernia had suddenly come down much larger than usual. He partly reduced it, and applied his truss, but the day following it again came down, and this time he found himself unable to replace it. He sent for medical aid, and taxis, with a hot bath, was unsuccessfully employed. Vomiting and hiccough, with some little pain, had come on on the morning of his admission. At that time he was found to have an immense inguinal hernia on the left side; the bowel had

descended into the scrotum, which was distended to the size of the head of an adult, the penis being quite obliterated, and only a small orifice left denoting where it was. It was not very tense, and there was slight impulse on coughing. There was bilious vomiting at intervals; not much pain. Temperature normal; pulse 90; bowels had not acted for three days. He was placed in a hot bath, and an attempt made to reduce it, but without success. As the symptoms at present pointed more to obstruction than strangulation, it was decided to wait before proceeding with an operation. He was put back to bed, the tumour well raised, ice applied to it, and a simple enema of two pints administered. The foot of the bedstead was also raised some six inches, in the hope that the bowel might gravitate backwards into the abdomen.

March 9.—Had passed a fairly comfortable night, but the condition of the hernia remained unaltered. There was still slight vomiting of bilious matter. The enema was retained some considerable time, but only a few small pieces of hardened fæces came away with it. He was seen in consultation by the medical staff, and it was again decided to wait for more urgent symptoms before operating, the same treatment being continued, with a full dose of opium at night.

10th.—Has passed a restless night. Vomiting worse—semi-stercoraceous, with hiccough. Has a more anxious expression, and complains of rather more pain about the hernia. Temperature 99·4°. Seen by Mr. Bradley and Mr. Bowring, and operation decided on. The ordinary operation for inguinal hernia was performed by the former, and upon reaching the sac it was found there was no constriction at either the external or internal ring, nor within the canal, the finger being easily passed along the whole length by the side of the gut. It was then attempted to reduce the bowel without opening the sac, but this could not be done. The sac was therefore opened, and a large mass of intestines exposed. These were somewhat congested, and covered with a layer of fibrinous exudation, which bound the coils of intestine together, and thus helped to prevent reduction. These were gently separated, and reduction commenced, but whilst the bowel was being passed back into the abdomen a small quantity of thickish fluid oozed up, with a distinctly fæcal odour and appearance. Some search was at once made for the supposed opening; but amongst the enormous mass of intestines it was found impossible to find it without passing, as it seemed, nearly the whole of the small intestine inch by inch through the fingers. This, with the existing state of things, was thought unadvisable, as probably only likely to increase the mischief; and so, with the hope that by means of the fibrinous exudation the opening might become closed, the wound was stitched up and the hernia left unreduced. On recovering from the chloroform the patient was very sick, with the same semi-stercoraceous vomit as before; temperature 99°. He complained of very little pain until 5 p.m. in the evening, when severe abdominal pain came on, and a quarter of a grain of morphia was administered subcutaneously. He was easier for some few hours after this, but died in a state of collapse about 12 midnight.

Post-mortem.—The post-mortem examination, made the next-day, revealed a most unusual state of things: the whole of the small intestines were contained in the hernial sac, and also the cæcum, and small part of ascending colon, which were pulled across from the right side. The whole of the coils were bound together by the inflammatory exudation, thus accounting for the difficulty experienced in attempting reduction. The cæcum was firmly adherent to the back part of the scrotum; and here the coils were bound down in such a twisted and confused mass that it was with some difficulty the true position of the parts was made out. The appendix vermiformis had undergone great thickening, apparently from old inflammation, and just at its junction with the cæcum ulceration had taken place, through which the fæcal matter noticed at the operation had escaped.

Faculty of Physicians and Surgeons of Glasgow.—At a meeting of the Faculty, held on the 3rd inst., Dr. Benjamin Ward Richardson, F.R.S., was elected an Honorary Fellow. This is the only distinction of a purely honorary character which the Faculty have it in their power to confer, and they exercise the power very rarely.

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Medical Times and Gazette.

SATURDAY, JUNE 8, 1878.

THE MEDICAL ACT AMENDMENT BILL.

When the Duke of Richmond moved, on May 24, the commitment *pro formâ* of the Medical Act Amendment Bill, he proposed that the discussion in committee should not be taken till the week after Whitsuntide week. To the outside world it was therefore rather surprising to learn on Tuesday last that the Bill had been passed through committee in the House of Lords and reported on the previous evening. This hastening of the progress of the measure may, however, be taken as a proof that the Government intend in good earnest to pass it into law if possible, and therefore desire to bring it before the House of Commons without any avoidable delay. Several amendments were made in the Bill as it passed through committee, besides the amendments proposed by the Duke of Richmond, and though most of them are verbal amendments only, some are of considerable importance. Clauses 3 and 4 of the section on registration were, on the motion of the Marquis of Ripon, and with the assent of the Duke of Richmond, amended so as to make the possession of a diploma or licence from a medical authority unnecessary for the purposes of registration. The commencement of Clause 4 is consequently altered so as to entitle a person who, "(*a*) after the commencement of the joint board system, has obtained a qualifying certificate under this Act," to be registered on producing or sending to the Medical Registrar such qualifying certificate—the words which required a medical diploma to have been received from one of the medical authorities after the qualifying certificate had been obtained, having been omitted; and Clause 3 has been amended in the same sense. This very significant amendment seems to remove one of the chief difficulties with regard to the registration of medical women, and has, we suppose, been made with that special object, as no degree, diploma, or licence granted by any medical authority will be necessary to enable a person to demand admission to the Medical Register. We do not think that the medical authorities will object to the

alteration, for no medical man will be likely to be content with the qualifying certificate only; but we very much doubt whether medical women will approve of the change. We do not observe that the Bill anywhere states what is to be the professional title of a person possessing only the qualifying certificate, or what initials such a person is to place after his or her name. "Q.P." perhaps, or "Q.M.P.," as signifying "Qualified Practitioner," or "Qualified Medical Practitioner," ? "M.P.," meaning "Medical Practitioner," or "Q.C.," as short for "Qualifying Certificate," would be more handy; but these combinations of initials are unfortunately already appropriated. This question of title is, however, a serious one, and demands consideration by the framers and amenders of the Bill. It cannot be said, without more careful examination of the amended Bill than has as yet been possible, what will, or may, or is meant to be the effect of the amendments regarding the necessity of diplomas. Clauses 3 and 4, as we have stated, make the possession of only a qualifying certificate obtained from a Medical Board sufficient to entitle to registration; but Clause 8 has not been in any way altered, and the first part of it runs thus:—"1. The Medical Register under the Medical Act (1858) shall—(*a*) contain in one alphabetical list all United Kingdom practitioners, that is to say, all persons who are either registered at the commencement of this Act, or being entitled at the commencement of this Act to be registered are subsequently registered, and all persons who are registered in respect of diplomas granted after the commencement of this Act by the medical authorities of the United Kingdom"; and then goes on to provide separate lists for colonial and foreign practitioners; but nothing is said about registering persons in respect of qualifying certificates. In Clause 16, in the section entitled "Board for Medical Examinations," the paragraphs entitling every person who has obtained a qualifying certificate from the Medical Board to receive on application from any Medical Corporation one of its diplomas, and to be registered on such diploma, are entirely omitted. In the section "Medical Authorities," the clause giving power to any medical authority to constitute a new medical diploma, which should confer on qualifying certificated persons the right only to registration, has been omitted; and the clause respecting the power of medical authorities to grant diplomas to women remains unaltered.

Paragraph (4) of Clause 13—that respecting "examination-rules"—has been amended again. As the Duke of Richmond amended it, it stood—"The examination-rules shall provide for the admission of women to the examinations, with such distinctions, if any, as may be judged necessary between the examinations for men and for women, so, however, that the examinations for men and for women shall guarantee equal proficiency." Now all the words after "to the examinations" have been omitted, and instead of them the following have been inserted: "and that the examiners may, if they deem it necessary, propose alternative questions to be answered by each candidate." The amendment does not appear to mean much; but makes the clause more simple and perhaps even more permissive than before.

Some few minor amendments may also be noted here—as that in Clause 3, which requires that the qualifying certificate granted by a Medical Board shall mean that a person has shown himself to be qualified to practise both medicine and surgery, "including therein midwifery," the latter words having been added in committee; and in Clause 16 it is again stated that the certificate shall mean that the possessor of it has been examined in midwifery as well as in medicine and surgery. In the last paragraph of the same clause there is also an amendment altering the latest date given for the establishment of Joint Boards from "not after the last day of July, 1880," to "not after the last day of December, 1879." And in Clause 12 it is provided that the Committee of the Medical Council for the purpose of erasure from and restoration to the Medical Register shall not exceed "seven," instead of "five," in number; and power is given to the Council to appoint, if they think fit, the Executive Committee to be the Committee for these purposes.

On Tuesday, the 4th inst., the report of the amendments on the Bill was brought up and agreed to.

REFORM OF THE GENERAL MEDICAL COUNCIL.

The question of altering the constitution of the General Medical Council, by providing for the direct representation of the profession in it, has been strongly and repeatedly urged upon the Duke of Richmond, but he has, so far, absolutely refused to make any provision for such a change in the present Bill. He has, however, recognised the importance of the subject, and has admitted that it may be supported on general grounds, though stating, at the same time, that it cannot possibly be introduced into his Bill, but will have to be dealt with in a separate measure and at some other time. But his Grace has shown himself so open to argument with regard to the formation of conjoint schemes, and so ready to reconsider, again and again, his conclusions, that it can hardly be hoped or expected that the British Medical Association will not continue to try their utmost to carry their "direct representation of the profession on the Council" point, even at the risk perhaps of wrecking the Bill. We cannot pretend to feel any great sympathy with them, for we dispute the correctness and the force of some at least of the grounds on which, as we understand, the proposed change is demanded; we deny its urgency; and we greatly question the wisdom of the proposed method of making the desired change. We are quite ready to admit that the General Medical Council is not a perfect body for its purposes, but we do not admit that the profession at large is not represented on it. We certainly do not feel able to accept the very high-flown appreciation of them put forward by their President, when, on a late occasion, he said, "I should like the member of the Council to be named who would dare to rise in his place and admit that he represents anything else but the profession, except it be the nation at large"; but neither, on the other hand, do we altogether believe that the amusingly Hibernian counter-declaration of Sir Dominic Corrigan, "I represent the Queen's University in Ireland, and I say that I do not represent the profession," fairly and truly reflects the opinions and feelings that generally guide the members of the Medical Council. But, were it granted even that the representatives of the Universities and the Corporations in the Council are nothing more than the delegates of the various bodies that elect them—which we do not grant—whom do the Crown nominees represent, if not the profession? And, further, when the conjoint boards system comes into operation, the eminent men whom the medical authorities send to the Council will certainly be still less tempted and prone to think too exclusively or too prominently of the interests of the various bodies that elect them than, according to their criticisers, has hitherto been the case. The reform, so called, is, we therefore think, not urgent; and we reject the allegation that the profession is not represented in the Council. Further, we venture to say that it is not wise to base the demand for "direct representation" in any measure on the cry that representation and taxation go together. It may perhaps be, in one sense, expedient to do so, for the British Medical Association may, no doubt, be aided in raising some considerable, and not ineffectual, obstruction to the passage of the present Bil

through the House of Commons, by infusing a political, and still more a party, flavour into their opposition. And the cry we have mentioned is a political shibboleth well calculated to capture young members of Parliament and fussy politicians, while the Tadpoles and Tapers of party are especially likely to think it an effective one. But it is certainly rather straining the term "taxation" to apply it to the registration-fee imposed by Government—not by the Medical Council—for admission to the Medical Register. And, even if you call it a tax, it may be well replied that a *tax* paid once does not usually confer a franchise for a lifetime. Two other reasons for persistently urging the Government to grant, by the present Bill, the demand for direct representation are put forward so prominently, and apparently considered so weighty, that it would not be quite fair to omit all mention of them. One is, that the British Medical Association has always and unswervingly advocated it; and the other, that the profession has almost unanimously demanded it since 1868. We give the reasons for what they are worth, only observing that the first shows a happy confidence on the part of the Association, or of its ruling and guiding body, in its own wisdom and judgment; and that, as to the second, when the Association some eight years ago asked the opinion of the profession on the subject of direct representation, some 9000 replies were received in favour of it; while now, having asked it again, and sent out "sixteen or seventeen thousand" circulars, only somewhat over 5000 favourable answers have been received.

Nevertheless, though we object to some of the grounds upon which the demand for the reform of the Medical Council has been demanded, and to the alleged urgency of the demand, we do think that it is desirable to reform the Council so as to admit of the profession being more perfectly and fully represented on it; but we hold that it would be much better to effect this by indirect than by direct representation. That is, instead of having a certain number of the members of the Council elected by the profession at large, in contradistinction to election by and through the medical authorities, we should prefer a liberal extension of the electoral franchise among the members of those bodies. We urged this so long ago as in May, 1870; and it may be remembered that in the latter year, when the Medical Council had Lord Ripon's Bill under consideration, the late Dr. Parkes moved a resolution—"That it is expedient that a clause should be introduced into the amended Medical Act, giving the medical authorities power to elect their representatives on the Medical Council on an enlarged basis." The resolution was negatived by a small majority, chiefly, we think, because it was introduced so late in the session that it could not be fully discussed; but Dr. Parkes' argument in favour of the principle of his resolution, and against what is called direct representation, was, though short, very full and clear, and may be read with advantage now that the subject is again before the profession. We have ourselves always supported the principle, as did Dr. Andrew Wood, on the grounds that it would be more likely to secure the return of good practical members, and be much more easily worked than the plan of universal suffrage. The machinery for it already exists, and only a few details—such as the mode of nomination, the method of election, and the limit of extension of the franchise—would have to be agreed upon; and we need not apologise for not offering any suggestions on these points now, as the Chairman of the Medical Reform Committee of the British Medical Association, at his interview with the President and other members of the Medical Council, rather scouted the idea of being troubled about details of the direct representation scheme, and said the question was one of principle, and not of detail. The *Journal* of the Association has, however, since then declared that the provisions for carrying out the scheme are complete and ready; and informs us that the elections are to be conducted by means of voting papers, by the registrars of the branch councils of the Medical Council, and that any twelve registered medical practitioners are to have the power of nominating candidates, who must be registered medical practitioners. It would not be easy, we think, to propose a plan more certain to create needless confusion, trouble, and expense, and less likely to produce satisfactory results. The election would in the end inevitably fall into the hands of one or two cliques of electionmongers and wire-pullers; or not improbably entirely into the hands of an election committee of the Association; and that, we venture to say, with all due respect for the Association, would not be a desirable result. The members most needed in the Medical Council are, we think, men practically and fully acquainted with the material out of which the mass of general practitioners are manufactured; teachers and examiners, including one or more of the teachers in our large provincial schools of medicine; and men who are not "pure" physicians or surgeons, but who live and work as country general practitioners, know fully and by experience what the general practitioner needs. Such men would, we suspect, be much more probably elected by indirect than by direct representation.

But the whole question of the reform of the Medical Council is one that requires very full and careful consideration and elaboration. The Duke of Richmond has declared that, in his opinion, the introduction of the subject into his Bill would insure its loss, and it must be admitted that he is likely to be well informed on this point. The Government have, we believe, fully determined to carry the Bill if possible as it now stands; and should a Government of such strength, and which has so earnestly and honestly endeavoured to understand and meet the main needs of the profession, be thwarted because their Bill does not provide for direct representation of the profession on the Medical Council, medical reform will, in all probability, be postponed for another eight or more years. Any body or association that persists in a course of action likely to produce such a result will earn, we think, anything but the gratitude of the profession; and we cannot but regret to observe that the *Journal* of the British Medical Association concludes one of its latest articles on direct representation with the assertion that, "to imagine that the Association can abdicate the position it attained before and at the time of the passing of the Medical Act of 1858, and that it alone is to be excluded from all influence in the present conjuncture, will probably prove to be a fatal delusion"—a declaration that sounds as if prompted much more by jealousy, pique, and disappointed ambition, than by a simple and disinterested regard for the interests and welfare of the profession.

HEALTH OF INDIA FOR THE YEAR 1876.

The laborious task of compiling a sanitary return for a country so vast as India, and the difficulty of obtaining information from outlying districts, will satisfactorily account for the Thirteenth Annual Report of the Sanitary Commissioner with the Government of that country for the year 1876 having only lately been made public. With the exception of the cholera epidemic of that year, the history of which (forming a portion of the present Report) we noticed some few weeks back, the general results of the sickness and mortality may be considered favourable. Compared with the returns recorded in former years, the ratios for 1876 are satisfactory as regards the European Army of India. The ratio of admissions into hospital slightly exceeds the ratio for the previous year, but it is below the average of the five years 1871 to 1875, and both the death-rate and the invalid-

ing-rate are considerably below the rates for the previous year; indeed, the total loss from these two causes was 7 per 1000 below the quinquennial average. The chief causes of admissions into hospital bore much the same relation to each other in respect of frequency as in the previous year. Malarial fevers, as usual, caused by far the greatest number of admissions; venereal diseases ranking next in point of frequency. The ratio of admissions from the latter cause was lower than that of 1875, being 190 against 205. Cholera proved fatal to 134 soldiers in the whole European Army of India during the year, enteric fever to 105, hepatitis to 97, apoplexy to 94, and dysentery to 67. The number of deaths from cholera, hepatitis, and apoplexy were fewer than in the previous year, but there was a considerable increase in the mortality from enteric fever and from dysentery.

A comparison of the general results in the three Presidencies shows that in Bengal the better health of the troops is manifest in the lower death-rate from all causes, and in the lower invaliding rate, the total loss from invaliding and mortality having been 7 per 1000 below the average of the previous six years. The diminution in the death-rate of this Presidency was chiefly due to the less fatality of fevers of the malarious type. In the Madras Presidency the results for 1876, also, on the whole, bear favourable comparison with those of former years. Cholera prevailed throughout the whole of the year, with exceptional violence among the native population, and consequently the death-rate of the European troops is above the average of former years; nevertheless, the death-rate from all causes was below the average, and the diminution in the total loss from deaths and invaliding was 9 per 1000 below the average. Hepatitis and heart disease were the principal diseases from which the mortality was less in 1876 than in former years; enteric fever and apoplexy showing a decided increase. The results of the year, however, in the Bombay Presidency compare unfavourably with the other two; there was a lower admission-rate, but the daily sick-rate was up to the average of former years. The cholera death-rate was remarkable for a fall from 5·30 per 1000 in 1875 to 0·19 per 1000 in the year under notice. This is to be accounted for by the fact that the disease was not epidemic over so wide an area of the Presidency as in the previous year. The death-rate from all causes was more than 5 per 1000 below the average of the six previous years, but the number invalided was considerably in excess of the average, and the total loss was above the average instead of below, as was the case in the other two Presidencies.

In the admission-rate of the Bengal Presidency, dengue forms an important item. This disease is nearly absent from the Madras rate, and quite so from that of Bombay. The admission-rate of apoplexy for Bombay is lower than in Bengal and Madras; and the cases were not only less frequent, but less fatal, than in the other two Presidencies. In the previous year the reverse had been the case. The data from which the returns of cases of drunkenness are taken cannot be altogether depended on; but it may be assumed that drunkenness among British soldiers in India is, on the whole, decreasing. The rate of mortality among children of soldiers was: under one year, 215 per 1000; during the second year of life, 90 per 1000; during the third year, 49 per 1000; and between the seventh and sixteenth only 6 per 1000. Of a total of 1737 officers of the British Army, 27 died, equal to 15·5 per 1000, during the year; and of 1327 officers of the Indian Army, 19 died, a ratio of 13·90 per 1000.

In the regular Native Army, the deaths, including those which occurred on leave, as well as those in the regimental hospitals, equalled 15·52 per 1000. In 1875 the ratio was 15·70 per 1000, the mortality in both years having been much below the average. Diseases of the respiratory organ again, as in former years, occupy the highest place in the statement of causes of mortality among the native troops. Fevers rank first amongst the causes of admission into hospital. They are classed under two heads: intermittent, and remittent and continued; only fifteen cases from the whole Native Army being entered as enteric.

The returns for the gaols in the Bengal Presidency show that there was greater mortality in 1876 compared with 1875 from dysentery and cholera; and the death-rate from phthisis, atrophy, and anæmia for 1876 was nearly double the rate from those causes in the previous year. It is, however, remarkable that among the prisoners as well as amongst the troops, European and native, although fevers were more prevalent than in 1875, the death-rate from this cause was considerably lower. With reference to the mortality which occurs in gaols in India, the medical officers in charge of them account for the high rates by the fact that a large proportion of the convicts are in bad health when they are admitted, and although with care and treatment many recover, a considerable number are past relief, and do not survive the second year of their imprisonment.

The information on the vital statistics of the general population of India, the Report admits, is not complete; the Sanitary Commissioners for Madras and Bombay have been so much occupied with urgent duties connected with the famine in those Presidencies, that they have not been able to complete their annual reports. Imperfect registration is also still a trouble, and it has been decided in future to abandon attempts to collect more accurate statistics from selected areas, and to endeavour to improve the registration of deaths generally over the province. Compared with the previous year, however, the statistics of Bengal collected from the whole population show considerable improvement.

From a general perusal of this Report it may be gathered that sanitary science in India is gradually, though slowly, beginning to combat successfully with disease: the one exception is to be found under the head of cholera—a disease which has hitherto baffled all attempts either to account for or control it; and until this exception can be removed the mortality in India must always prove exceptionally high.

THE WEEK.

TOPICS OF THE DAY.

An appeal was made from the decision of Vice-Chancellor Malins in the case of Sir Richard Brooke *versus* Wigg, which was heard last week before the Master of the Rolls. It will be remembered that the defendants are owners of chemical works in the neighbourhood of Chester, and the plaintiff sought to restrain them from allowing noxious fumes to escape from their works to the injury of his property. Two years and a half ago it was agreed that the evidence in this case should be taken by affidavit, but eventually the defendants gave notice to have the case tried before a judge and jury. The plaintiff applied to Vice-Chancellor Malins for an order that the case should be tried before himself without a jury, and taking into consideration the expense which had already been incurred in taking evidence on affidavit, his lordship ordered that the case should be brought before him without a jury. Against this decision the defendants appealed, and the Court of Appeal decided that the Vice-Chancellor had the discretion to make the order which he had made, and they thought that in the circumstances he had exercised his discretion properly. The case will therefore have to be brought before him for adjudication.

A numerous and influential meeting of the supporters of Queen Charlotte's Lying-in Hospital took place last week at that establishment, to hear the annual medical and general report on the institution for the past year. The Hon. Eliot

Yorke occupied the chair, and was eventually elected to fill the post of Treasurer to the charity, rendered vacant by the resignation of Mr. George Hanbury, who had acted in that capacity for many years. The report showed that the funds of the Hospital are in a satisfactory state. The funded property has been increased during the year to the extent of between £5000 and £6000. The Hospital was rebuilt about twenty-seven years ago with all the improvements which at that time were thought necessary, but the advance which has recently been made in sanitary science, and the large mortality which occurred in the institution during the last few years, especially in 1876, caused the medical officers of the charity to consider whether a more satisfactory state of things could not be inaugurated. Steps were accordingly taken, and whereas in 1876 the deaths of mothers were at the rate of 1 in 22, in 1877 they were only at the rate of 1 in 78. The illnesses of children have also been fewer, and the general health of all in the Hospital has greatly improved compared with former times.

Our contemporary, *Nature*, states that "the cultivation of the opium poppy (*Papaver somniferum*) which has hitherto been exclusively confined to the East, bids fair to become thoroughly established and remunerative in Eastern Africa. Seeds of the best kinds have been imported from Malwa into Mozambique, where 50,000 acres of uncultivated State land have been granted to a company for the purpose of cultivating and trading in opium. Besides the grant of land the company is also to receive from the State the exclusive right for twelve years to export opium free of duty through all the custom-houses of the province. It is satisfactory to learn that the poppy plants are thriving, and the fruits are reported to be larger than those produced in the best opium districts of India."

The Duke of Richmond and Gordon, replying last week to a deputation representing the London School of Medicine for Women, and those ladies who as registered practitioners had already petitioned against the Medical Bill now before Parliament, after promising to give effect to the representations of the deputation, remarked that the medical women would be great gainers by this Bill, as previously it had only been optional for any corporation to examine them, whereas in future, after passing the conjoint examinations, they could, as a matter of right, claim a diploma from any medical corporation in the country. The deputation thanked his Grace for such welcome assurance, as they had been in doubt whether it was not the intention to issue one sort of diploma for medical men, and an inferior description for medical women, and they had desired to protest against any such invidious distinction.

Two instances of culpable negligence in cases of infectious disease have recently been brought before the London magistrates. A dressmaker at Peckham was summoned by the Vestry of Camberwell for having on April 4, without previous disinfection, exposed a dress in a house in which her husband was suffering from small-pox. The evidence showed that a girl took some materials to the defendant to have made into a dress, and eventually had it tried on in the kitchen on the ground floor, contiguous to where the defendant's husband was suffering from small-pox. The defendant had refused to allow her husband to be removed, and he died in the house, while the girl who had tried on the dress was seized with small-pox and taken to hospital. The defence was that the defendant did not know that her husband was suffering from small-pox when she accepted the work, and that afterwards, in her trouble, she allowed the girl to try on the dress, thinking there was no harm. The magistrate took a lenient view of the case, but felt himself compelled to inflict a fine of 20s. and costs. In the second instance a widow was summoned by the parochial authorities of Camberwell for exposing and conveying bedding and clothing from a place where scarlet fever had broken out, without previously having such articles disinfected. On the 11th ult. a child was removed from the defendant's lodgings to the hospital, suffering from scarlet fever; within an hour the defendant removed the bedding and clothing to another house. The defendant pleaded guilty through ignorance of the law; and the magistrate, who remarked that it was a most serious offence, that might have spread the fever, commuted the penalty from £5 to 20s. and costs.

At the last meeting of the Metropolitan Board of Works, the Works and General Purposes Committee presented a report, in which they stated that they had been in communication with the Home Secretary in reference to a proposed substitution of a site in Cherry-garden-street, Bermondsey, for the site fronting Jamaica-road, reserved for labourers' dwellings under the Artisans' and Labourers' Dwellings Acts. They had now before them a letter from the Home Office, signifying the consent of Mr. Cross to the proposed substitution upon the following conditions—viz., that as the blocks of buildings to be erected were to be of five storeys, or about fifty feet in height, a space of thirty feet be left between the dwellings and the houses on the east side of Little Cherry-garden-street; and that the blocks of buildings be reduced from eighty-five feet to about seventy-eight feet in length, to admit of a space being left at the western end for the circulation of air. The Committee now recommended that the same be adopted, and that the solicitor be instructed to carry the arrangement into effect; and this was unanimously agreed to.

A fresh outbreak of small-pox is reported from Deptford, between thirty and forty patients having been recently removed to the small-pox hospital from this locality during the past fortnight. The disease has proved most prevalent in Stanhope-street, Regent-street, and the immediate neighbourhood, and it has been considered advisable to close the Board School in Regent-street. The Greenwich Board of Guardians, at their meeting last week, had the matter under consideration, and it was determined that a number of bills should be immediately circulated, calling attention to the necessity for revaccination among all classes.

The special service arranged by the Guild of St. Luke for medical men and their friends was held in St. Paul's Cathedral on the 31st ult., and it may justly be considered a success numerically, some 4000 persons being present, and amongst them many well-known members of the medical profession. The musical arrangements were in the hands of the London Gregorian Choral Association, and consequently the service was well rendered; the instrumental choir in connexion with the Association materially added to the effect in the hymns and psalms. The service was intoned by the Rev. Minor Canon Shuttleworth; the first lesson was read by the Rev. Geo. Greenwood, M.A., Warden of the Guild; the second by the Rev. T. W. Belcher, D.D., M.D., Vicar of St. Faith's, Stoke Newington, also a member of the Guild. The Rev. Henry Arnott, F.R.C.S., in deacon's orders, was in the choir. The sermon was preached by the Rev. George Body, M.A., and the preacher exhibited his usual fiery eloquence. He exhorted his hearers to work and to personal holiness, touching the subjective side of religion almost exclusively—one of his strong points being that a Christian physician can often speak the word in season, when the door is shut against the clergyman. The Guild of St. Luke deserves some praise for the admirable arrangements in the Cathedral. The Guild is a society of medical students and practitioners, banded together for the objects of personal holiness and the encouragement of works of mercy. Dr.

Alfred Meadows is its Provost, and it holds meetings at 68, Mortimer-street, W., on the third Wednesday in each month at 7.30 p.m., when papers on various subjects are discussed.

The Nawab-Abdul Ghani has recently presented to the town of Dacca, in India, a system of waterworks for the supply of that prime necessity of life, at a cost of 150,000 rupees. The donation was made to commemorate the recovery of the Prince of Wales from his dangerous illness in 1872, and the foundation-stone was laid by Lord Northbrook. The Queen's birthday was selected as the date of the opening, and the importance of the gift cannot be estimated too highly. Up to the present time Dacca has suffered considerably from the inferior quality of its water-supply, and it is not too much to hope that the generosity of this native prince will succeed in securing for the town a far higher sanitary reputation. The present healthy condition of Calcutta is reported to be entirely due to its superior supply of pure water; and if private munificence can only be brought to second the efforts of the Government, we may look for a steadily decreasing death-rate in the large and populous towns of India.

It is not necessary in a medical journal to say anything in reminder of the foundation of the fame of Harvey, who, as has been well said by a lay contemporary, "if he does not stand alone as the greatest discoverer of his country, yet shares that honour only with Newton." Nor are any words needed either to explain why it was especially fitting that the College of Physicians should this year give a commemorative Harveian banquet, or to justify our devoting space, elsewhere in our columns, so as to give as fully as possible Professor Huxley's able speech, and others of the chief speeches on the occasion. The idea of commemorating at the College Harvey's tercentenary was a happy one, and it was so well carried out that it may seem ungracious to suggest even a blemish in the arrangements. But we cannot help an expression of regret at not finding in the long list of the guests of the College the name of Mr. George Eastes, the Honorary Secretary of the Harvey Tercentenary Memorial Fund. The success, now well assured, of that fund is so largely owing to the untiring exertions of Mr. Eastes, that it would have only been an eminently well merited, as well as a graceful, recognition of them by the College to have invited him to their festival.

That the latest scientific discovery, the microphone, may in certain cases prove of considerable importance in surgery, was demonstrated last Saturday, when Sir Henry Thompson, in the presence of several members of the profession, showed its efficacy in aiding the detection of the existence of stone in the bladder, however small the particle might be. It was stated that the microphone would be equally valuable in establishing the existence of a bullet or other foreign body, or of diseased bone at the bottom of a deep wound. It is, of course, unnecessary to dwell on the importance of being able to detect with absolute certainty the existence of a calculus in the bladder as early as possible; and the microphone may render very valuable aid in cases of unusual doubt and difficulty. But, as Sir Henry Thompson pointed out, considerable caution is required in the employment of it, for if the carbon arrangement on the handle of the sound should be too delicate, the mere friction of the instrument against the walls of the bladder would produce a noise that might be mistaken for the sound caused by striking or rubbing against a calculus, and should the battery be too strong, accidental friction of the wires, or a noise in the room, would produce an audible sound in the telephone. But on the whole, Sir Henry Thompson did not seem to expect any very remarkable results, in ordinary practice at least, from the employment of the microphone.

The Thirlmere water scheme has come to an end so far as the present session is concerned. We last week stated that the Examiner of the House of Lords had reported that the standing orders had not been complied with, and an application was thereupon made by the promoters to the Standing Orders Committee to allow such standing orders to be dispensed with in this case, so that the Bill might proceed. The Committee, however, resolved that these orders ought not to be dispensed with, and the Bill will therefore be necessarily delayed until another session.

QUIET CONSULTING-ROOMS.

A CASE of considerable interest to the profession came before the Master of the Rolls in the Chancery Division of the High Court of Justice on Monday, June 3. The action was brought forward by Dr. Octavius Sturges, of 85, Wimpole-street, to restrain the defendant, a confectioner carrying on business in adjoining premises, from using certain large pestles and mortars fixed in the boundary wall, the noise from which formed a nuisance and annoyance to the plaintiff. The latter in 1873 had erected a consulting-room at the back of his own house in ground previously used as a garden, and abutting on the rear of the defendant's premises; and he now complained that the noise caused by the constant use of two large pestles and mortars belonging to the defendant materially interfered with the use of the consulting-room, both for his own reading, and for the purposes of consultation with patients. The nuisance was scarcely disputed, but the defendant contended that he had acquired the prescriptive right by his having employed for more than twenty years the instruments causing the nuisance. In giving judgment the Master of the Rolls remarked that the only points seriously argued were whether by prescription, or under the "Prescription Act," the defendant had become entitled to continue the nuisance. He pointed out that until the erection of the consulting-room there had been no nuisance at all, and he considered it quite impossible to presume the grant of an easement in a case of this sort, so that there was an end of the claim by prescription. Then as to the defence under the statute, he could not consider this a case of easement enjoyed "upon, over, or from" the plaintiff's land, and therefore it did not come within the Act. The defence therefore failed, and the judgment was for the plaintiff, with costs.

THE HARVEY TERCENTENARY MEMORIAL FUND.

THE subscriptions now exceed £1650. During the past week Colonel Charlesworth has contributed £20, through Sir James Paget; and the Faculty of Physicians and and Surgeons of Glasgow has given £21 to the Fund. The accounts are to be audited on Tuesday next, before which date the honorary secretaries request that all promised subscriptions may be paid. A meeting of the London subscribers to the Fund will, by the kind permission of the President of the Royal College of Physicians, be held on Wednesday next, at 5 p.m., at the College, Pall-mall East, when it will be proposed that directions be given to the Executive Committee to put the work in hand at once.

COLLEGIATE ELECTIONS.

THE following gentlemen have been duly nominated for seats in the Council of the Royal College of Surgeons at the election to be held on Thursday, the 4th prox., when three vacancies will be declared, caused by the retirement, in the prescribed order, of Messrs. Wilson, Lee, and Holt, who, however, will offer themselves for re-election:—Mr. John Gay (a former member of the Council), Fellow, December 11, 1843; Member, July 11, 1834. Mr. Lister, Fellow, 1852. Mr. T. Bryant, Fellow, May 12, 1853; Member, August 6, 1849.

Sir H. Thompson, Fellow, November 10, 1853; Member, October 4, 1850. Mr. J. Wood, F.R.S., Fellow, May 11, 1854; Member, July 30, 1849. Mr. E. Lund, Fellow, June 12, 1863; Member, April 9, 1847: and the nomination papers of Mr. H. Power, Fellow, 1854; Member, 1851, will no doubt be received. Monday next will be the last day for receiving the nominations of other candidates.

MEDICAL PARLIAMENTARY AFFAIRS.

Medical Act Amendment Bill.—In the House of Lords, on Monday, June 3, in Committee on this Bill, the Marquis of Ripon moved an amendment to Clause 4, so as to make the diploma obtained from a joint board of examination sufficient for the purposes of registration, without requiring to pass an examination before one of the existing medical authorities. The Duke of Richmond having agreed to the proposal, the amendment was allowed to stand, and Clause 4 as amended passed, as also the remaining clauses after a few verbal alterations, and the Bill was then reported.

Adulteration of Violet Powder.—Mr. Cross said that the circumstances of the death or injury of several children at Loughton, by the use of violet powder largely adulterated by arsenic, were being carefully investigated by the Secretary of the Treasury. The wholesale chemist supplying the article will, in all probability, be prosecuted.

Public Health Act (1875) *Amendment Bill.*—Earl Delawarr expressed the opinion that this Bill should be referred to a Select Committee, in consequence of the heavy expenses which the passing of the measure might lead to by reason of entrusting rural authorities with increased power. Earl Cowper said that in many cases the rural authorities did nothing but quarrel among themselves; and often the single representative of a parish was completely silenced by persons representing the other parishes. Lord Norton spoke in favour of the Bill, as making one complete Act on water-supply in place of the disjointed sections in the Act of 1875. The Earl of Kimberley remarked that he intended to propose, in connexion with Clause 2, that a similar limitation of the cost of water-supply charged upon owners of cottages should be required of the Local Government Board in any case where the local authority is compelled to apply to the Local Government Board for authority. The central board would, if the amendment passed, be limited to a cost for supply not exceeding the interest of 3d. per week, at the rate of 5 per cent. upon the capital expended. In other words, the Local Government Board would have compulsory powers for outlay 50 per cent. beyond those possessed by the local authority. The Marquis of Salisbury feared that the rent of cottages would be so much raised by such an enactment that those who now built farm-labourers' dwellings would abstain from doing so, and the result would be very undesirable from a sanitary point of view, viz., overcrowding. The labouring classes already experienced great difficulty in getting cottage accommodation for themselves and their families. After a short debate upon some of the clauses, the only amendment agreed to was that of the Earl of Kimberley on Clause 2, already referred to. An attempt was made by the Marquis of Bath to alter Clause 4, so as to give the right of appeal in all cases to the Local Government Board, and not to the justices in petty session in some cases. But the Earl of Kimberley explained that the local justices would be in a better position to decide upon the merits or demerits of the case than the central authority. The Bill was then ordered to be reported.

Prevention of Floods.—On Tuesday, June 4, the Marquis of Ripon inquired as to the intention of the Government to act upon the report of the Select Committee appointed to inquire into the best method of obviating the disasters caused by periodical floods. The Government had promised to provide for the improvement of Conservancy Boards in a Bill introduced into the House of Commons, but this Bill was not a satisfactory measure, and it would probably be abandoned for the present session. He hoped the Government would undertake to deal with this question as a separate measure next session, and not mix it up with the subject of County Government. The Duke of Richmond remarked upon the difficult nature of the subject under consideration. The Government, he said, were very desirous of dealing with the subject if it was possible to do so.

THE HARVEIAN BANQUET AT THE ROYAL COLLEGE OF PHYSICIANS.

On Saturday, the 3rd inst., the President and Fellows of the Royal College of Physicians commemorated the Tercentenary of the Birth of Harvey, by entertaining a number of distinguished guests at a banquet in the fine library of their Hall in Pall-mall. It happened unfortunately that no member of her Majesty's Government was able to be present, but her Majesty's faithful Opposition were very well represented by the Marquis of Ripon, Viscount Cardwell, Mr. Gladstone, and Mr. Lowe; and the company included also Mr. Spencer Walpole, Mr. Justice Denman, Professor Owen, Professor Huxley, Dr. Allen Thomson, the Presidents of the General Medical Council, of the Royal College of Physicians (Ireland), and of the English Royal College of Surgeons, Dr. Carpenter, Dr. Lyon Playfair, M.P., Mr. Benett-Stanford, M.P., Captain Cameron, Professor Michael Foster, Mr. Simon, the Masters of the Society of Apothecaries and of the Merchant Taylors, other distinguished guests, and between sixty and seventy of the Fellows of the College. The chair was occupied by, of course, the President, Dr. Risdon Bennett, who performed his duties perfectly, his speeches in introducing the various toasts of the evening being admirably good, in matter, language, taste, and length. The usual loyal toasts were first duly honoured, and then, in proposing "The Houses of Lords and Commons," the President remarked that no member of the medical profession had yet attained to the dignity of the peerage, but that they could console themselves with the reflection that if they did not go to the peerage, the peerage came to them, the roll of their Fellows embracing no fewer than two dukes and a marquis. The last—namely, the Marquis of Dorchester—was, he believed, introduced to the College by the great Harvey himself, and endowed it with a valuable library. He seemed rather to have been of a liberal turn of mind for his day, for he was also a Bencher of Gray's-inn. Passing to his more immediate subject, the President expressed the obligations of the medical profession to the Marquis of Ripon and Mr. Walpole for the part they had taken in medical legislation, and concluded by coupling their names with the toast.

The Marquis of Ripon, responding for "The House of Lords," reminded his hearers that that branch of the Legislature, at all events, could not be charged with having thrown obstacles in the way of medical legislation. In 1870 he had the good fortune to pass a Bill through the Upper House, but it was lost in the Lower. Very shortly another Bill—the Duke of Richmond and Gordon's—on the same subject would be passed by the House of Lords, and the responsibility for its fate would then rest upon Mr. Walpole and his colleagues. In connexion with the Bill of 1870 he thought it only right to say that he had received the most cordial assistance from all branches of the medical profession. Those whom he had to consult had always shown themselves ready to lay aside any special interests of their own in order to promote the public good. He rejoiced that the Duke of Richmond and Gordon should have undertaken to deal with the subject in a broad and comprehensive spirit, keeping steadily in view the fact that it was not individual or corporate interests that had to be guarded, but the interests of the public, and that these could be best served by establishing for the three divisions of the kingdom a single portal to the medical profession, so that when a medical man's name appeared on the Register everyone could rely upon his possessing a certain definite minimum of professional training and skill. As the Bill now stood there were some points in it which might be susceptible of amendment, and it would be his duty in a friendly spirit to submit them to the consideration of the House of Lords, but he should deem it a misfortune if the present opportunity of legislating were lost, and if the subject were hung up, perhaps, for other eight years. With regard to the occasion of their meeting, he felt it an honour to take part in celebrating the memory of a man who did so much to place the medical profession in the high rank it now occupied as Harvey, and he was glad to think that from Harvey's days there had never been wanting on their rolls

the names of distinguished men who had worthily upheld the reputation of the Royal College of Physicians among the medical institutions of the world.

Mr. Walpole, M.P., in returning thanks for "The House of Commons," said he should have great pleasure in promoting to the best of his power those improvements in the medical profession which were begun in 1858, when he happened to be Home Secretary. Celebrations such as these, he thought, were decidedly beneficial; they were the links which connected with a glorious past the grateful present and a hopeful future, and they held up for the emulation of succeeding generations the examples of men like Harvey, whose unwearied diligence and patience in the pursuit of knowledge were only equalled by his gentle modesty. He thanked them heartily for the privilege of commemorating the merits and virtues of so truly great and good a man, and also of paying homage to the College itself of which he was the highest ornament.

With the toast of "The Army and Navy" the President coupled the names of Viscount Cardwell and Captain Cameron, remarking that the former had done good service to the medical profession as chairman of the Commission of Inquiry into the vexed question of Vivisection; and the latter had eminently illustrated the pluck, endurance, and love of useful adventure and research of the English soldier.

Lord Cardwell, speaking of the Army, expressed his belief that, if ever called upon to take the field, it would acquit itself in a manner worthy of the days of Marlborough and Wellington. With regard to the Commission on Vivisection he could only say that they had endeavoured to do justice to the profession as well as to the public; and that if they had helped to dissipate the notion that any sentiment of inhumanity was at all characteristic of the noble profession of medicine, and if they had been instrumental in restraining the unworthy practices of those who possessed neither experience, science, nor skill, at the same time that they secured the legitimate opportunity of investigation to every experienced, skilful, and scientific man in the kingdom, they had been abundantly rewarded. Before sitting down he wished to say just one other word, and that was that while at the War Office he had very great pleasure in being in constant communication with the distinguished director of the Army Medical Department, Sir W. Muir, whose judicious counsels had greatly contributed to the welfare of the Army and the advancement of the public interest.

Captain Cameron responded for the Navy, with his customary effective modesty and clear good sense.

The President then proposed "The Bench and the Bar," for which Mr. Justice Denman and Mr. J. C. Day, Q.C., Standing Counsel to the College, returned thanks. Mr. Justice Denman, in doing so, expressed the obligations he was often under to medical men for unravelling the difficulties of a case. It was true that doctors differed, but they did not differ more, perhaps, than judges.

Then came the toast of the evening, "The Memory of Harvey," in proposing which the President said Harvey had achieved for himself the highest glory as a physiologist and as a benefactor to mankind. It was within the walls of their College that he first promulgated those views on the circulation of the blood which formed the basis of his great work, "De Motu Cordis et Sanguinis," and they would be unworthy of themselves if they ever forgot, or allowed the world to forget, his claims to their gratitude.

The toast was responded to by Professor Huxley, who, after humorously comparing himself, as the exponent of Harvey's merits, to the Herald of old, whose duty it was at great ceremonials to recount the titles of the king, which everybody knew already, said Harvey's titles to their honour and respect seemed to him to be essentially three—first, that he was the discoverer of the circulation of the blood; secondly, that he wrote "De Motu Cordis et Sanguinis"; and, thirdly, that he was the author of that remarkable treatise, "De Generatione," in which were laid the foundations of that great doctrine of genesis which underlies all our modern conceptions of development. Harvey's first title had been challenged, but, so far as he knew, to the signal confusion of the challengers. Having taken great interest in the question, he had endeavoured to acquaint himself with all the documents bearing upon it, and he had not the slightest hesitation in asserting that William Harvey stood almost alone among scientific discoverers, not merely in the fact that, as Hobbes said of him, he had the great good fortune to see the novel views which he had proposed accepted within his lifetime, but also in this—that his doctrine of the circulation of the blood, as he put it forward, was not only absolutely original as regarded himself, but absolutely novel in respect to all those who had gone before him. Previous to the year 1628, when Harvey expounded his views, there was not, he ventured to assert, in any published work, he would not say a statement, but the hint of a suggestion, that anybody had ever imagined that a given particle of blood starting from the left side of the heart returned in a short time to the point from which it started. That was the substance of Harvey's doctrine, and those who wanted to show that Harvey was anticipated would have to show what, he ventured to declare, did not exist. The memorials which they had heard of as being erected in Italy and Spain to other discoverers of the circulation of the blood were, therefore, to those acquainted with the facts of scientific history, nothing more than a proof that, even outside churchyards, inscriptions were not always to be depended upon as historical. He had no sympathy whatever with Chauvinism of any kind, and least of all with that particular form of it which introduced national jealousies and national pride into the regions of science. He trusted they would all be ashamed to allow their judgment as regarded William Harvey's merits to be influenced in the smallest degree by the fact that he was an Englishman; but the incontestable fact being that Harvey was an Englishman, he saw no reason why they should not take an honest satisfaction in being members of the great race which had produced him. And when they reflected that within a century this English stock of ours had produced two such men as Harvey and Newton, he thought they had not only reason for the self-congratulation he had referred to, but that they were under a heavy obligation not to allow themselves in these times to be seduced from the path of science by mammon-worship, or deterred from following it by the blind and ignorant outcry against scientific investigation. The second title which he had attributed to Harvey—viz., his authorship of the work "De Motu Cordis et Sanguinis"—might surprise some, considering that this was only a treatise of fifty pages. But it was to be borne in mind that it was not only a model of scientific statement, but that, in addition to the doctrine of the circulation of the blood, it contained the first exact explanation ever given of the mechanism of the heart. In his work "De Generatione," which constituted his third title, Harvey grappled with one of the most difficult problems of biology. It was a problem which from the nature of the case could not be solved without the aid of that invention of later times the microscope, and Harvey had at the most a little hand-glass. His theory of the essentials of the generative process and of the first changes that occur in development were consequently erroneous, either directly or by their inadequacy. But it was the privilege of great genius to be able to distinguish instinctively between truth and error, and in this particular case of Harvey's they found themselves in presence of what was one of the most wonderful facts in the history of science—namely, that although entirely wrong as to his primary data and as to his general conclusions, yet in the matter of theory he anticipated almost *verbatim* the results at which men had arrived only in these recent times. For a hundred years his successors went entirely wrong, and it was only in the middle of last century that they began to go back to Harvey's traces. It not infrequently happened that the reputation of men of genius was besmirched with some unfortunate failing, but there was no stain upon Harvey's escutcheon. Nor was he a man of one pursuit or one book. A diligent lover of the classics, a great student of philosophy, faithful and generous in all the relations of life, the most that was said against him, even in the shape of gossip, was that he had a hot temper and could say sharp things on occasion. He certainly should not venture to throw stones at him for that. Whether gossip was right or wrong in this matter, so far as Harvey's private life was concerned, he did not suppose, judging from those of his writings which remained, that since scientific controversy existed there ever was a man who, having been so much attaked, took the trouble to defend himself so little, or who, when he did defend himself, spoke with such altogether angelic sweetness. As regarded his other personal qualities, the more one studied his works the more one was inclined to represent him to oneself as a man who was willing enough to receive honour if it came to him, but who, if it did not come to

him, could do exceedingly well without it, and who found his great pleasure and satisfaction in the peaceful pursuit of that inquiry into nature of which he constantly boasted the charm.

Mr. Lowe, in returning thanks for the toast of "The Universities and Educational Bodies," dealt with it in its relation to the medical profession. Anything approaching competition between these bodies conferring degrees and honours must, he observed, or at any rate might, be productive of evil. And the result of such a system had been a kind of Dutch auction of degrees and honours, there being in some quarters a desire to secure as many students as possible by lowering the standard of qualification; but he was happy to think that that evil was about to be remedied, and that they were approaching a time when they would obtain what not only the medical profession, but every individual in this country, had a right to demand—namely, that no one should be allowed to heave the lead into the depths of his fellow-creature's physical constitution without possessing a certain proved degree of skill. That had been the dream of all sound medical reformers for a long time. It had hitherto remained only a dream, but it was about to be realised, and, as far as he understood the question, it was about to be so mainly through the disinterested conduct of the universities, who had expressed their readiness to surrender the privilege they now enjoyed of admitting persons to the medical profession, and to hand over this duty to a certain body possessing the power of fixing a standard of qualification below which no person whatever should be admitted to practice. He was one of those persons who were in the habit of making what might be called liberal comments upon the proceedings of her Majesty's Government. Now, one of the accusations which those cavillers made—it was not for him on that occasion to say with what justice—was that the Government looked rather to particular than to public interests; but he was bound to say that nothing of the kind could be alleged in the case of the Duke of Richmond and Gordon's Bill.

Mr. Gladstone replied to the toast of "General Science and Literature," and said that the proposing of such a toast, he took it, affirmed a very important principle—viz., that a man to be really great must know something outside the limits of his own particular calling; must acquaint himself, as far as he could, with the treasures of knowledge the human race possessed. The President, in stating that if none of the members of the medical profession had gone to the peerage, two dukes and a marquis had come to them, seemed to him rather to understate the case. He might have taken up much higher ground on behalf of his profession, because sooner or later all members of the peerage, equally with commoners, were obliged to knock at their doors and request their assistance. Great as had been their profession in former times, everyone must feel that it was growing greater, wider, more solid from year to year and from generation to generation. He did not speak now of literary culture, for although he felt that literature had stood in a very important relation to the medical profession of late years, still literature was necessarily fluctuating, and had been so in all periods of the world. They had gone through a great literary age, as other races had done before, and they could hardly expect the succeeding generation to maintain the same literary level. But as regards science the case was very different. Nothing here seemed to be required but that patient labour which it was in the power of all men to bestow, together with those large opportunities for observation which we all enjoyed in some degree if we would but use them, and which medical men perhaps enjoyed in a greater degree than any other class of men. As society was developed, as civilisation became more elaborate, as the wants of men, as the enjoyment of men, and as, perhaps, also the dangers of men multiplied, and as the connexion of body and mind, which was daily under their eyes, became revealed, they would find their way more and more into the very innermost chambers, so to speak, of human nature. As science progressed their responsibilities would increase, but he was sure they would never be wanting in that capacity and zeal which had ever distinguished them, and that in proportion as their influence over human welfare and human happiness increased, they would obtain that respect and gratitude which, amid their imperfections, mankind were ever ready to extend to their benefactors.

Several other toasts were given, for which we cannot find space; but we may mention that that of "The Visitors" was coupled with the name of Mr. Benett-Stanford, M.P., who had placed at the disposal of the College a prize of one hundred pounds for the best essay (in English) on "The Nature and Origin, and on the Prevention, Treatment, and (if possible) the Cure of Rabies and Hydrophobia." In proposing the toast Dr. Quain alluded to this liberal gift, and expressed his gratification at the fact that, notwithstanding the agitation against experimental research, there are members of the Legislature sufficiently enlightened to recognise its value and importance.

After a very pleasant evening the company separated at midnight.

THE ORIGIN OF INFECTION.

At the meeting of the Epidemiological Society on Wednesday, May 8, Surgeon-General John Murray, M.D., President, in the chair, Dr. Thorne Thorne read a paper on the above subject. At the outset he explained that the question he proposed specially to hold in view was, whether any case of acute specific fever could arise independently of an antecedent case; and with a view to the elucidation of this question he first gave a review of the principal grounds leading some observers to answer the question in the negative, others in the affirmative. The various arguments which might be brought forward on both sides were illustrated by a record of outbreaks which had come within the experience of the author and of other observers, and those which were deemed to support the views of those who hold that the infectious fevers are solely self-propagating were as follows:—First, there was the general inference to be drawn from the well-known fact that these diseases so largely owe their spread to communication with prior cases; and this being the ordinary source of infection, it might be urged that it was the invariable one. Such an argument, it was next suggested, was strengthened by consideration of the fact that new channels by which the poisons of the specific fevers might be conveyed were periodically being discovered, as, for example, the distribution of the poison of enteric fever by means of intermittent water-services. Cases were next cited which, having originally been deemed to support the view as to spontaneous origin, were subsequently found, owing to the discovery of some apparently trivial circumstance, to favour the opposite view. The extreme variations in length which periods of incubation exhibit were next adverted to as affording another source of error; this point being illustrated by numerous examples. The prolonged periods during which some of the poisons of the infectious fevers lie dormant were next dealt with. And finally, the long-continued immunity from this class of diseases which certain countries had enjoyed prior to infection being communicated to them was pointed out. The arguments on the opposite side were next considered, it being, however, admitted that since those who believe in the independent origin of the specific poisons have to prove a negative in order to maintain their views, the position they take up is more difficult of proof than that of their opponents. Judging from analogy, however, they had the support afforded by the proved possibility of the spontaneous generation of the traumatic infections; and by the artificial production of cases of apparently specific malignant peritonitis by inoculations from selected cases of simple peritonitis. Then there was the as yet quite unexplained origin of infectious fevers under specified conditions. Thus typhus was shown to arise in connexion with the maladministration of armies in the field, especially when they suffer from the depressing emotions consequent on defeat. The numerous instances which occur where no antecedent cases of the same diseases can be found, even when the circumstances are specially favourable to their discovery if they existed, were noted; and, after some minor points had been discussed, the writer assumed the right of all who do not believe that each of the specific poisons was originally the result of a definite act of creation, to maintain that, if they had once had an independent origin, it was impossible to assert that the same process could never take place again. So far, Dr. Thorne had avoided taking any side in the argument under consideration; but in the remainder of his paper he explained in detail the

grounds which had somewhat recently led him to lean to the view that the property of infectiveness is, under certain circumstances, one capable of progressive development. In support of this opinion he gave the history of some investigations he had made for the Local Government Board into outbreaks of diphtheria, and he explained how he had found cases of apparently simple sore-throat of a non-infectious type somewhat uniformly spread over an area of several miles; whereas at certain limited points in the same area, and at a subsequent date, sore-throats were met with which were distinctly infectious, and in some instances had led by transmission through a series of persons to the development of well-marked diphtheria. In conclusion, he pointed out that the view he had maintained was not that of the development of a living organism out of matter independent of antecedent life, but rather the production, by a process of evolution, of that which gives to an already existing organism that property by which it becomes infectious.

FROM ABROAD.

Diseases of the Ear from Bathing.

Dr. Sexton, Surgeon to the New York Ear Dispensary, in a paper published in the *New York Med. Record* (May 4), draws attention to the frequency with which disease of the ear is produced by bathing, especially in persons who have a large meatus auditorius, and probably a correspondingly large Eustachian tube. He has only of late had his attention drawn to the frequency of its occurrence, and has found that of 800 cases seen by him in clinics and in private, between May and September, sixty-five have had their origin in sea-bathing. Of this number, thirty suffered from acute or subacute inflammation of the middle ear, nine from inflammation of the membrana tympani, and twenty-six from inflammation of the meatus, accompanying the foregoing, or (nine cases) existing alone. One reason why the frequency of the occurrence is overlooked, is the habit which patients have had, and often their attendants also, of attributing the ailment to "catching cold"—the real cause only transpiring after close questioning. Complete deafness may indeed result without the cause having been suspected. Baths should never be ordered, without the necessity of protecting the ears being insisted on. Notes of four cases are also given by Dr. Sexton, in which the Russian bath also induced inflammation.

Man not having the protection afforded the ear which amphibious animals possess, the water may act injuriously in various ways. The mere force of contact may injure the membrane, and when an incoming wave dashes against the face, water may be freely driven into the Eustachian tube. In some persons the cutis is very sensitive, so that this may be easily irritated; and the presence of cold water for a long time in the meatus, as in diving, may set up inflammation in the meatus or the membrana, which may extend to the cavity of the tympanum. Another ill effect is produced by allowing the ears, etc., to dry in a current of air after coming out of the water. Sea-water is often more obnoxious than fresh, on account of its comparative uniformly low temperature, and the large quantity of salt which it holds in solution. A too prolonged stay in the water is also mischievous.

In three of Dr. Sexton's sixty-five cases, the inflammation passed from the middle ear and involved the meninges of the brain, and life for a time seemed endangered, recovery taking place only after protracted illness. He has also met with numerous cases in which the naso-pharynx and Eustachian tubes were unmistakably affected by the irritating quality of sea-water, even when deafness was not caused. Pain is the first symptom which alarms the patient, this being usually violent, and sometimes accompanied by delirium. From the beginning, and often preceding the pain, there is a distressing tinnitus, compared to the roaring of a cataract, wind, violent escape of steam, etc. Deafness is always more or less marked. Dizziness is usual, the patient being often unable to walk without support. In some cases there is only subacute action, tinnitus and deafness being then the only annoyance. The deafness, indeed, does not depend altogether on the violence of the disease. Suppuration occurs within twenty-four hours, and the collection of mucus which takes place in the middle ear causes great pain and distension, which may last for several days before the membrana gives way, when (or if perforated) the pain ceases. In about a fourth of the cases both ears were affected, although not always in the same degree, nor yet sympathetically. Women are not often subjects (three in the sixty-five cases) of the affection, as they protect their ears and do not dive. The purulent discharge following an acute inflammation may continue for months or years if not arrested, and under the most favourable circumstances seldom ceases in less than three weeks. Where the inflammation has not been severe beyond the meatus and the membrana, there is only exfoliation of the epidermis covering those parts, which is sometimes cast off whole, resembling the finger of a glove in appearance.

Report on the Mortality of the Paris Hospitals.

Dr. Ernest Besnier, in his report (*Union Médicale*, May 7, 9, and 14) on the mortality of the Paris hospitals for the first quarter of 1878, observes that the second portion of the winter of 1877-78 has been as remarkable for its benign temperature as was the first. The atmospheric humidity was also very intense. The general hospital mortality amounted to 3551, being 103 more deaths than occurred during the same quarter of the preceding year, and 495 more than the mean mortality of the quarter during the six preceding years. Among the factors of this progression are the normal increase of population and the accidental augmentation of the working-class portion, in consequence of the great preparations for the Exhibition; but these do not explain the whole of the excess, which is also due to the nature of the prevailing medical constitution.

1. *Affections of the Respiratory Passages.*—These present the degree of frequency and gravity proper to the season, with the peculiarity that the febrile (*pyrétoides*) forms have been numerous, constituting one of the types of the medical constitution called catarrhal or influenzal. Pleurisy has been especially prevalent, and its mortality has notably exceeded the mean. The figures for the quarter are 1181 cases of *phthisis*, with 613 deaths, or 51 per cent., as compared with the mean of 53·97 for the same quarter during the ten preceding years. This, being a chronic affection, cannot be brought into comparison with the other acute affections of the chest. Of 489 cases of *pneumonia*, 179 proved fatal, or 36·60, as compared with 36·07 for the preceding ten years. It is to be observed that the hospital mortality from pneumonia is always raised more than a third above the true mortality of the disease; the hospital population, enfeebled by alcoholism, and many other causes, offers but a poor resistance to pulmonary phlegmasias. The statistics are further weighted by a number of aged persons, who, the subjects of other diseases, contract a final pneumonia, and are only brought into the wards to die. The intercurrent affection is thus often the cause of deaths which would have taken place from other chronic disease. Of 1318 cases of *bronchitis* 121 proved fatal, or 9·18, as compared with the mean of 6 per cent. for ten years. The *pleurisies* were 309 in number, with 51 deaths, or 16·18 per cent., as compared with 12·31 for ten years.

2. *Articular Rheumatism.*—Under this head, Dr. Besnier takes occasion to ask whether, as the result of the trials which have been made of the *salicylate of soda*, the absolute duration of an attack of rheumatism becomes abridged. M. Lereboullet, of the Val-de-Grâce, where he has to do with soldiers of robust habit, replies in the negative. He believes much of the great toleration of this remedy which is observed is due to its rapid elimination by the urine; so that three days after its administration, and often only twenty-four hours after, not a trace of it can be found. None of his patients have presented cardiac complications. The general result of his observation of the use of this remedy is that it very decidedly relieves the pain, and *perhaps* may prevent visceral complications; but in no single case does it seem to have abridged the duration of the disease—*i.e.*, the duration of the stay of the patient in hospital. In some cases it even would almost seem that patients treated by the salicylate fall into a state of anæmia, which is more prolonged than in those who are treated by other remedies.

3. *Diphtheria.*—Conformably with the law of its evolution, which places it among those diseases which invariably manifest *hivernal* paroxysms, diphtheria reached its annual apogee during the first quarter of this year. Taking the entire population of Paris, diphtheria is on the regular increase, the mortality being triple what it was ten years since, and double what it was five years ago—not as the result of accidental explosions of the disease, but by reason of its gradual increase. The highest point yet arrived at was attained in the year 1877, when deaths from diphtheria amounted to 2393. Large urban conglomerations are favourable to the multiplication and transmission of the disease, but not all in an equal degree, for London, with so much larger a population than Paris, had only 492 deaths from diphtheria in 1877; while Berlin, with a population less than a million, had 932 deaths; and Glasgow, with only half a million inhabitants, had 366 deaths from this disease. For the first quarter of 1878 the deaths from diphtheria in the whole civil population of Paris amounted to 703. In the hospitals the disease, while exhibiting its annual paroxysm, and still very prevalent, is slightly less so than at this time last year. The total cases admitted were 246, with 188 deaths, or 76·42 per cent., as compared with 73·54 per cent., the mean mortality of the quarter during eight preceding years. Dr. Besnier states that the new hospital administration is about to take active steps to put in force the isolation as far as practicable of diphtheria and other contagious diseases, which to a great extent has already been carried out in variola. But isolation in other affections—as diphtheria, rubeola, scarlatina, and pertussis—is effected with much greater difficulty.

4. *Small-pox.*—After the great epidemic of Paris in 1870, variola declined very rapidly in 1871 and 1872, and during 1873 underwent the most extraordinary diminution ever known—there having been in that year for the whole of Paris only seventeen deaths, although the annual mean calculated from the year 1810 has not been less than 400. In 1874 the mortuary curve slowly rose again to 74 deaths, then rapidly in 1875 to 253, and nearly approached the ordinary annual mean in 1876, when it was 373. But in 1877 an unexpected decline occurred, so that the deaths were only 173, of which number only 26 occurred during the last six months of the year. In 1878 variola has returned to the same point it stood at in 1873, the minimum year, only six deaths having occurred in all Paris during the first quarter. Here is an affection, then, essentially contagious, transportable and transmissible in every degree and in every manner, the germs of which are never absent from the town, and which the varied and multiplied importations produced by a great immigration are incessantly renewing; and yet the degree of fecundity of these germs is so variable and mobile, that sudden and marked differences arise which are inexplicable by the supposition of the extension of the variolic aptitudes of the population by an anterior epidemic.

5. *Scarlatina.*—The geographical distribution of scarlatina is well calculated to illustrate the variable fecundity of zymotic diseases. The extraordinary difference of the fecundity of the scarlatina ferment in France and England, and especially in Paris and London, has been long observed and still continues. Thus in 1877 there were but 103 deaths in Paris from scarlatina to the 1576 which occurred in London (in the same year there were also 910 deaths in Berlin); and yet what an incessant interchange of things and persons between these two cities! Of all the eruptive fevers, scarlatina is that which has the least disposition to become generalised in the French hospitals; so that during the year 1877 (with no provisions against spreading by contagion) the whole of the Paris hospitals had but 141 cases of scarlatina, with only seven deaths!

6. *Measles.*—The affinity of the Parisian soil is far more marked for measles than for scarlatina, although the proportion is still nearly a third less than in London. Isolation is of great importance in a disease which causes annually the deaths of a great number of children who have entered the hospitals for the most different and the least dangerous affections. The deplorable consequences are only too well known which follow measles contracted within the hospital, as a secondary lesion, by children suffering from other affections or exhausted by prior disease. Isolation is therefore as urgently called for here as in variola and diphtheria.

7. *Typhoid Fever.*—According to an invariable rule, typhoid fever has undergone during this first quarter of the year its seasonal movement of decline. The total deaths from this cause in Paris for the last quarter of 1877 was 319, while during the first quarter of 1878 it was only 177. The number of cases admitted into the hospitals during this quarter was 306, with 72 deaths.

Bow-Legs from Rickets.

At the Medical Society of the County of New York, Dr. Horst read a paper (*New York Med. Record*, April 20), in answer to the question, "Is mechanical apparatus necessary in the treatment of bow-legs due to rickets?" He remarked that the cases which had fallen under his observation had not exhibited any tendency to spontaneous recovery, although he did not maintain that all cases would be benefited by mechanical appliances. To the objection that these induced atrophy of the muscles, he replied that, to a certain extent, this was true, but the atrophy was only produced at the seat of pressure, and not from disease of the muscles, as the child soon gets used to the apparatus, and can wear it without difficulty. In forty cases examined as to this point no diminution of muscular contractility was observed. Of sixty cases treated at the Cripple Hospital by Dr. Horst, in fourteen no mechanical means had been employed, and forty-six were treated by apparatus. In his opinion not much improvement attended its employment in children above three years of age. In none of his forty-six cases was there any increase of deformity while wearing the apparatus, and in this way it prevented the great curvature. In eight of the cases no improvement took place; in fourteen slight improvement; in eleven fair improvement; in ten great improvement; and three cases were regarded as cured. In one-half of the cases mechanical treatment afforded considerable relief. The use of mechanical without constitutional treatment is not advisable. In the hospital, preparations of lime had been abandoned, chiefly on account of their expense. Cod-liver oil and iron were beneficial.

Dr. Sayre, in the discussion which followed, observed that it was plain common-sense to give the limbs of rickety children support until the bones of the leg would, without bending, bear the entire weight of the body. He regarded cod-liver oil and lime as very essential, and it was poor economy to deny the children that which was required to give their limbs the proper strength. No child was fit to stand whose bones could be sprung out of shape and bent: if permitted to assume the erect posture, the limbs should receive mechanical support. Dr. Lewis Smith said that although he had had but little experience in the use of mechanical apparatus in the treatment of bow-legs, he had used constitutional remedies in a large number of cases. On the early recognition of rickets he had insisted upon keeping the child quiet, and then had given medical remedies, aided by such hygienic measures as were necessary, until the limbs could support the body. The remedies which he had found most serviceable were cod-liver oil combined with the lacto-phosphate of lime and the syrup of the iodide of iron. He did not fully accept the theory that rachitis was always due to the presence of an excess of lactic acid, although an excess of that acid might prevent the deposit of the salt of lime, which was one of the best known features of the disease. He had seen one case of bow-legs without rickets. In his opinion the disease may exist as a congenital affection. Dr. Yandell observed that rachitis was rarely seen in Kentucky, but he did not believe that its absence was due to the water of that region containing a large proportion of lime. The young negro children were very commonly rickety, but as soon as they were able to run about and get a better supply of food than that obtained from the mother, their limbs began to straighten, and they grew up well-formed men and women.

The annual meeting of the Birmingham Medical Benevolent Society was held on May 31, at the Medical Institute, Birmingham, Alfred Freer, Esq., President, in the chair. The report showed that thirteen annuitants had received grants during the past year to the amount of £445; that thirty-one new members had been elected, raising the total number to 238. The following officers were appointed:—*President*: Mr. Watkin Williams. *President-elect*: Mr. J. J. Mason, Stratford-on-Avon. *Vice-Presidents*: Mr. T. Elkington, Fenny-Compton; Mr. J. Garner, Birmingham. *Hon. Secretary*: Mr. T. H. Bartleet.

PROVINCIAL CORRESPONDENCE.

IRELAND.

Dublin, June 4.

Annual Medical Meetings: Royal College of Surgeons—Irish Medical Association—Royal Medical Benevolent Fund Society of Ireland.

The annual meeting of the Royal College of Surgeons for the election of officers for the ensuing year was held yesterday, pursuant to the provisions of the supplemental charter. Dr. Philip C. Smyly, Vice-President, Surgeon to the Meath Hospital, was chosen President, and was succeeded in the vice-chair by Dr. Edward D. Mapother, Professor of Physiology in the College, Surgeon to St. Vincent's Hospital, and Superintendent Medical Officer of Health of the City of Dublin. The changes in the constitution of the Council are very few. Dr. McDonnell, the outgoing President, takes Dr. Mapother's place, and Mr. William A. Elliott replaces Dr. Albert J. Walsh.

The Irish Medical Association met at noon for the despatch of business at the Royal College of Surgeons, Stephen's-green. The members had previously breakfasted together at the Shelbourne Hotel. At the annual meeting, which was largely attended by town and country members, the chair was taken by Dr. Nolan, of Gort, in the unavoidable absence of the President, Dr. Darby, of Bray. The report was read by Dr. Chapman, the Honorary Secretary of the Association. It touched upon the progress through Parliament of the "Public Health (Ireland) Bill"; the Lord President's "Medical Act (1858) Amendment Bill"; the necessity for amendment of the Irish Vaccination Laws; the Registration of Births and Deaths, etc.; the Poor-Law Union and Workhouses Amalgamation Inquiry Commission; the abuse of Dispensary Medical Relief; the payment of Medical Witnesses at Coroners' Inquests; the proposed Incorporation of the Association; the question of Superannuation to Medical Officers; the "Parliamentary Franchise (Ireland) Bill"; and the Factories Bill. The statement of accounts showed that many members were in arrear with their subscriptions. Dr. T. W. Grimshaw proposed, and Dr. Tagert seconded, the adoption of the report and statement of accounts. The following resolutions, among others, were then adopted by the meeting:—"(1.) That, whilst it would be an act of justice to the medical officers holding appointments in the Poor-law Service, it would also tend to the benefit of the public, that such of those officers who, through illness or infirmity, have become unfit to discharge their public duties, or who, having either served twenty years, or attained the age of sixty years, should be entitled to claim superannuation allowance, in amount not less than two-thirds of all their official emoluments. (2.) That the indiscriminate issue of tickets for dispensary medical relief which now prevails not only occupies unfairly the time of the medical officers, but also greatly and improperly increases the expenses of the poor-rate. This Association, therefore, approves of the propositions put forward by the Council in their communication addressed to the Poor-law Inquiry Commission on this subject. (3.) That it would be but just to the medical officers holding Poor-law appointments, and would tend towards increasing the efficiency of the service, that they should be entitled to a reasonable period of leave of absence in each year, as in the case of civil servants; and that provision for the same should be made at the public expense. (4.) That this Association approves of the action taken by the Council concerning 'The Medical Act (1858) Amendment Bill,' now before Parliament, with reference to direct representation of the members of the profession on 'the General Medical Council'; and also with reference to uniformity of education and examination for granting medical qualifications. (5.) That this Association approves of the action taken by the Council concerning amendment of the Public Health (Ireland) Bill; and also approves of their action with regard to the Bills suggested by them to amend the Vaccination Laws, and 'the Registration of Births and Deaths (Ireland) Act'; and hereby directs that the Council shall continue their efforts to have these reforms carried into effect." Dr. Chaplin proposed the confirmation of the resolution passed at the last annual general meeting, for the formation of the Irish Medical Association into an incorporated company. Dr. Morrogh seconded the motion, which was passed. On the motion of Dr. D. Jacob, seconded by Dr. N. Duncan, the amended "objects and rules" of the Association drawn up by the Council were adopted. A vote of thanks having been passed to the professional and general press, the result of the ballot for the election of officers was declared. The incoming President, Dr. Robert McDonnell, F.R.S., then took the chair, and the proceedings terminated with a vote of thanks to Dr. Darby, the outgoing President. In the evening the Association dined in the Albert Hall of the Royal College of Surgeons.

The annual meeting of the Royal Medical Benevolent Fund Society of Ireland was held at 4 p.m. in the hall of the King and Queen's College of Physicians, Kildare-street. The chair was occupied by Dr. Gordon, President of the College of Physicians, and there was a large and influential attendance of members of the profession. Dr. A. H. McClintock, Honorary Secretary, read the report, which stated that the total number of applications this year was ninety-seven; thirteen being from medical men, seventy-two from widows, and twelve from orphans. Included in the above are five applications which were refused, viz.—four who claimed as orphans but were over age, and a medical man whose case on investigation was not found a deserving one. Fourteen of the entire number of cases apply to the fund for the first time. In the interval between the last general meeting and the present, the central committee have been obliged to make grants to thirteen cases of extreme urgency, which anticipatory grants amounted to £208. One medical annuitant who was on the list last year and the year before, has died. He received in all £120 from the fund. One widow, who got £12 last distribution, has also been removed by death. The amount of money allocated among the ninety-two eligible claimants on the fund this year comes to £1332 10s., and in the following proportions, viz.:—To medical men, £457 10s.; to widows, £762; and to orphans, £113. It must be satisfactory to know that the receipts for the year, derived from interest and subscriptions, not only permit of this appropriation, but that it is hoped a small balance will remain over to pay the printing, stationery, and other necessary expenses." The statement of accounts was read by Dr. Finny. It showed there was a balance in the hands of the Treasurer of £2072 2s. 10d. The donations amounted to £305 10s. in the year 1877-78, and they included—£100 from Dr. Hudson, £100 from his brother (Mr. Hudson, of Chester), £25 from Dr. Robert M'Donnell, £10 from Dr. Travers, £25 from the Misses Brooke, etc. After payment of expenses a sum of £1124 10s. remained to be disposed of, and there would be a balance in the hands of the Treasurer of £151 18s. 3d. Dr. Finny stated that the medical students had supported the institution in a progressive and favourable way. They had received from the City of Dublin Hospital, £6 14s.; Meath Hospital, £5 18s.; Rotundo, £6 2s. 11d.; Cork, £1 9s.; Galway (through Dr. Pye), £5 10s. After the adoption of the report, considerable discussion took place as to the propriety of continuing to fund the donations and bequests of the Association. Dr. Banks thought the time had come when they must begin to distribute the donations and bequests as they came in, and moved a resolution to the effect that in future donations and bequests shall be either funded or distributed at the discretion of the Managing Committee for the time being, unless in cases where a specific direction as to the appropriation has been given. Dr. Duncan seconded the motion, which was eventually adopted. The remainder of the business was routine.

Excision of the Scapula.—Dr. Brigham, of St. Francisco, publishes, with photographs, in the *Boston Medical and Surgical Journal*, April 11, a successful case of "subperiosteal excision of the entire scapula and head of the humerus."

The Berlin Charité Hospital.—The diminution of the teaching material for the university clinic supplied by this Hospital, on account of the establishment of the great number of local (special?) hospitals, has become so urgent that the Minister has summoned a conference to consider how it is to be met. We fear resort will be had again to mere palliative measures, whereas radical procedures are called for. Foremost among these, in our opinion, stands the erection of a university hospital, devoted exclusively to clinical teaching.—*Deutsche Med. Woch.*, May 18.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 10.

GEORGE W. CALLENDER, F.R.S., President, in the Chair.

RINGWORM COMPLICATED BY CHLOASMA.

MR. MALCOLM MORRIS showed this case, which he considered to be unique. The patient was a young woman employed in a laundry, who perspired freely while at work. She had never worn flannel next to her skin. Eighteen months previously she was nursing a child suffering from ringworm, and at that time noticed a small red spot on the back of the neck, which gradually spread from the edge, leaving healthy skin in the centre. After this several other spots of similar character appeared, and spread in the same way. Last January she observed on her chest a brown spot, which also spread. Her skin exhibited well-marked rings of tinea circinata situated on the neck and shoulders, also on the arms. On the chest and back were large patches of tinea versicolor. These patches not only occupied the greater part of these regions, but had spread within the circles of the ringworm; so that, as the ringworm fungus retired, the chloasma advanced. At the time of the meeting the patient had been for some days using a strong lotion of hyposulphate of soda, but there was still a considerable quantity of the chloasma to be seen. Under the microscopes on the table were specimens of the two varieties of fungus, kindly mounted for Mr. Morris by Dr. Sangster. It was well known that both favus and ringworm could exist on the same skin, or, at all events, that one could produce the other. Mr. Hutchinson had also stated that ringworm in a child could produce chloasma in an adult. The chief point of interest in this case was the fact that the parasite of pityriasis versicolor could grow where the trichophyton could not exist.

A CASE OF YELLOW FEVER.

Mr. LEGGATT read notes of this case. The patient, a gentleman aged fifty-two, single, before 1865 had been some years in India (Bengal) without any serious illness. He had always lived well, drinking a bottle of wine daily, and for the last four winters had gone to a warm climate on account of hæmoptysis and a delicate lung; returned from a sanitary voyage to and from Buenos Ayres on March 17, and arrived in London on the 18th. He had felt "seedy and bilious" twice on the voyage home, and after landing. He appeared well on the 19th, when he was seen by Mr. Leggatt. His appetite was not so good as usual; urine (night and morning) 1003, acid, almost colourless, no albumen. On the night of March 21 he was seized with shivering and frequent vomiting after a good dinner. On the 22nd he was languid and had headache, pain in the back, and loathing of food; he was hot; his pulse was over 100; the tongue white; bowels not moved. He took effervescing citrate of potash and soda, and his usual "tamar" at bedtime; and had milk and soda-water and tea. On the second day (22nd) he was freely purged, and had frequent vomiting—six ounces of black coffee-ground vomit. Pulse 108; temperature at noon 101·3° Fahr. He was very depressed and languid, and asked if he had yellow fever. There were frequent motions during the day of pale whey-like liquid, with shreddy mucus. Evening temperature 100° Fahr.; pulse 94; tongue moist, coated in the centre with a light drab fur, red at edges and tip. On the third day (24th) he passed a sleepless night. There were frequent motions of the same character. He vomited once, and was very depressed and weak. The face and conjunctivæ were yellow. No urine was passed, or possibly a little with the motions. Pulse only 48, weak and irregular; temperature 98·6° Fahr. Great tenderness and pain existed in the epigastrium and right hypogastrium. At night the pulse was 60, more regular. Frequent motions were passed. A grain of calomel was given at noon; eight minims of laudanum in an enema at bedtime; a teaspoonful of brandy every three hours during the day. Fourth day (25th), the patient slept a good deal. Two drab pultaceous fetid motions and about three drachms of urine were passed. The latter was of sulphur-yellow colour, clear, neutral, and contained one-third of albumen. The yellowness of the skin had spread to the trunk and limbs, and was deeper. The abdominal pain was increased. There was no sickness in the night. The pulse was 60, of fair power; temperature 98·3° Fahr. Dr. Hawksley also saw the patient. Two grains of calomel and one grain of opium were given at 3 p.m., a water compress was applied to the abdomen, and a wide belt of impermeable piline around the trunk. Six hours after the opium the patient was bright and free from pain. He took but little nourishment, and no stimulants. In the evening the temperature was 98·2° Fahr.; two pale fetid motions had passed. Fifth day (26th), there had been a sleepless night, with frequent vomiting of clearish liquid, with flakes like beef-tea grounds; one darker vomit contained blood. He was very weak and torpid, but irritable. The abdominal pain and tenderness were much relieved. There were distressing attacks of hiccough for three-quarters of an hour together. Two grains of calomel were given at 3 p.m., and half a minim of creasote at 4 p.m. Dr. Murchison also saw the patient in the evening. His manner was altered, and he was jocose. He still vomited frequently; once, dark flakes of blood. The lower lip was livid and swollen. The tongue remained as before, moist and without sordes. Temperature 99° Fahr. (axilla). There was still some tenderness. The area of liver-dulness was rather smaller, if anything, than natural. No urine had passed for sixty hours, and there was no sign of any in the bladder. There was no motion. Five grains of calomel were given. The trunk was enveloped in piline, wet with infusion of digitalis, four times the officinal strength. Sixth day (27th), the patient had a convulsion at midnight, followed by twenty minutes of unconsciousness, and four convulsions subsequently during the night. He vomited frequently. There had been saved eight ounces of clear liquid and four ounces of black coffee-ground vomit. The lower lip was black and swollen (ecchymosis?). The tongue was dry and brownish. There was the mercurial fetor. The pulse was 63, feeble, small; temperature 98° Fahr. He had taken a little milk and barley-water. A drop of croton oil was given at 2 p.m., and was followed by strong convulsions, in which the pulse was almost imperceptible. Dr. Murchison and Dr. Hawksley again saw the patient at 3.30 p.m. He was semi-comatose, and did not recognise anyone. A few purpuric spots were visible on the right instep and front of the right leg. The yellowness of the skin was darker. There had been no vomiting since the early morning no motion; and no urine for seventy-nine hours. The digitalis was continued. A drop of croton oil was given, in the hope of relieving the uræmia by vomiting and purging. At 8.30 a severe convulsion left the patient comatose, and he died at 9.30. In this case, the temperature subsided on the third day from 101·3° of the previous morning to the natural standard, above which it never again rose. There was great prostration on the morning of the third day, which passed away under very small doses of brandy (one ounce), and the pulse rallied from 48 to 60, and never afterwards fell below or rose above that frequency. The tongue continued moist to the end of the fifth day, and was free from sordes. On the sixth it was brownish and dry. The mind was unaffected till the fifth day, when the patient became excited and a little unmanageable, but not at all violent. Blood was vomited on the second day, but not again till the fifth. There was never any blood in the motions. Death was evidently caused by uræmic poisoning, and it was not surprising that suppression of urine should occur in kidneys such as those described in the post-mortem notes. The results of the necropsy, taken together with the symptoms above described and the fact of exposure to infection, satisfied all present that the illness was one of specific yellow fever. An epidemic of this disease existed at Rio de Janeiro when the steamer touched there on her outward and homeward voyages. First, on January 30, three days after leaving, an officer of the vessel, assistant purser, who had been ashore at Rio for one hour only, failed with the fever, and died at Buenos Ayres on February 12. The vessel was in quarantine during her stay there. On the 14th she left for Rio, and arrived on the 21st. During her stay it was popularly stated that one hundred deaths a week were taking place from the epidemic. She left Rio on the 24th, and, two days afterwards, two more of the crew failed with the fever. One recovered; the other (the fifth engineer) died on March 5, in latitude 8° 13′ N.; longitude 27° 42′ W. Neither of these patients had been ashore during

the whole voyage out and home. The sick were isolated and disinfectants freely used, and no one in attendance on the sick took the disease, nor did any other case occur on board. The subject of this paper landed on both occasions at Rio, and it appeared probable that in his case, as well as in the other three, the infection was contracted at Rio. If so, a period of incubation of twenty-five days resulted. It was possible, however, that, before reaching a temperature in which the poison was supposed to be inoperative (say below 60° Fahr., which would probably be in about latitude 34° 21′ N., longitude 13° 44′ W., the position of the ship on March 12, and which is about four degrees north of the isothermal line, which has a mean winter temperature of 58° Fahr.), the infection might have been taken from the ship in which the three cases of fever had occurred. This would give an incubation of nine days. The ordinary term was said to be from one to fifteen days; but cases were on record which gave seventeen or eighteen days. The infective poison was generally supposed to be innocuous below a temperature of 60° Fahr. But the experience of physicians in the Peruvian Andes showed that the fever could become epidemic and propagate itself at an elevation of 14,000 feet, and in a daily mean temperature of 48° Fahr.; and it had been asserted by an American physician that the poison was not absolutely destroyed, but only rendered dormant, at any temperature above 32° Fahr. If these facts were established, it would behove us in England to use great caution when any infected vessel reached an English port. It had happened already at Swansea, in 1855, that such a vessel did, in September, with a mean temperature for the month of 65° Fahr. in the dock of that town, import the disease, which infected twenty-two persons and caused fifteen deaths amongst its population. In March last the mean (maximum and minimum) temperature for the last eleven days was 38° only. There were severe frosts at night, and north-west winds and some snow; one severe storm. This cold was preceded by warmer weather from the 18th to the 20th, when the thermometer was at 55° or 53° each day, and these days were preceded by colder weather, during which this patient entered the Channel and arrived at Southampton.

Dr. Greenfield read an account of the post-mortem and microscopic examination of the case. The necropsy was made forty-three hours after death, the weather being very cold. The rigor mortis was well-marked; yet there were signs of decomposition on the abdomen, the blood was fluid and contained gas-bubbles, and there was deep staining of the tissues around the veins. There was general intense icterus of somewhat brownish colour; ecchymosis in the lower lip. The liver—slightly enlarged, deeply jaundiced, and of light yellow colour—showed on section well-defined lobules, which were greenish in the centre; the surface of the organ was smooth, the capsule even, the gall-bladder and bile-ducts patent and healthy. The stomach contained much black fluid, resembling altered blood; its coats and those of the intestines were healthy. The spleen, free from disease, was small and firm. The kidneys, generally stained and somewhat decomposed, presented slight swelling of the cortex. The lungs contained numerous scattered hæmorrhages in the lower lobes, and subpleural ecchymoses. The pericardium was free from ecchymosis; the heart-wall was soft and greasy. Microscopic examination of the liver showed an interstitial exudation, part of which appeared to be old, part recent, and of acute origin; the liver-cells were swollen, containing much pigment at the centre and periphery of the lobules, and some fat also at the periphery. Together with this were tracts of liver-tissue, in which the cells were swollen and split up into fragments, some containing nuclei, others bile-pigment or oil, and others apparently deliquescing; and between the cells were many nuclei. The kidneys showed changes exactly similar to those seen in the earlier stages of acute parenchymatous nephritis, and some older fibroid changes. The spleen was quite healthy. Dr. Greenfield remarked that the morbid appearances resembled in most respects those which had been described by many observers in the tropics; but that the changes in the liver, which were analogous in kind to, though less in degree than, those seen in acute yellow atrophy, established the existence of a true parenchymatous hepatitis in yellow fever—a condition which had been denied by some authorities. The alteration in the liver was, in fact, similar to that in the kidneys.

Dr. Cayley pointed out that the temperatures did not correspond to those known to exist in yellow fever. All the symptoms and post-mortem appearances pointed to acute yellow atrophy of the liver.

Mr. Hutton said the disease (yellow fever) was one rather of cities than of malaria. He held with Parkes that it was really a fæcal fever, and that the risk from its introduction into towns was great.

Dr. Greenfield said that the question of yellow atrophy was present to the minds of all who saw the case; but in yellow atrophy was the spleen enlarged, and were lesions of the heart and kidney also found? The brain was not examined.

Dr. Cayley did not insist on the disease being yellow atrophy; only the conditions described, especially as regards temperature, were not those we were taught to associate with yellow fever.

Mr. Leggatt, in reply, said that on the second day he saw the patient the morning temperature was 101·3°, in the evening 100°; afterwards it remained normal. A low temperature was not unusual in yellow fever. Dr. Murchison thought the case might be one of liver disease when he saw it during life, but after the post-mortem he became convinced that the disease was yellow fever.

Lupus Exedens.

Mr. Spencer Watson read notes of two cases of lupus exedens treated by the forcible and deep application of lunar caustic, together with internal remedies. The disease in the first case—that of a policeman aged twenty-eight—attacked the eyebrow, eyelids, and root of the nose, and was attributed to the face having been injured by a kick. The treatment was at first by the internal administration of arsenic, and the local application of lunar caustic. Subsequently, iodide of iron, cod-liver oil, and iodide of potassium were given, and the caustic was repeated. Complete cicatrisation resulted, but after a prolonged course of treatment. There was no history of syphilis in this case. In the second case, the cheek and ala of the nose were the parts attacked, the patient being a weakly man with a phthisical family taint, and no history of syphilis. He, also, was at first treated by the internal administration of arsenic, but conjoined with iron and cod-liver oil. No improvement following, the lunar caustic was freely and deeply applied, and iodide of iron, cod-liver oil, and small doses of opium were given internally. Under this plan a very rapid improvement took place, partly attributed by the author to an antiseptic dressing applied to the ulcerating surface.

The President thought the author was to be congratulated on the successful result of the treatment adopted in the case.

Imperfect Right Hemiplegia, with Double Optic Neuritis, and Obliteration of the Right Brachial Artery.

Dr. Buzzard related this case, which occurred in a girl aged eighteen, who was admitted into the National Hospital for the Paralysed and Epileptic in December last. So slight were the symptoms of hemiplegia, and the girl's manner was so strange and confused, that at the first glance the case was thought to be one of hysteria; but the ophthalmoscope revealed both optic discs much swollen, with the veins very tortuous and partly concealed by effusion. She was at once admitted; and, on further examination, it was found that pulsation in the right brachial artery ceased at the middle of the arm, the radial and ulnar arteries being both indistinguishable. It appeared that before admission she had had a fit, on recovery from which she had complained of loss of power in the arm and cutaneous anæsthesia of the forearm. The anæsthesia, which was marked on admission, disappeared in three days without treatment. She was then ordered iodide of potassium, and was subsequently injected hypodermically every day for twenty-nine days with Dr. Bamberger's solution of peptone of mercury. She rapidly recovered the use of the arm, the optic neuritis gradually cleared away, and at the end of February she left the hospital. It was not until the patient had been six weeks under treatment that a sphygmographic tracing of the right radial pulse could be taken. This, which was shown to the Society, contrasted strongly with one obtained from the left radial artery on the same occasion. Subsequent tracings (which were also exhibited) showed the gradual return of circulation through the vessel. At the latter end of February the girl had been examined by several members at a meeting of this Society, and the

state of the radial pulse, which was still very imperfect, confirmed. In his remarks, Dr. Buzzard pointed out that, although the case was obscured to a certain extent by some hysterical symptoms, the existence of optic neuritis must be looked upon, under the circumstances, as practically conclusive of the existence of coarse intracranial lesion, probably gummatous inflammation of the dura mater giving rise to the hemiplegia. The girl's history made it likely that the disease was of syphilitic origin. He attributed the temporary obliteration of the brachial artery to chronic endarteritis of syphilitic origin, of the kind which had been minutely described by Heubner as occurring in the arteries of the brain, and of which specimens were shown by the author and others at the late discussion of the Pathological Society upon visceral syphilis. If this were so, the case was, so far as he knew, the first one of thrombosis consequent upon this arterial change which had been noted during life in a vessel not belonging to the cerebral system. He had at first thought that when the girl fell in a fit the artery might have been injured and thrombosis thereby induced, but an investigation of the position and circumstances of her fall had, he thought, practically excluded this explanation.

The President, upon inquiry, learned from Dr. Buzzard that the heart was healthy.

Mr. Brudenell Carter mentioned a case where a young woman was totally blind in one eye from neuro-retinitis. Three weeks after, by the use of mercury and iodide of potassium, vision was completely restored. The other eye was never affected. He had recently been consulted by a young officer who had suddenly gone blind in the right eye. The retina was milky, and the vessels buried in exudation. This might be due to some interference with the circulation.

Mr. George Brown suggested that there might have been an abnormal distribution of the arteries in the arm.

Dr. Buzzard pointed out that the pulsation returned in both radial and ulnar arteries after a month, and there were no acute symptoms of plugging. The arteries were not thickened. He had never seen double optic neuritis follow embolism.

THE PATHOLOGICAL SOCIETY.

Tuesday, May 21.

Charles Murchison, M.D., LL.D., F.R.S., President, in the Chair.

New Honorary Members.

The President announced that the following gentlemen have been nominated for election as honorary members of the Society:—M. Charcot, M. Chauveau, M. C. Robin, Professors Cohnheim, Rindfleisch, Schwann, Thiersch, and Pirogoff, and Dr. D. Gross.

French Millstone Maker's Lung.

Dr. Peacock exhibited a specimen of this disease. A man of twenty-nine was admitted into the Victoria-park Hospital last December, suffering from chest-disease, which had commenced five months before with hæmoptysis. Cough, expectoration, dyspnœa, lividity of the lips, anorexia, and occasional vomiting with emaciation were the prominent features of the case. The right lung yielded dulness and bronchial breathing, and there was deficient expansion of the corresponding side. Post-mortem, a large cavity was found in the right upper lobe, the posterior part of the middle lobe was indurated, both lungs were adherent at the apices, the right vocal cord was ulcerated, and the bronchial glands were enlarged. A portion of the indurated lung yielded 0·406 per cent. of silex on chemical analysis. Microscopically, the bronchi and alveoli were found to be compressed, fibrous tissue and a small-celled growth pervading the walls. Catarrhal and exudation cells in a caseous condition filled the alveoli; and there, as well as in the walls, were pigment-particles. Dr. Peacock also showed specimens of the stone used by millstone-makers, as well as of the dust formed in the process, which he explained. The age of workmen employed in the trade was remarkably shortened. The cases which had come under Dr. Peacock's own observation were aged twenty-four, twenty-nine, thirty-seven, forty-five, and forty-eight years respectively; and in one London manufactory none of the workmen were more than forty years old, while those who began as boys rarely reached twenty-four.

Dr. Douglas Powell asked whether a tendency to phthisis was inherited by the children of persons suffering from this form of lung-disease. While the fathers might reach a fair age, their sons who followed the same occupation appeared to succumb more rapidly.

Dr. C. Theodore Williams asked what the essential change in the lung was.

Dr. Leared said that limited pneumothorax might occur in these cases.

Dr. Peacock replied. He said that the number of recorded cases of this disease was still too small to allow conclusions to be drawn respecting its heredity. The pulmonary lesion was essentially of a fibroid nature.

Carcinoma of the Orbit.

Mr. Nettleship showed a specimen of this nature which had recurred fourteen years after its second removal. Twenty years ago Mr. Zachariah Laurence removed "an encysted encephaloid" tumour from the right lachrymal region of a woman of twenty-eight; and five years later the operation had to be repeated by the same surgeon. No fresh growth occurred for the next fourteen years, at the end of which time the patient consulted Mr. Nettleship for a firm painful tumour in the right lachrymal region, which displaced the globe, as well as several fusiform subcutaneous growths. The whole mass, including the globe, was successfully removed, and the cavity treated with zinc-paste. The growth, which was adherent to the periosteum, proved to be a true carcinoma. The nature of the tumour and the interval between the last two appearances of it were remarkable features in the case. Mr. Nettleship also related the sequel of a case of tumour of the sclerotic which he had shown in 1876 (see *Medical Times and Gazette*, vol. ii. 1876, page 21) The patient died recently, with tumours in many parts of the body, although the very small primary tumour had been completely removed.

Embolic Softening of the Brain.

Dr. Cayley exhibited a specimen of softening of the left inferior parietal convolution due to embolism. A woman of fifty-two, suffering from chronic bronchitis, was seized with convulsions, followed by unconsciousness which lasted three hours. Next day she was admitted into the Middlesex Hospital, when it was found that her speech was difficult and her memory impaired, and that the right foot twitched, though there was no paralysis of the limb. The heart was large, with roughness of the sounds. Seventeen days after the first attack, the patient died with gangrene of both lower extremities as far as the thighs. Post-mortem there were found—mitral stenosis; thrombosis of the left auricle; plugging of both femoral, and right renal arteries; and two small wedge-shaped areas of red softening in the left inferior parietal convolution.

Dr. Douglas Powell mentioned a case in which convulsions occurred in embolism in mitral stenosis. This accident was occasionally the cause of death in mitral stenosis.

Dysidrosis.

Dr. Tilbury Fox and Dr. Radcliffe Crocker exhibited a number of microscopic specimens illustrating the minute anatomy of dysidrosis. Dr. Fox said that he had obtained the permission of a patient, whom he had admitted into University College Hospital suffering from the disease in its typical form, to excise a portion of skin. He had selected a part where the eruption was spreading, and was, in fact, in its earliest stage—that is, about three days old—and with the view of determining the initial lesions of the disease, for any conclusions drawn from the later stages were valueless in this respect. Dr. Crocker and he had carefully examined the removed portion of skin, and he would state the main results. The symptoms before excision in the part removed were tumescence, redness, greater patency of the orifices of the sweat-ducts, and the formation of little sago-grain-like bodies embedded in the derma, and developing in the site of the sweat-ducts, but without any elevation of the cuticle. In other parts of the hand the disease existed to a fully-developed degree. On minute examination it was clear that such changes as are found in eczema were entirely absent. There was no dermic inflammation, no change in the vessels of the papillæ, no escape of fluid from them, and no vesiculation of an eczematous kind. The changes were confined to the sweat-ducts and glands and the tissue of the rete immediately in contact

with the ducts. The sweat-ducts were large, and more tortuous than usual in the affected parts, and showed dilatations here and there. The globules or embedded vesicles —*i.e.*, the sago-grain-like bodies—were situated between the papillary portions of the rete; and, in fact, out of the sixty or seventy specimens only one could be made out to have any sort of relation to the vessels of the papillæ. They were indeed interpapillary and formed in the rete, especially its deeper part. The specimens also showed plenty of ducts entering globes or embedded vesicles, and others leaving them again, the connexion between ducts and dilatations of the rete being real. The contents of the globes were granular and epithelial. On tracing the ducts down more deeply, many were observed to be enlarged, their walls being thickened, and their interior stuffed with an increase of epithelial cell-elements. In one section, the deep sweat-glands themselves were seen to be swollen, and indistinct as regards the several normal component structures, the whole being in great part "blurred" by increase of cell-elements about their walls and throughout their structures, including disappearance of the lumen from stuffing by cell-elements—in fact, there were evidences of congestion or commencing inflammation. All these changes were limited to the sweat-glands and ducts, and the immediately adjoining tissue in the rete; and they seemed to confirm most clearly, Dr. Fox affirmed, the correctness of his clinical description of the disease. Dr. Robinson, of New York, was said to have proved that in dysidrosis the vesicles were formed by the escape of fluid from the vessels in the papillæ, and were seated over the papillary vessels. Either Dr. Robinson had drawn largely upon his imagination, or he had made his observations upon a disease which was not dysidrosis at all.

Dr. Frederick Taylor asked Dr. Fox whether he believed that the disease was inflammatory from the first, or whether the inflammation was secondary to the obstruction of the secretion. He had himself found that the contents of the vesicles were always alkaline.

Dr. Fox said that in his description of dysidrosis he had spoken of heat, redness, pain, swelling, vesiculation, and pus-production, of the formation of a red, tender, excoriated surface in the later stages, and so on—in short, of an inflammatory disease. He intended, however, to convey the idea that the sago-grain-like bodies or vesicles were produced by fluid secreted by the sweat-apparatus and distending the duct at its upper part.

Cavity in the Spinal Cord.

Dr. Frederick Taylor showed a specimen of elongated cavity in the spinal cord. The subject was a child of eighteen months, which had died of broncho-pneumonia, while suffering from chronic hydrocephalus. An irrregular cavity, distinct from the central canal, and two inches and a half in length, was found in the lower dorsal region of the cord. Both grey and white matter was involved by the cavity, and there was but a slight epithelial lining of the wall, which was not distinct from the lax and fibrillated tissue of the neighbourhood. A similar but smaller cavity was found in the upper dorsal region. The origin of such cavities, which had been already described abroad, was difficult to discover.

Ovarian Cysts from Twin Infants.

Dr. Leared showed these specimens. The twins had been born at full time; one died at eight weeks of complete obliteration of the common bile-duct with jaundice; the other died of pneumonia. In either ovary of the former was found a cyst as large as a filbert; and in one of the ovaries of the second a cyst as large as a pea.

Dr. Samuel West said that he had met with small ovarian cysts in an infant of three weeks.

The President said that deficiency of the common bile-duct was rare, and had been found associated with syphilitic changes. He inquired whether there was syphilis in the present case.

Dr. Leared replied that there was not.

Spontaneous Rupture of the Œsophagus.

Mr. Adams showed this specimen. A gentleman of fifty-three, dyspeptic for years, suddenly became faint two hours after a hearty dinner in the midst of good health, retched, suffered from severe pain in the left side, became collapsed, and died in seven hours. Post-mortem, the œsophagus proved to be ruptured close above the diaphragm, some of the gastric contents being found in the left pleural cavity. The walls of the œsophagus were thinned, as well as the cardiac end of the stomach; while the pylorus was much thickened. A similar case of rupture of the œsophagus in vomiting was recorded by Dr. Williams in the first volume of the *Transactions*. Mr. Adams further said, in reply to inquiries by the President and Dr. Pye-Smith, that no disease was found in the œsophagus, and that the rupture appeared as a longitudinal slit with sharp margins.

Dr. C. Theodore Williams suggested that the muscular coat should be examined microscopically.

Dr. Coupland mentioned a case of perforation of the œsophagus and post-mortem digestion in which gastric contents were found in the right pleural cavity. The appearances of the perforation were different from those described in the present case.

The specimen was referred for examination to Drs. Cayley and Greenfield.

Aneurism of the Pulmonary Artery.

Dr. Samuel West showed this specimen, from a fatal case of hæmoptysis, in a woman aged forty-six. The right lung presented two patches of dense fibroid induration, at the apex and in the lower lobe respectively; in the latter there was a cavity into which a small aneurism on a large arterial vessel projected. The left lung contained blood, but beyond this and adhesion there was no further disease on either side.

Dr. Green referred to the unusual distribution of the lesions.

Dr. Douglas Powell asked whether the cavity might not have been produced by the aneurism.

Dr. West said that the case was certainly peculiar; the patches of local induration corresponded with the bronchial distribution. He considered that there was too much disparity in size between the aneurism and the cavity for the former to have been the cause of the latter.

Dr. Douglas Powell replied that the aneurism might have been much larger before rupture.

Dr. Crocker said that pulmonary aneurisms might be found both in small and in large cavities. He had seen no fewer than six aneurisms in a single lung.

Dr. C. Theodore Williams said that aneurism in bronchiectasis was rare. Pulmonary aneurism might be frequently found by careful search. He had been told by the late Dr. Rasmussen that he believed that all cases of hæmoptysis in incipient phthisis were referable to rupture of small aneurisms into attenuated bronchi.

Filaria Sanguinis Hominis.

The President showed specimens of this hæmatozoon sent by Dr. Bancroft, of Brisbane, who had discovered the mature worm. The advanced period of the session of the Society did no tallow them to read a paper on filarious disease by the same gentleman, in which thirty-one cases were recorded with illustrative photographs, and the whole subject treated in an exhaustive manner. The President also announced that a paper upon Elephantiasis had been received from Dr. Loudon, formerly of Jerusalem, and now of Carlsbad.

Polypus of the Nose and Orbit.

Mr. Spencer Watson exhibited a specimen of fleshy polypus removed by two operations from a gentleman of fifty-nine years, who had been a great snuff-taker, but very robust, and with no family or personal history of cancer. The growth involved both nostrils, and the antrum and orbit of the left side. Rapid growth took place after each operation, and the patient died five weeks after the second, somewhat suddenly, probably from embolism. The tumour presented on section the appearance of a rapidly growing round-cell or granulation sarcoma.

Colloid Cancer of the Breast.

Mr. Watson also exhibited a colloid cancer removed from the breast of a woman of forty-two, without any family taint of cancer, and with no personal cachexia indicating such a taint. It was of four years' growth, of the size of a large hen's-egg, hard, nodular, and prominent. The skin was very freely movable over it, except near the nipple, which was slightly retracted. The axillary glands could not be felt. After removal, the wound healed soundly, and

no recurrence had taken place sixteen months after the operation. A section presented, to the naked eye and microscopically, the features of colloid cancer.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, MAY 28.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

NOTES ON THE SPIRILLUM-FEVER OF BOMBAY, 1877.

MR. H. V. CARTER began this paper by expressing his conviction that, by means of the clinical thermometer and microscope, it has now been demonstrated that the new Bombay fever is identical with the famine fever, relapsing fever, or recurrent typhus of Europe, and he insists upon the importance of this fact. Proofs are arranged as being derived from the natural history of the epidemic (*a*), from the symptoms noted (*b*), and from the pathology indicated (*c*), as follows:—1. The rather abrupt appearance of a malady evidently connected with unusual and excessive want, fatigue, and overcrowding; its spread with the increase, and subsidence with abatement of these hygienic defects. 2. The remarkable resemblance in clinical characters of this new malady to the relapsing fever of Europe—a resemblance so close as of itself to be decisive of actual identity. 3. As a special feature, the invariable presence in the blood, during pyrexia, of a minute parasite, which, so far as known, is peculiar to one form of fever only, viz., the relapsing. It is also noted as significant that the new fever has raged most at that season of the year when there is least malaria, and has declined when remittents commonly begin to appear. Quinine does not check its course. The first, or natural history, proof will be developed hereafter, but it is already apparent (in the author's estimation) that this epidemic arose contemporaneously with excessive afflux of famine-stricken people, that in proportion as the pressure of immigration augmented, the "fever" death-rate rose, and lastly, that contemporaneously with diminished influx and with active deportation of families to relief-centres in the interior, this comparative fever-mortality began to decline, though had it been due to malarious influences alone the reverse would have been the case. And with regard to the influence of defective sanitation, there is no evidence that Bombay was in a worse state than previously; and besides, relapsing fever does not arise from filth. Most stress is, however, laid upon the proved identity of symptoms and pathology, and in proceeding to discuss these, reasons are given for introducing the designation "spirillum-fever"—the word *spirochæte* not lending itself so well,—and occasion is taken by the author to acknowledge the valuable co-operation of Drs. Succaram, Arjoon, and Auna Moreshwar K., of the Jamsetjee Jejeebhoy Hospital, Bombay. Some general observations follow; the sources of information being a camp of refuge, and two large hospitals of which the author had charge at different times—in all some 900 cases of "fever" of all kinds, and taken without selection, have been examined, and of these about 350 were demonstrated to be instances of spirillum disease. About the same number of cases (chiefly malarious) did not show the parasite; and the remainder were not microscopically scrutinised—they were the milder, obscurer, and mostly sequelar instances. Upon full consideration the author concludes that upwards of one-half (it may be more) of the sickness in Bombay was due to the famine-fever. From the date now alluded to, it was evident that malarious fevers were to be infallibly distinguished by the absence of the spirillum; but the author admits he had no previous conception of the variety of form and degree the parasite fever may assume—it might, indeed, like the malarious, be regarded as an order or genus of specific fevers. As to its analogies with the last-named group, secondary or later paroxysms may closely resemble "intermittents," or aguish attacks; and as the blood-parasite may or may not be found in such brief exacerbations, it is evident that much difficulty may be felt in deciding upon their real character. Here experience in India quite accords with that in Breslau and St. Petersburg (for example), and different explanations may be offered, the author alluding to an instance he has met with of ague-like fever being occasionally attended with a spirilloid blood-parasite. The more important question of the relationship of the spirillum-fever with "remittents" is thus briefly discussed:—First, paroxysms always, and relapses frequently of the former, present a persistent pyrexial state, which may be either "continuous" or "remittent"—in Bombay it was, perhaps, as often one as the other; but it is invariably marked by the presence of the blood-spirillum, whilst this will be vainly sought for in pure remittent attacks. It sometimes happens that the apyretic or free interval is so filled up with daily changes of temperature that the date of relapse is not evident in the chart; if not due to local complications, there may here be addition of a remittent, or, as the author thinks not unlikely, of veritable "typhus," and by means of the microscope it will always be possible to demonstrate the occurrence of a relapse even under these circumstances; when detected, our prognosis may be more favourable than it otherwise would have been. Symptomatic fevers as complications are next alluded to; and lastly, the author expresses his concern that "remittent" fever continues to be the official name of a malady so distinct in important respects as the spirillum or relapsing fevers. Instance of *typhus icterodes* and of "hæmorrhagic" typhus are then mentioned in which the blood-parasite was found, as it has been in Europe; it has not been found, however, in "enteric" fever (with a very doubtful exception), varicella, elephantoid fever (where the *filaria* was detected), and every other ordinary febrile ailment concurring with the specific. Some general remarks on "fever" follow, and the course of future inquiry is suggested. *Symptoms:* The value of a thorough acquaintance with all stages of the spirillum-fever is insisted upon, because only by this means can obscure or late instances be understood. The entire correspondence in symptoms of an ordinary attack of the relapsing fever of Bombay with that of Europe is pointed out, the author adverting to his own illness in part proof; and due prominence is given to this important identification. Instances in which no relapse occurred are particularly mentioned; they were 25 per cent. of all recovered cases, but if fatal ones be added of persons dying during or just after a first paroxysm, then the proportion of instances showing but one febrile exacerbation rises to 40 per cent. Upwards of one-half of all recovered cases show one relapse, 6 per cent. two relapses, 5 per cent. three, and 2 per cent. four relapses. The mean duration of the first attacks and intervals was seven to eight days, with a rather wide range. Relapses last a shorter time. No difference was noted between an abortive and a relapsing attack, nor any fixed relation between the severity of first and second paroxysms. Repeated attacks of the spirillum fever in the same individual, at long intervals, were well-known in Bombay. Individual symptoms next come under review. Prodromata may be wanting, although the spirillum be found within an hour of the initiatory chills of a first attack; they are commonly absent before relapses. Jaundice, delirium, and the typhoid state, and protracted convalescence, were more frequent than usual in Europe. Abortion occurs in pregnant women, and was early recognised. Hunger as a symptom was sometimes seen. *Mortality:* As based upon hospital statistics, this may be estimated at 10 per cent.; it was greatest at the height of the epidemic, but latterly several deaths have occurred in cases offering typhus symptoms, which have caused a somewhat increased death-rate. The author estimates the rate in ordinary fevers (mostly malarious) as double the above, and in remittents as treble, during the same period. Three-fourths of deaths from spirillum fever take place near the close of the first paroxysm and during the early part of the following apyretic interval. *Anatomical Lesions:* Excepting that of the blood, none is absolutely peculiar to the fever, and none is invariable. The commonest changes were—enlargement of the spleen (nineteen times in thirty-seven autopsies, also fibrinous infarcts (eight), and softening (three); enlargements of the liver (seventeen times in thirty-seven autopsies; fatty degeneration (sometimes acute) of the gland-cells of liver, kidneys, and spleen was noticed, but not of the heart-muscle; hæmorrhages in the arachnoid and other serous membranes, and in the intestinal mucous membrane. *Etiology:* The influence of age, sex, season, and occupation pass under notice. The remarkable limitation of the epidemic to the indigent and those nearest them is pointed out, the middle and upper classes having

virtually escaped. The origin *de novo*, from want, of this fever may seemingly occur; yet it cannot be the usual mode of origin, and contagion as a means of spreading the disease must be admitted. The author's own case is in point here. Rabbits and pigeons resisted inoculation of infected human blood. Adverting to the sanitary and hygienic condition of Bombay in 1877, the author then turns to the year 1864, when, from a wholly different cause, viz., excessive prosperity, the town became dangerously overcrowded, and an epidemic of fever broke out, which was clearly contagious, and by good authority was compared with typhus. Whether at that time relapsing fever also occurred is now unknown, but the author is inclined to believe that the latter is not a new disease in this Presidency. The remaining portion of the notes is occupied with a description of the spirillum (*spirochæte*), and other blood-elements detected in this most interesting disease during the many hundred observations which have been made in Bombay. The method of procedure is described, the different states in which the blood-parasite is seen, and although nothing particularly new has been made out, yet the author has had the satisfaction of finding that his independent experience entirely corresponds with most of that collected during recent years in Europe, and he regards this identification of the spirillum-fever as a substantial addition to our previous knowledge.

Sequel to a Case of Aneurism of Aorta, Innominate, Subclavian, and Carotid Arteries, treated by the Double Distal Ligature.

Mr. Richard Barwell read a paper, giving further details of the case of Robert W., who was exhibited to the Society on November 13, 1877, when a previous paper was read:—On November 14 he left the hospital. He came to the hospital on November 20 on formal business, and as he was suffering from bronchitis, Mr. Barwell persuaded him to remain. He was very intractable; and not being allowed brandy, left on November 22, walked home (about two miles) very thinly clad through snow and sleet, sat four hours in wet clothes without a fire, became rapidly worse, and died November 24. At the post-mortem on November 25, the aneurism, which appeared solid, was removed, together with heart and great vessels. No other disease discoverable, except very acute bronchitis (muco-pus in large and small bronchi), hypostatic pneumonia, and œdema of lungs. Blood in arterial system dark, like that of veins. On examination of the aneurism and of the great vessels, the tumour was found to be rather larger than a tennis-ball; it sprang from the junction of first and second parts of the aorta; its pressure had altered the course and relations of the trachea and œsophagus; the large veins also were peculiar. It was remarkably hard and firm; at its upper part it was elongated into a subsidiary enlargement, which lay in the neck, and was in front divided from the rest of the aneurism by a groove marked in it by the clavicle. The back of the sac was moulded on the apex of the lung. The sac was laid open from behind forward; there was within it still persistent a globular cavity perhaps an inch in diameter; this was surrounded by very firm clot of variable thickness—in front, close to its opening into the aorta, it was rather more than one-third of an inch thick; behind, one inch and a half thick. The subsidiary tumour was quite obliterated, so that here the clot was over two inches thick. No vessel-mouth opened out of the aneurism, the innominate being, like the right subclavian and carotid, obliterated; the left vessels came off from the aorta itself below the mouth of the aneurism. The specimen showed the tumour had greatly shrunk since the operation; that the whole tumour was as much filled as could be expected in the time; that had the man chosen to remain in the hospital, or been moderately prudent, the whole cavity must almost of necessity have become obliterated, since the aneurism, so thickened by hard clot, could neither have enlarged nor burst; and since there was no thoroughfare within the sac, there could have been no blood-stream through it. In fact, though the man by his own perversity contracted an intercurrent fatal disease, the aneurism was to all intents and purposes cured.

Two Cases of Intussusception, in one of which Abdominal Section was performed.

Mr. C. Handfield Jones and Mr. Herbert W. Page contributed a paper in which two cases were recorded, patients of Dr. Handfield Jones, in St. Mary's Hospital. The first, a harness-maker, aged sixty, admitted May 12, 1874, had, although enjoying good health, passed blood per rectum for the previous twelve months. On May 5 he was seized with abdominal pain, and then passed a teacupful of clotted blood. The pain became constant after May 8, and when admitted a tumour was found in the cavity of the bowel, round which the finger could be passed, and there was dulness in the left flank, with constipation. He was examined on the 21st with a view to operation, but the surgeon, now no longer among us, concluded there was cancerous disease, having brought away a portion of growth on the finger. The man died on the 23rd. Extensive peritonitis was found post-mortem, and a large invagination projecting into the rectum, which could be reduced with ease, and there was no cancer. Regret is expressed at the delay and mistake in diagnosis, as operation might have easily relieved the condition, and perhaps have saved life. The second case presents features of great interest and rarity. A boy of five, admitted December 31, 1877, with a history of having lost flesh and been very ill for six weeks. He had severe paroxysms of pain in his abdomen, varying very much in frequency, and with some diarrhœa. He improved during the first few days, but on January 14 he had more pain and there was dulness on percussion in the left flank. This condition increased, and on the 20th, the child being very ill and there being a distinct hard lump in the left iliac fossa, inflation was performed per anum, and was followed by a rapid subsidence of all the urgent symptoms. His state continued very variable from day to day until February 4, when the tumour again appeared, and was a second time relieved by inflation. On February 11 for a third time, and again on February 16 the tumour reappeared, and was removed by insufflation; and on February 25 the operation was again repeated for the fifth time, and caused the disappearance of the tumour, then much larger than before, and both seen and felt in the left iliac fossa. He was taken out of the hospital by his parents on February 27, with a warning that a recurrence of the disorder was almost certain. Readmitted on March 4 in an alarming state, the symptoms having returned two days before. A large tumour was now felt reaching from the iliac to the umbilical region, and inflation when performed in the afternoon only changed its position, did not make it disappear. The child continued in great pain, and in the evening insufflation was again tried, and failing, water was injected, but without success. On the following day he was much worse, and at 5 p.m., when pulseless and collapsed, he was seen by Mr. Page, who at once performed abdominal section. The tumour was so large that it was necessary to prolong the incision above the umbilicus, and to remove the small intestines from the abdominal cavity. Traction on the upper end of the volvulus was only successful in the extrication of about two inches of ileum, and an attempt to draw off the ensheathing part at the lower end was frustrated by the presence, then discovered, of a second and lower intussusception of the colon, in which the order of parts was reversed, the inferior portion being ensheathed in the upper, which thus became the ensheathing part. The two volvuli met and overlapped each other at their extremities, and it became necessary to reduce the backward intussusception before the ordinary invagination could be relieved. Owing to the great distension of the bowel and slight adhesions at the ultimate point of the intussusception, this was a work of much difficulty, and was only accomplished by considerable force. The upper or more usual invagination was then reduced with great ease by gently squeezing the lower end of the volvulus—an action which simultaneously drew off the ensheathing and pushed out the ensheathed part of the bowel, the vermiform appendix being the last to appear. There was some visible congestion and thickening about the cæcum, but no general peritonitis or adhesions. The operation, of which a detailed account is given, lasted an hour and a quarter. The child considerably rallied after it, but died exhausted the following morning, having lived nine hours and three-quarters. At the autopsy the lips of the wound were found adherent. There was commencing peritonitis of the small intestines, but none of the large bowel. At a point corresponding with the upper limit of the volvulus, the mucous membrane of the ileum was swollen and greatly congested, and that near the vermiform appendix was much the same. The meso-cæcum was so lax as to allow of the cæcum being drawn over the left iliac fossa. The method of reducing the upper volvulus is especially referred to as confirmatory of Mr. Hutchinson's experience recorded in vol. lix. of the *Transactions*, that

pulling down the ensheathing part rather than pulling out the ensheathed part is the true mode to pursue. Reduction of the backward intussusception was rendered most difficult from the slight adhesions at its furthest end and from great hyperdistension of the gut, and although accomplished without damage to the structure of the bowel, it is thought that such force as was requisite might itself have been dangerous. Reference is made to the long continuance of pain before any definite appearance of tumour, and it is suggested, as an explanation of the cause of intussusception, that pain and the subsequent motor derangement must be ascribed to a functional disorder of the abdominal nerves and ganglia, a relaxed state of a lower segment certainly favouring the intrusion of an actively contracting part above. It is therefore most probable that the essential condition of intussusception is a local paralysis of a portion of the small intestine, which becomes the sheath of the volvulus. Neuralgic pain in other parts is associated with motor paralysis, and probably is so in the abdominal organs. At the same time the laxity of the meso-cæcum may throw light on a predisposing cause of the intussusception. The second and ascending intussusception forms a very remarkable feature in the case, the existence of a single instance of such a condition having been called in question by no less an authority than the late Dr. Brinton. The absence of peritonitis and adhesions after so many recurrences, and the presence of slight adhesions only when the child had been taken home and when there was long delay in resorting to inflation, shows how necessary it is that this treatment should be had recourse to as soon as intussusception is evident; while the state of the mucous membrane, although the serous surface of the bowel may be free from inflammation, points out the imperative need of surgical interference at the earliest possible moment after other means have failed to give relief.

The PRESIDENT said this was a very important addition to our knowledge of such cases, which were, unfortunately, too common among children.

Mr. GAY ventured to make a few remarks on the first case, for in a question of diagnosis chronic cases of invagination were too often lost sight of. He remembered a case of his own which was somewhat similar to that reported. He was called in consultation to see a lady over seventy, supposed to have suffered for several years from internal piles. Sometimes there was bleeding and difficulty of defæcation; and when this last was overcome, blood was passed in some quantity. When she was seen he could find a considerable swelling in the rectum which seemed to be a polypus when examined by the speculum, and to that he applied a ligature. When next seen there were peritonitis and vomiting, and no motion had been passed. He removed the ligature, and separated the part by the knife. She improved for a time, but after a few weeks she sank and died. No post-mortem was allowed; but the tumour, when examined, proved to be an old invagination, and it could even be unsheathed with a little trouble. The case showed, at all events, that invagination might last for years without giving rise to marked signs.

Mr. BROOK thought a small bougie passed round about the tumour might be of use in detecting such cases.

The PRESIDENT remarked that we often learn more by our mistakes than by recorded successes.

SYPHILITIC AND IODIC PURPURA.

Dr. STEPHEN MACKENZIE read notes of a fatal case of purpura following the administration of a single dose of iodide of potassium, in an infant the subject of congenital syphilis; with remarks upon syphilitic and iodic purpura. An infant aged five months, the subject of well-marked congenital syphilis, had prescribed for it a mixture containing iodide of potassium in two-and-a-half-grain doses. About three quarters of an hour after taking the first and only dose, the child's face was noticed to "turn black"; and this rapidly increasing, it was brought to the London Hospital three hours after taking the medicine. When first seen the whole of the face was swollen, of a purplish-black tint, the eyelids closed from extravasated blood, the lips and chin tensely swollen and of an almost black colour. The cheeks were discoloured by aggregated patches of purpura. There were a few spots on each arm, but at this time none elsewhere. There were also scattered over the body a few abortive pustules. While the patient was watched the purpuric patches perceptibly increased in size, until in the course of an hour or so the scalp and face were fairly covered. The next day the whole face was swollen, and of a port-wine colour, and there were purpuric spots on the arms and legs. The extravasated blood underwent some changes of colour, and part of the skin of the face became necrosed in the course of this and the following day. The child died sixty-eight hours after taking the medicine. The necropsy showed characteristic signs of syphilis and ulceration of the intestines. The previous medicines the child had been taking were procured and analysed: they were free from iodine. From the quantity abstracted from the bottle containing the iodide of potassium, it was certain that not more than two and a half grains had been given to the patient. The author stated that as purpura was known to occur in connexion both with syphilis and the ingestion of iodide of potassium, it was necessary to review what was known concerning syphilitic and iodic purpura. He especially referred to cases of the former recorded by Wilson Fox, Baly, and Behrend, and others observed by himself. As regards iodic purpura, he alluded to the writings of Fournier, Van Buren, Bradbury, and Sidney Ringer, and the cases he had himself seen. His conclusion was that in this case the fatal purpura was due to the iodide of potassium, though the syphilitic dyscrasia under which the patient was labouring may have contributed to the result.

A NEW CARDIO-SPHYGMOGRAPH.

Dr. GOWERS showed a new form of sphygmograph, designed for taking tracings from either the pulse or the heart. The pressure is varied by a second spring, which slides down over the first by a rack and pinion. The extent of movement of the spring both regulates and indicates the pressure which can be varied from 3 oz. to 16 oz. The graduation is on the sides of the instrument, and the index is simply the end of the spring itself. For use as a cardiograph the knife-edge is movable, and the ivory pad projects considerably. Dr. Gowers has had it in use for some time, and finds that it answers exceedingly well. Tracings taken with it from the radial artery, the left ventricle, the left auricle, and the pulmonary artery, were shown.

A PUBLIC recreation ground, comprising about twenty acres of land, was opened at Sydenham on Saturday last. The churchyard of St. John's, Waterloo-road, after having been laid out as a garden, was also opened to the public on the same day.

ST. THOMAS'S HOSPITAL.—Prizes for summer session, 1877:—First Year's Students—W. A. Duncan, Manchester, College prize £15; R. Heelis, Carshalton, College prize £10; F. W. Nicholson, Putney, College prize £5. Second Year's Students—A. Newsholme, Bradford, College prize £15; T. D. Savill, Brixton, College prize £10; Takaki Kanehiro, Tokei, Japan, College prize £5. Prizes for Winter Session, 1877-78:—Entrance Science Scholarships—W. Wansbrough Jones, Leek, Stoke-upon-Trent, scholarship £60; A. E. Wells, Brixton, scholarship £40. First Year's Students—W. Wansbrough Jones, Leek, Stoke-upon-Trent, the William Tite Scholarship £30; F. W. Stoddart, Bristol, College prize £20; M. Jay, Wallaroo, South Australia, College prize £10; A. E. Wells, Brixton; W. Fell, Kensington. Second Year's Students—W. A. Duncan, Manchester, Musgrove Scholarship £42; H. N. Holberton, Middlesex, College prize £20. Third Year's Students—A. Newsholme, Bradford, College Scholarship £42; A. Newsholme, Bradford, College prize £20; Takaki Kanehiro, Tokei, Japan, College prize £15. Physical Society's Prizes for 1876-77—Hutton Castle, Newport, Isle of Wight, Society's third year's prize; G. Gulliver, Canterbury, Society's second year's prize; J. N. Stephens, Margate, Society's first year's prize. For 1877-78—T. D. Aeland, Oxford, Society's third year's prize; W. A. Duncan, Manchester, Society's second year's prize; W. Wansbrough Jones, Leek, Stoke-upon-Trent, Society's first year's prize. Solly Medal and Prize—C. E. Sheppard, Kensington, medal and prize £20. Surgery and Surgical Anatomy—W. F. Haslam, Reading, the Cheselden Medal, founded by the late George Vaughan, Esq. Practical Medicine—S. J. Taylor, Grantham, the Mead Medal, founded by Mr. and Mrs. Newman Smith. For General Proficiency and Good Conduct—S. J. Taylor, Grantham, the Treasurer's gold medal.

OBITUARY.

DAVID MANSON, M.D., C.M.

Medical graduates of Aberdeen who were students ten years ago will hear with unmingled regret of the death of their old class-fellow David Manson. The sad news has just reached this country that Dr. David Manson died of sunstroke on April 1, at Foochow.

The story of David Manson's life and death may be briefly told. He graduated in medicine and surgery at the University of Aberdeen in 1870, spent a short time in Vienna, and then left England for China to join his brother, Dr. Patrick Manson, who has since earned for himself a high reputation by his researches on human and comparative hæmatozoa. For two years Dr. David Manson practised in Formosa; in 1873 he removed to Amoy; and in 1877—only some six months ago—he settled in Foochow, at the express desire of the community. On March 29 he was persuaded, against his own better judgment, to play in a cricket-match; he left the field ill, speedily grew worse, and died on the third day at the age of thirty years.

David Manson united in his character and person all the qualities that are precious to friends and popular among men at large. While he was one of the best students of his time in the class-room and in the wards, he was the foremost in the field and on the river. Tall and handsome beyond his fellows, he was the most modest and retiring of men. To his intimate friends he was unusually dear on account of his faithful, manly, and unselfish heart; and he was the most popular man of his time, as the embodiment of all that was best in the medical student. His virtues may, perhaps, be said to have cost him his life. Much of his time in China was spent in charitable work, and at his death he was engaged in building a native hospital at Foochow. His health was not good at the time when, as already mentioned, he exposed himself to exertion in the sun, with his characteristic unselfishness, to please his friends. Though it is many years since David Manson left England, and though he has died so far from home, his name is not, and never can be, forgotten by the many men who loved and admired him in the old student-days at Aberdeen.

THOMAS FRASER, M.D.,

Deputy Inspector-General of Hospitals and Fleets.

The death of Dr. T. Fraser took place on the 26th ult., at 4, Nottingham-terrace, Regent's-park, aged seventy-two. He entered the Royal Navy as an Assistant-Surgeon in 1828, and was promoted Surgeon in 1838. He served in medical charge of H.M.S. *Herald* throughout the first China war, including the action with the Bogue Forts, February 26, 1841, and the attack made on the following day upon the enemy's camp, fort, and ship bearing the Chinese admiral's flag at their position below Whampoa Reach. Dr. Fraser was also present at the operations against Canton, and afterwards served in the *Cumberland* in the Baltic during the Russian war. He was Staff-Surgeon at Pembroke Dockyard from June, 1855, until August, 1862, from which time he was engaged at Devonport Dockyard until promoted, January 3, 1866, to the honorary rank of Deputy Inspector-General.

Testimonial to an Analyst.—Mr. William Jones, of Winterbourne, Gloucestershire, on his removing to the metropolis, has been presented with a handsome testimonial in recognition of his public services as an analyst, and of his medical skill, impartially rendered to all classes of his neighbours.

Jaborandi in Obstinate Hiccough.—Dr. Ortille, of Lille, relates a case of most obstinate hiccough in which he had tried a great variety of means, including electricity and hypodermic morphia injections—the hiccough even continuing during the sleep caused by this last. He then tried the hydrochlorate of pilocarpin, on account of its action on the phrenic nerve. A hypodermic injection of two centigrammes and a half was inserted with almost immediate effect, so that in a quarter of an hour the patient was bathed in sweat, salivation was established, and the hiccough disappeared, never to return.—*Bull. de Thérapeutique*, May 15.

MEDICAL NEWS.

Apothecaries' Hall, London.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, May 30:—

Alden, Ebenezer Wenham, Oxford.
Castle, Hutton, Newport, Isle of Wight.
Homes, James, Ledbury.
Hughes, T. Montgomery, 175, Kennington-road, S.E.
Lighton, Henry Alfred Hamilton, Ross.
Lynn, Edward, Woolwich, Kent.
Michael, Henry James, Colchester.
Watson, Evan John, Durham.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Hardy, Henry Louis Preston, London Hospital.
Jones, Arthur Lloyd, London Hospital.
Wey, Alfred Cox, Middlesex Hospital.

In the list for March 7, Frederick Enos Fenton, "St. Mary's Hospital," should have been "St. George's Hospital."

NAVAL, MILITARY, &c., APPOINTMENTS.

Admiralty.—Royal Naval Artillery Volunteers, Liverpool Brigade: Hugh Lees, M.R.C.S., to be Honorary Surgeon.

BIRTHS.

Easton.—On May 13, at Alnwick, Northumberland, the wife of G. F. Easton, M.D., of a son.

May.—On May 31, at 68, Pentonville-road, N., the wife of Edward H. May, M.R.C.S. Eng., of a daughter.

Spencer.—On June 2, at 66, Albion-road, Stoke Newington, the wife of Edward Richard Spencer, L.R.C.P. Edin., of a daughter.

MARRIAGES.

Black—Lambert.—On June 5, at St. George's, Hanover-square, Henry Alexander, youngest son of Patrick Black, M.D., of Queen Anne-street, W., to Janet Spears, second daughter of Charles J. Lambert, Esq., of 29, Park-lane.

Macdonnell—Burd.—On June 1, at Disley, Cheshire, Hercules Henry Macdonnell, M.D., son of Hercules H. G. Macdonnell, J.P., of the County Dublin, to Fannie Keogh, daughter of John Burd, Esq.

Willmott—Hathway.—On June 3, at Christ Church, Weston-super-Mare, Julius John Eardley Willmott, M.B., to Annie, youngest daughter of N. Hathway, Esq., of The Ferns, Weston-super-Mare.

Wolston-Lean.—On June 4, at the Registrar's Office, Lambeth, Surrey, Walter Thomas Prideaux Wolston, M.B., of Edinburgh, to Mary, third daughter of the late Francis Lean, R.N.

Wood-Millar.—On April 23, at Durban, Natal, Andrew Alexander, second surviving son of Andrew Wood, M.D., F.R.C.S., of Edinburgh, to Jessie, eldest daughter of John Millar, Esq., M.L.C., of Hertford Lodge, Durban.

DEATHS.

Barrett, Charlotte, daughter of Thomas Brettell Barrett, M.R.C.S. Eng., at 12, High-street, Welshpool, on May 31.

Bartlett, James Cresswell, son of J. Prime Bartlett, M.R.C.S. Eng., at 8, Sydney-place, Onslow-square, on May 29, aged 2 years and 4 months.

Hamilton, Mark, M.D., Staff-Surgeon R.N., at 2, Honor Oak-park, Forest-hill, on May 28, aged 63.

Heward, Thomas Spencer, L.R.C.P. Edin., late of 52, Grosvenor-street, at Clare, on May 28, aged 64.

Hill, Robert Gardiner, L.R.C.P. Edin., F.S.A., at Earl's Court House, Old Brompton, on May 30, aged 67.

James, Rev. John Boote, M.D., at the Rectory, Gamlingay, Cambs., on May 31, aged 78.

Morison, Maud, wife of John Morison, M.D., at La Motte, Jersey, on May 29.

Pares, James, M.R.C.S., late of Bury, at Bankfield, Ainsworth, near Bolton, on June 3, aged 65.

Walker, Hugh Eccles, M.D., F.R.C.S., at Chesterfield, on May 31, aged 62.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

Kent and Canterbury Hospital.—Physician. Candidates must have been practising as physicians for the space of two years previous to election, and be registered as regular graduates in medicine of some University of Great Britain or Ireland, or Fellows or Members of the Royal College of Physicians of London. Qualifications and testimonials to be sent to the Board of Management on or before June 28.

Manchester Royal Infirmary.—Ophthalmic Surgeon. Candidates must be Fellows, Licentiates, or Members of one of the Royal Colleges of Surgeons of the United Kingdom. Diplomas, original testimonials, and a certificate of age to the Chairman of the Board on or before June 29.

Middlesex Hospital, W.—Assistant-Physician. Applications for the office must be made in writing, and addressed to the Chairman of the Weekly Board, on or before July 2. Candidates must be approved of by the Medical Committee before they can be admitted as candidates by the Weekly Board.

ROYAL HOSPITAL OF BETHLEHEM.—Assistant Medical Officer. Candidates must be Fellows or Members of one of the Royal Colleges of Surgeons, also Members or Licentiates of one of the Colleges of Physicians or Licentiates of the Company of Apothecaries. All applications and testimonials must be accompanied by answers to a printed form, which may be obtained from A. M. Jeffreson, Bridewell Hospital, New Bridge-street, Blackfriars, to whom applications must be forwarded on or before June 20.

WEST BROMWICH DISTRICT HOSPITAL.—House-Surgeon. Candidates must be surgically qualified, registered, and unmarried. Applications, stating age, with testimonials, to the Hon. Sec., Rev. F. Willett, on or before June 10.

WILTS COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Candidates must be unmarried, duly qualified, and registered. Applications, stating age, accompanied by not more than six recent testimonials, "To the Clerk to the Committee of Visitors," on or before June 15.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Aysgarth Union.—Mr. Edward Allen has resigned the Hawes District; area 50,064; population 3332; salary £40 per annum.

Bodmin Union.—Mr. Frederick Trevan has resigned the First District; area 10,420; population 2141; salary £32 2s. per annum.

Grantham Union.—Mr. F. Newcome has resigned the Ropsley District; area 9204; population 1483; salary £30 per annum.

Manchester Township.—Mr. Charles F. Diggle has resigned the office of Assistant Resident Medical Officer at the Workhouse; salary £140 per annum.

APPOINTMENTS.

Chorley Union.—Thomas W. Jackson, M.R.C.S. Eng., L.S.A., L.R.C.P. Edin., to the Workhouse.

Droitwich Union.—Douglas Wills, L.R.C.P. Edin., M.R.C.S. Eng., L.S.A., to the Droitwich District.

Greenwich Union.—Henry A. Speed, M.R.C.S. Eng., L.R.C.P. Edin., to the North Deptford District.

Hartlepool.—Thomas S. Robson, Phil. D. Heidelberg, as Analyst for the Borough.

Huddersfield Union.—Andrew Browne, L.R.C.P. Edin., L.F.P.& S. Glasg., to the Kirkheaton District.

Ludlow Union.—Ernest Tredinnick, M.R.C.S. Eng., L.R.C.P. Edin., to the Stokesay District.

Newcastle-under-Lyme Union.—Thomas H. Palmer, M.R.C.S. Eng., to the Whitmore District.

Penrith Union.—Tristrim L. Montgomery, F.R.C.S. Edin., L.R.C.P. Edin., to the Greystoke District.

West Derby Union.—Wm. O. Deacon, L.R.C.P. Edin., L.R.C.S., Edin., as Assistant Medical Officer at the Workhouse.

PROFESSOR SPENCER WELLS.—This gentleman will commence his course of lectures at the College of Surgeons on Monday next. Students now have the privilege of attending as well as members.

PUBLIC HEALTH DEMONSTRATIONS.—Prof. Fodor has received the consent of the magistracy of Buda-Pesth to demonstrate to his pupils at the slaughter-houses, water-supply, the schools, and other public institutions.—*Deutsche Med. Woch.*, May 18.

ROYAL COLLEGE OF SURGEONS.—At the half-yearly pass examination for the Fellowship of this institution, which was brought to a close on the 3rd inst., twenty-two candidates presented themselves, seventeen of whom were successful; the remaining five, not having acquitted themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for twelve months. The list cannot be published until submitted to and confirmed by the Council to be held on the 13th inst. They were, with one exception, all members of the College.

IRISH MEDICAL ASSOCIATION.—At the annual general meeting, held on the 3rd inst., the following members were elected to the undermentioned offices for the year ending May 1, 1879:—*President:* Dr. Robert M'Donnell, Dublin. *Vice-Presidents:* Leinster—Dr. Hudson, Dublin; Ulster—Dr. C. D. Purdon, Belfast; Munster—Dr. J. R. Harvey, Cork; Connaught—Dr. Sharkey, Ballinasloe. *Council:* Dr. Baggot, Enniskillen; Dr. Charles Benson, Dublin; Dr. Samuel Browne, Belfast; Dr. Burnside, Clondalkin; Dr. H. G. Croly, Dublin; Dr. Darby, Bray; Dr. Drapes, Enniscorthy; Dr. G. F. Duffey, Dublin; Dr. Faussett, Clontarf; Dr. Gray, Armagh; Dr. Grimshaw, Dublin; Dr. Hayes, Naas; Dr. A. H. Jacob, Dublin; Dr. D. Jacob, Maryborough; Dr. J. Bellew Kelly, Drogheda; Dr. Lyster, Kilkenny; Dr. Macnamara, Dublin; Dr. James Martin, Portlaw; Dr. Mayne, Ballybrack; Dr. Molony, Tulla; Dr. J. W. Moore, Dublin; Dr. Nolan, Gort; Dr. Perceval, Stradbally; Dr. Pollock, Blackrock; Dr. George Porter, Dublin; Dr. T. Purcell, Dublin; Dr. H. J. Smith, Donaghmore; Dr. Speedy, Dublin; Dr. Tagert, Monkstown; Dr. Usher, Dundrum; Dr. A. J. Walsh, Dublin; Dr. T. L. Whistler, Bray. *Auditors:* Dr. Morrogh, Dublin; Dr. Nugent Duncan, Ballybrack.

DR. CARL NOBILING.—It is satisfactory to know that this would-be regicide is not a member of our profession, as at first supposed, but a doctor of philosophy.

THE REPTILES IN THE JARDIN DES PLANTES.—The *Muséum* has just received a python of enormous proportions, forwarded by Dr. Pluem, the Director of the Java Hospital. It measures five metres in length, and half a metre in circumference. About the same time the menagerie also received a boa-constrictor measuring two metres in length. The reptile gallery now contains eighteen serpents of large size—viz., six boa-constrictors, a boa-imperator, and eleven pythons.—*Union Méd.*, May 28.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At the annual meeting of the College, held pursuant to the provisions of the supplemental charter on Monday, June 3, the following officers were elected for the year 1878-79:—*President:* Philip Crampton Smyly, M.D. *Vice-President:* Edward Dillon Mapother, M.D. *Secretary:* William Colles, M.D. *Council:* Wm. Colles, Alfred H. M'Clintock, George H. Porter, George H. Kidd, Benjamin G. M'Dowel, William A. Elliott, Joliffe T. Tufnell, Edward Hamilton, Edward Ledwich, Rawdon Macnamara, Robert M'Donnell, John K. Barton, Archibald H. Jacob, Henry Gray Croly, J. Denham, Anthony H. Corley, Benjamin F. M'Dowell, William Stokes, and Samuel Chaplin.

ABUSE OF MEDICAL CHARITIES.—It would seem that the abuses to which medical charities are liable are felt as keenly in the United States as among ourselves. At all events, here is a tolerably vigorous report on the subject, issued by a committee of the New York County Medical Society:—"*Whereas* the dispensary and hospital service is provided for the pauper population of this city, but is shared by another class without proper limit; and *whereas* those arms of this service which maintain shelter, sustenance, and attendance for the out- and in-patients, from steward to scrub-woman are paid for their labour; and *whereas* there is now much actual suffering for the necessaries of life in the ranks of the medical profession, which may be partly charged to the plan now common, for the physician and surgeon to give gratuitously what is paid for in other departments; and *whereas* the knowledge of these facts is exceedingly limited or persistently ignored in the body of the profession, and should be clearly and widely made known. Therefore, be it *resolved*—1. That this Society, in the name and behalf of the entire profession, call upon the proper bodies to enact, and the proper officials faithfully to execute, such laws and rules as shall discriminate against the giving relief to any except such as are examined and found absolutely without means to pay for such service, and that upon presenting a proper certificate duly issued by some person to be designated. 2. That from this date the practice of gratuitous professional serving in charitable institutions, leading to professional poverty, is counted unbusiness-like, and is held as odious before the eyes of the fraternity, and that after July 4, 1878, it shall be considered as sufficient cause for disfellowship."

COMPOSITION AND QUALITY OF THE METROPOLITAN WATERS IN MAY, 1878.—The following are the returns (by Dr. Meymott Tidy) of the Society of Medical Officers of Health:—

Names of Water Companies.	Total Solid Matter per Gallon.	Oxygen required by Organic Matter, etc.	Nitrogen: As Nitrates, etc.	Ammonia.		Hardness. (Clarke's Scale.	
				Saline.	Organic.	Before Boiling.	After Boiling.
Thames Water Companies.	Grs.	Grs.	Grs.	Grs.	Grs.	Degs.	Degs.
Grand Junction ...	19·40	0·066	0·120	0·000	0·009	13·2	2·8
West Middlesex	19·20	0·084	0·120	0·000	0·010	13·2	3·3
Southwark and Vauxhall ...	19·00	0·077	0·135	0·000	0·009	13·2	3·3
Chelsea	18·40	0·056	0·135	0·000	0·007	12·6	3·7
Lambeth	20·60	0·063	0·156	0·000	0·008	13·7	2·8
Other Companies.							
Kent	32·00	0·001	0·450	0·000	0·001	20·6	7·5
New River ...	17·60	0·024	0·144	0·000	0·005	12·6	3·7
East London ...	18·10	0·049	0·135	0·000	0·007	12·1	3·3

Note.—The amount of oxygen required to oxidise the organic matter nitrites, etc., is determined by a standard solution of permanganate of potash acting for three hours; and in the case of the metropolitan waters the quantity of organic matter is about eight times the amount of oxygen required by it.

The water was found to be clear and nearly colourless in all cases.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Catheter.—It is quite impossible to answer such a question in our answers to correspondents. You may refer to Barnes's book on Obstetric Operations.

W. E. P.—It was clearly wrong for the assistant to sign his master's name. Suppose it had been on a piece of stamped paper, what would the master have said? But it is quite clear there was no *mala fides* in the case. It should not occur again.

The Last Straw.—The Duke of Richmond and Gordon has had a bad time of it lately. Deputation after deputation, and letter after letter, have poured in upon him; but it was left to the women to completely cow his lordship. One visit from them sufficed. It was the last straw, and his lordship was only too glad to get rid of them, and the Bill at the same time, by passing it speedily through committee, in much dread of a renewed visit. It is said that certain members of that deputation are formidable in more ways than one; looks and bearing have been gifted them, which, taken in connexion with the terrors of the tongue, might well drive, if not lead, Parliament into passing any Bill.

Small-Pox.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—In your periodical of May 25, 1878, I notice that the committees of five metropolitan small-pox hospitals have presented their reports, showing the great extent in which the above-named disease is at present existing in the metropolitan districts. Various measures have been suggested for its prevention—viz., a more efficient performance of vaccination during infancy, revaccination at or about puberty, and other suggestions of a compulsory character which ought to be enforced. There is another mode of stamping-out the disease—viz., that all certifying surgeons of factories should refuse to "pass hands" if found either that they had not been or imperfectly vaccinated. This was recommended by the Royal Commissioners appointed to inquire into and report on the consolidation of the various factories and workshops Acts—and a wise and salutary measure it is, which has been overlooked in the new factory Act. If this measure were carried out, the present unreasonably low scale of fees would require an amendment.

I am, &c.,

June 1. Medicus.

The Ambulance.—It was through the labours of Baron Percy and Baron Larrey, army surgeons under the First Napoleon, that military medical organisation was first commenced. The name of the first of these eminent men is associated with the field stretcher; while to the latter is due the credit of practically carrying out in modern warfare the principle of wheeled transport. Advantage was therefore taken in modern systems of the principle of wheeled transport introduced into the French army by Baron Larrey, whose flying ambulance detachments created quite a sensation among the French soldiery. It was, then, in these two systems united that the essential features were got of the bearer companies recently adopted in the British Army, for during the Peninsular and Crimean wars little advance was made for the improvement of ambulance service.

The Telephone at a County Asylum.—The telephone has been successfully utilised as a means of communication at the County Lunatic Asylum, Lancaster. One of these instruments has been fitted up in the house of the medical superintendent, and it communicates with the superintendent's office, the surgery, and the steward's office.

J. O. M., Cheshire.—The City of London Truss Society has been in existence upwards of seventy years. The Society's sphere of usefulness is not confined to London only, but spreads throughout England.

The Health of Scarborough.—Dr. J. W. Taylor, the Medical Officer of Health for Scarborough, in his report for the quarter ending March 31, states that there were 129 deaths registered, against 143 in the corresponding period for 1877. The death-rate for the past quarter was 18·49 per 1000; for the corresponding months last year it was 20·65 per 1000.

Female Ambition.—Dr. Eliza Dunbar, speaking on the admission of women to the medical profession, at a recent public meeting held on "Women's Suffrage," in the Shire Hall, Hereford, said:—"We maintain that our interests are not always represented by men, a striking instance of which is seen in the Medical Bill, framed by the Duke of Richmond, and now under the consideration of Parliament and of the Medical Council. If you read a recent letter by Mrs. Garrett Anderson, anyone can see how entirely unfit Parliament or the Medical Council are to express the views of women on the question of their admittance to the medical profession; and between Parliament and the Medical Council, what women want is evidently misunderstood. Parliament has every wish, I believe, to grant the desires of women in this matter, but they cannot altogether come to a conclusion; and the General Medical Council are endeavouring to place women in a position inferior to themselves. So long as we can see that men wish those women who are in the same profession as themselves to be treated differently—so long as they wish us to be placed on a different register, and hold different positions,—I think no one can venture to say that the interests of men and women are identical."

The Surbiton Cottage Hospital.—The Committee in their last annual report, just issued, state with satisfaction that the practical experience gained during the past year confirms that of the previous six years as to the necessity and value of a district or cottage hospital. Established in 1870 for the benefit of persons of both sexes residing in Surbiton and the neighbourhood, the Hospital has been the means of conferring substantial advantages upon the inmates, representing a total number of 295. The principle of self-help by the patients is encouraged by the rules of the Hospital, and a sum of £37 5s. had been received from them during the year. In former reports reference had been made to the probability of obtaining a site by gift or purchase, on which to build a suitable hospital, in lieu of the present inconvenient one, but that had not been accomplished. The Committee, however, will continue their exertions for attaining so desirable an object, and they have no doubt, when preliminary difficulties are overcome, funds will not be wanting for the proposed new building. The capital of the Hospital has steadily increased, and the Committee thankfully acknowledge the support they have hitherto received from all the donors and subscribers.

Railway Casualties.—A summary just issued of accidents and casualties reported to the Board of Trade as having occurred upon the railways in the United Kingdom during the year 1877, shows that these accidents caused the deaths of thirty-five persons, and injury to 822. Of those killed, eleven were passengers, twenty-two servants of the companies, and two other persons; and of the injured, 664 were passengers, 154 servants of companies, and four other persons.

Small-pox Cases, Kingston.—The Guardians of the Kingston Union having declined to receive any more infectious cases of the non-pauper class in the Workhouse Infirmary, a deputation representing the Corporation waited upon the President of the Local Government Board with the view of getting an official sanction to the continued removal to the workhouse of any small-pox cases occurring within the borough. The deputation urged the hardship upon the ratepayers of having to erect a hospital when there was sufficient accommodation at the union for non-pauper cases. Mr. Sclater-Booth, however, thought in such a wealthy neighbourhood as Kingston and Surbiton, the very first thing the authorities should do would be to look after the sanitary arrangements of the place. He also stated that he had no power to sanction the removal of these infectious cases to the workhouse. There was no necessity for providing a large establishment; all that was required was a small building, which could, if necessary, be extended. A question was raised as to whether, if the several parishes in the district combined in erecting a separate hospital, Government would give their sanction to the Guardians allowing their pauper cases to be sent to it. Mr. Sclater-Booth replied that he should be glad to consent to such an arrangement being carried out. Mr. Henley, a Poor-law inspector, who was present, remarked that at Birmingham the Corporation assumed the whole responsibility of dealing with these matters, and that the Guardians in the immediate district sent all their infectious cases to the hospital, and paid so much per patient.

A Danger requiring Legal Restrictions.—In the last report of the Engineer of the Manchester Steam Users' Association, we find it stated that since the commencement of the year, up to the 24th ult., boiler explosions have occurred, killing thirty-one persons, and injuring thirty-nine others. None of these deaths were from boilers enrolled with the Association. The causes of these accidents, subsequently ascertained, showed that in every instance they might have been prevented had proper precautions been taken. Attention is specially directed to several of these disasters—namely, that fifteen persons were killed outside the works at which the explosions occurred. That any person should be allowed to set down a steam boiler in a populated locality, and work it on till the plates become so thin that it bursts, causing destruction all round, seems almost incredible.

Workhouse Diet.—The "Food Reform Society" recently kindly addressed a letter to the Guardians of St. George's-in-the-East, recommending a vegetable and grain diet for paupers instead of that of animal food. The Society urges that meat, as an article of food, is vastly over-estimated; that what is required for paupers is "a natural, pure, healthy and nutritious diet," not "an absurdly preposterous and unnatural, besides expensive food, as flesh is, when many ratepayers can hardly find garbage or carrion, or even a very frugal fare, but healthier and cheaper for themselves and their families." It was moreover added, that "one of the cankers of the country" is the consumption of flesh food. The Guardians were entreated "to adopt an inexpensive diet of vegetables, grain, and fruit" for the workhouse inmates. But the Board declined to follow the teaching of the "Food Reform Society."

A Fellow, Clapham.—On inquiry we find that your address is not known at the College of Surgeons, and on referring to the "Medical Directory" your name appears with "address uncommunicated." Send at once to the Secretary, who will then furnish you with all particulars relating to the annual election on the 4th prox.

Dr. Williams.—Mr. Samuel Rowe, M.D., C.M.G., is there described as "Governor-in-Chief" of Sierra Leone, with a salary of £2500. Dr. W. Freeman Daniell, F.R.C.S., died some years since in this country, soon after his return from Africa. His papers were published in the *Medical Times.*

COMMUNICATIONS have been received from—

Mr. B. R. Wheatley, London; Mr. W. E. Poole, London; Mr. T. M. Stone, London; Dr. J. M. Bruce, London; Mr. J. Chatto, London; Sir Joseph Fayrer, London; Dr. Thomas Barlow, London; Mr. G. P. Field, London; Dr. Robert Lawson, Exeter; Mr. R. W. Parker, London; Dr. Fothergill, London; Mr. Reeves, London; Dr. Kelly, Rotherhithe; "Medicus"; Mr. B. W. Squire, London; The Registrar of Apothecaries' Hall, London; The Secretary of the Medical Alliance Association; Dr. Edmunds, London; The Registrar-General, Edinburgh; Dr. Elliot, Carlisle; Mr G. M. Macnamara, Corofin; The Secretary of the Faculty of Physicians and Surgeons, Glasgow; Dr. Meymott Tidy, London; Dr. E. Sparks, London; Dr. R. J. W. Orton, London; The Hon. Secretary of the Guild of St. Luke; Mr. J. Cantlie, London; Mr. M. Becher, London; Dr. J. W. Moore, Dublin; Mr. W. E. Porter, Lindfield; Mr. T. H. Bartleet, Birmingham, The Secretary of the Royal Institution.

BOOKS AND PAMPHLETS RECEIVED—

B. Joy Jeffries, A.M., M.D., Dangers from Colour-Blindness in Railroad Employés and Pilots—Balmanno Squire, M.B., Atlas of the Diseases of the Skin. part i.—Report of the Committee of Management of the Metropolitan Fever and Small-pox Hospitals at Homerton, for 1877—Bushell Anningson, M.D., M.A., Report on the Sanitary Condition of the Cambridge Improvement Act District—V. P. Gibney, A M., M.D., The Paralyses of Pott's Disease—Thomas B. Curtis, M.D., Rapid Lithotrity, with Evacuation—James Patterson Cassells, M.D., M.R.C.S., Thoughts and Suggestions concerning the Education of Deaf Children; Sewer-Gas and Ear Disease—J. J. Coleman, The Constitution of Malt Liquors and their Influence upon Digestion and Nutrition.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie - Gazette des Hôpitaux - Gazette Medicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Transactions of the Odontological Society of Great Britain—Monthly Homœpathic Review—Veterinarian—Estudos Medicos—Home Chronicler—Edinburgh Medical Journal—Gazeta Medica da Bahia—Doctor—Obstetrical Journal—Analyst—Morningside Mirror—Hardwicke's Science Gossip—New Preparations—Glasgow Medical Journal.

APPOINTMENTS FOR THE WEEK.

June 8. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. H. Morley, "On Joseph Addison."

10. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Royal College of Surgeons of England, 4 p.m. Prof. T. Spencer Wells, "On the Diagnosis and Surgical Treatment of Abdominal Tumours."

11. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Rev. W. H. Dallinger, "On Researches in Minute and Low Forms of Life."

12. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex; 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Epidemiological Society, 8 p.m. Dr. M'Combie, "On the Comparison of Epidemic Statistics, 1871 and 1877."

Royal College of Surgeons of England, 4 p.m. Prof. T. Spencer Wells, "On the Diagnosis and Surgical Treatment of Abdominal Tumours."

13. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Professor Guthrie, "On Molecular Physics: Solids."

14. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.; Guy's, 1½ p.m.

Royal College of Surgeons of England, 4 p.m. Prof. T. Spencer Wells, "On the Diagnosis and Surgical Treatment of Abdominal Tumours."

Royal Institution (Weekly Meeting, 8 p.m.), 9 p.m. Prof. Dewar, "On Liquefaction of Gases."

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 1, 1878.

BIRTHS.

Births of Boys, 1293; Girls, 1246; Total, 2539.
Average of 10 corresponding years 1868-77, 2177·7.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	712	707	1419
Average of the ten years 1868-77	685·9	622·2	1308·1
Average corrected to increased population ...	...	...	1400
Deaths of people aged 80 and upwards ...	...	...	45

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	6	4	3	2	21	1	4	...	6
North ...	751729	17	2	6	11	32	...	4	...	3
Central ...	334369	...	...	1	...	11	...	...	...	2
East	639111	2	2	5	2	36	1	2	...	3
South	967692	15	7	3	2	52	2	1	...	6
Total	3254260	40	15	17	17	152	4	11	...	20

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·769 in.
Mean temperature	52·7°
Highest point of thermometer	66·0°
Lowest point of thermometer	40·2°
Mean dew-point temperature	46·7°
General direction of wind	Variable.
Whole amount of rain in the week	0·39 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 1, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending June 1.	Deaths Registered during the week ending June 1.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2539	1419	66·0	40·2	52·7	11·50	0·39	0·99
Brighton	103923	44·1	77	37	66·0	44	6	52·7	11·50	1·21	3·07
Portsmouth ...	129461	28·9	79	37	...	...	...	...	...	...
Norwich	84620	11·3	71	32	64·0	42·8	52·7	11·50	0·43	1·09
Plymouth	73599	62·8	44	38	63·0	45·0	52·9	11·61	0·54	1·30
Bristol	206419	46·4	145	69	69·2	38	8	52·0	11·11	0·19	0·48
Wolverhampton ...	74240	21·9	57	24	65·5	39·4	50·3	10·17	0·45	1·14
Birmingham ...	383117	45·6	294	141	...	...	...	...	...	...
Leicester	121473	38·0	117	33	66·2	44·0	53·4	11·89	0·38	0·97
Nottingham ...	165267	16·6	125	67	69·0	41·3	53·3	11·84	0·27	0·69
Liverpool	632681	102·3	457	231	62·5	46·0	51·3	10·73	0·33	0·84
Manchester ...	360514	84·0	276	141	...	...	...	...	...	...
Salford	170251	32·5	172	77	67·5	35·2	50·0	10·00	0·15	0·38
Oldham	107366	23·0	74	40	...	...	...	...	...	...
Bradford	185088	25·6	140	72	64·0	39·4	50·4	10·22	0·80	2·03
Leeds	304948	14·1	259	114	65·0	39·0	50·9	10·50	0·14	0·36
Sheffield	289537	14·7	200	135	64·0	38·9	50·3	10·17	0·39	0·99
Hull	143139	39·4	123	42	66·0	42·0	51·8	11·01	0·09	0·23
Sunderland ...	112459	34·0	94	58	65·0	44·0	52·3	11·28	0·22	0·56
Newcastle-on-Tyne	144570	26·9	109	69	...	...	...	...	...	...
Edinburgh	222371	53·1	153	101	64·6	40·0	52·2	11·22	0·19	0·48
Glasgow	566940	94·0	448	238	65·0	42·0	53·4	11·89	0·36	0·91
Dublin	314666	31·3	218	152	68·1	35·7	51·8	11·01	0·42	1·07
Total of 23 Towns in United Kingdom	8373953	37·9	6276	3382	69·2	35·2	51·9	11·06	0·38	0·97

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·77 in. The lowest reading was 29·59 in. at the beginning of the week and on Tuesday afternoon, and the highest 29·99 in. on Thursday at noon.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON THE DIAGNOSIS AND SURGICAL TREATMENT OF ABDOMINAL TUMOURS.

Delivered at the Royal College of Surgeons of England.

By T. SPENCER WELLS, F.R.C.S.,
Consulting Surgeon to the Samaritan Hospital, etc.

LECTURE I.

Mode of Examining Patients with Abdominal Tumours—External, Internal, and Combined Examination—Form of Note-Book for Recording Cases—Collections of Fluid in the Abdominal Cavity and in the Cyst—Ovarian, Renal, and Hydatid Cysts—Illustrative Specimens from Museum—Chemical Examination of Fluids removed by Tapping.

MR. PRESIDENT AND GENTLEMEN,—The honourable position of Professor of Surgery and Pathology, which, by the kindness of my colleagues on the Council, I hold this year, has been filled in past times by some of the greatest men in our profession. Abernethy, Cooper, Bell, Green, Lawrence, Brodie, Guthrie, and Fergusson are among those who have passed away. Of past professors still happily amongst us, and giving encouragement by their presence, some have published their lectures as actually delivered here, and I have only to mention Paget's "Surgical Pathology," Hilton's "Rest and Pain," Clarke's "Surgical Diagnosis," Hancock's "Surgery of the Foot," and Hewett's "Injuries of the Head," without doing more than allude to recent lectures which have appeared in the medical journals soon after delivery, to prove that the able men who have preceded me in this professorship have worked so well that, while they afford the stimulus of a bright example, they also make me painfully conscious of my inability to tread worthily in their footsteps. It would be presumptuous in me to attempt to rival them. All that I can do is to bring before you in the plainest manner the results of some twenty years' exceptionally large observation and practice in a department of surgery which until lately has not received much attention here; and in endeavouring to tell what I have learned about the diagnosis and surgical treatment of abdominal tumours, how I have learned it, the lessons that I have been taught by mistakes and failures, the satisfaction which has attended increasing success, I may be of use in directing the thoughts and studies of some of the men who will practise surgery in years to come, and thus help to fulfil the great object for which this College exists—the lessening of suffering and the saving of life. In the printed summary which has been circulated, it may be seen that I have arranged, in an order which will allow me to present to you many valuable specimens of the museum, abundant material for the six hours allotted to me; and I will now ask you to imagine that we are about to examine a patient who is supposed to have an abdominal tumour. I need hardly say it is desirable to pursue in an examination of this kind a somewhat uniform plan or method; and, after a good many trials, I arrived at a mode of arranging the various questions and answers in the form detailed in this Note-Book, which I will send round, and which is published for general use by Messrs. Churchill. You will find in each book, arranged in pages, a series of questions which may be put in order to a patient when she presents herself in one's own consulting-room, or when called to see her at her lodgings; and spaces are left for the answers that may be given.

On the first page one simply enters the date of the visit, the name and age of the patient, and the residence, which should be filled up in considerable detail and exactitude, because years afterwards, if it be imperfectly done, there is a good deal of trouble in finding out what has become of a patient. It is only those who have tried to do this who know how difficult it is to trace a case from its commencement to its close. Following the residence comes a note where the patient was born and formerly resided, which also affords some assistance towards understanding the history of the patient. When I was in America, at Professor Gross's clinique in Philadelphia, he invited me to make some clinical observations upon a woman, and, to my surprise, she was a black woman. Dr. Atlee, who was present, whispered to me: "It is a very rare thing to see ovarian disease in a black woman." That at once put me on my guard, and really the tumour did turn out to be not ovarian, but a fibroid tumour of the uterus, which Dr. Atlee afterwards told me was extremely common amongst negresses. Dr. Knox told me it was rare to find ovarian disease amongst what he called cross-breeds; that the Celt and the Saxon are liable to them, but he had never seen one in what he called a cross-breed. That is a question I have never been able to examine into very closely, because it is so difficult to find exactly what may be a real true Celt or Saxon in these days, or what Dr. Knox would call a cross-breed. But these points are of some interest; and, after examining a great many patients, and getting a number of these books together, one can by annotation examine how far such statements are true or not.

Then one comes next to the question as to whether the patient is married, single, or a widow; if married, how long; if she have children, how many, and what their ages are, and whether she has suckled them. I have left out "lactation" in my note-book; but it is rather an important point, and will be inserted in any future edition. Then I have a question as to the number of abortions, and the name of the usual medical attendant. These are merely a few questions which serve to commence an acquaintance with the patient, and afford information of importance. On the next page, you will see a number of notes as to the general appearance of the patient. I am speaking rather of the patient herself than of her abdomen—the general aspect which she presents—what is her expression, whether cheerful or anxious, and what her apparent age as related to her real age. That is a matter of some consequence, because I think most of us would say a woman who looked considerably older than she stated herself to be would be a less favourable subject for an operation than a woman whose apparent age was less than she stated, who looked younger than she really was. Then, with regard to the height or build of the patient—whether she is a strong well-built person, or a person below par in that respect. Then as to complexion—whether she is fair or dark, pale or florid. This, we shall see, has some bearing on the diagnosis between ovarian and uterine tumours. Women with uterine tumours have a physiognomy which is more or less marked, one of the points being a good deal of colouration of face; whereas ovarian patients are more commonly pallid. Then we note something as to corpulence or emaciation and muscular development. Then we regard the amount of hair developed on the surface of the body. Some persons have supposed that patients who have a large growth of hair are more subject to cysts like ovarian cysts, and so on, but I really have not been able to note that; for I have seen patients with a great deal of hair, and also with very little hair, both suffering from the same complaint. We next note the temperature of the skin and extremities; perspiration—whether it occurs during rest or under exertion, or whether there is any peculiar odour or acidity about it. Then we notice the presence of any glandular swellings, or eruptions, or ulcers, or old cicatrices—whether there are any varicose veins, particularly about the legs, or œdema of legs or feet; the condition of the areola round the nipple, particularly when there is any doubt as to pregnancy, and any special alterations in the hair or nails. These are all points which are seen at once, and, when one is in the habit of going over these headings regularly, the first view of a patient enables one to see directly what the case is likely to be.

Having done that, one turns to the next page, and proceeds from the general examination to an examination of the abdomen: and this may often be done quite as well in a surgeon's consulting-room as with the patient in bed. Of course, in some cases it is more convenient to examine the patient in bed, where the chest and abdomen can be thoroughly examined; but it is quite easy, in one's consulting-room, to remove the dress of a patient sufficiently, and to cover the limbs and lower part of the body with a shawl or towel, in such a way that the examination can be quite satisfactorily made without the least indecency.

Then, I would say, the first thing is to notice what one *sees*. We see at once whether there is visible enlargement of the abdomen or not, and if this enlargement is general or local; if one side of the abdomen is enlarged, or if both sides are enlarged. One notices also the amount of subcutaneous fat, and, of course, if the patient is unusually thin and the

abdomen retracted. The umbilicus is at once seen, whether it is concave or convex; and one also notices if there be any discharge there. Dilated veins at once come into view. One notes their size and the course they run, and sees any lineæ albicantes which may have remained after pregnancy or any other distension of the abdomen; and one sees occasionally that these may be œdematous. These lineæ albicantes wer formerly called varicose lymphatics, but there is no ground for that. Then, one frequently notices, in pregnant women, and most markedly in those pregnant for the first time, a brown mark running down the centre of the abdomen, which is a very common sign of pregnancy; and any hernial protrusion is also seen.

From seeing one proceeds to feeling; and we notice, by passing the hand over the surface, what its heat may be, and whether any unusual heat is confined to one side or is symmetrical; and one also feels if the abdominal wall is tense or flaccid; if there are any knots about it, or if it is œdematous. Then we also notice if there is any crepitation; if, on pressing the hand over any swelling, there is a feeling of friction beneath the hand; and also whether there are any movements of gas, or of mixtures of gas and fluid, which may gurgle. And then, with the two hands, one also may feel if there is that sensation of fluid, or wave of fluid, which is so well known as fluctuation; and one may be able also to appreciate whether the wave is fluid, or merely a sort of bag of jelly which moves about with the sensation which has been called "elastic impulse." Pulsation may also be felt, or a thrill; and one can estimate, with a little care, the seat of pulsation: whether it follows the course of the aorta, or whether it is felt elsewhere; and whether it may be simply the impulse transmitted from the heart's action downwards. Then we should also notice how these movements are affected by deep inspiration and full expiration, and also by sudden pressure.

Next, as assisting inspection, we come to measurement; and there is, on the third page, a diagram, which we are in the habit of using, in which five different measurements are marked down. First, the girth at umbilical level, then a measurement from the lower end of the sternum to the umbilicus, and from that to the pubes, and then from the right and left anterior superior spine of the ilium to the umbilicus. By these five different measurements, and also by marking out on the diagram the outline of any tumour that may be felt, we obtain a very accurate record of any swelling or tumour which is existing at the time of the first examination of the patient.

Then, from seeing, feeling, and measuring, we proceed to listen; and are able to mark out pretty distinctly what are the outlines of the liver or spleen, and what parts are dull, and which are resonant on percussion, and their exact seat and limits. We observe any unusual dulness over the liver, and whether it extends too far downwards, or whether the heart is pushed out of its place, or whether there is any definable tumour of any part of the abdominal cavity, by the dull sound which solid tumours give on percussion, as distinguished from the resonance of the intestines. The effect of altered position would also be noticed: turning the patient from side to side, raising the shoulders or hips, seeing what effect that has, and watching also the effect of respiration upon any dulness, and also seeing whether, on re-percussion, there is anything like hydatid fremitus developed by the alternate impulse of the two hands.

Proceeding to observe the sounds heard on auscultation, one may note where any gurgling sound of the intestine and any friction sound is audible, where the sound of the aorta may be heard, whether there is any vascular murmur, or any fœtal heart-sounds, and whether there is any sound accompanying succussion or fluctuation. All these things are frequently heard, and occasionally, where there is a mixture of air with fluid, one can hear the sound so well known by auscultators as "metallic tinkling"—air bubbling through fluid. What assistance the microphone may give us, I hardly know yet; but it is very probable that the fœtal heart-sounds may be heard much more distinctly than they are by an ordinary stethoscope. All this examination may or may not lead to the detection of a tumour; but we will suppose a tumour has been discovered; and then we have to determine whether there is only one tumour, or more than one; supposing there to be more than one, if they are united or separate; whether they can be moved one upon another, and marking on the diagram the exact position and outline of each of them, and noting in what position of the patient they are best seen and felt. Then, one would also notice whether there is any connexion with any of the abdominal organs—with the liver, the kidney, the uterus, or the spleen. This would at once become apparent by the position of the tumour; and one would notice also the surface of the tumour, whether smooth, or irregular and knotty; what its consistence was, hard or tense, soft or boggy; or whether any fluctuation which could be detected in it was uniform or limited, deep or superficial, and whether the superficial fluctuation was over the surface or only felt upon deep pressure of the tumour.

With regard to mobility, one would note to what extent the tumour may be moved upwards or downwards, or from side to side; whether the abdominal walls moved over it or not, or whether they were connected with the tumour, and whether any movable portions of the tumour are more or less independent of its general mass; whether one tumour may be moved independently of others; and occasionally, when the abdominal wall is flaccid, one is able to make some kind of guess as to the probable weight of the tumour. It may be advisable also to ascertain what is the effect of meals, of vomiting, of purging, or of catheterism on any tumour that has been detected.

Having examined the abdomen in this way, one proceeds to the examination of the pelvis. In a man, of course, this is not so frequently necessary; but, in examining a woman, it is always necessary to ascertain whether an abdominal tumour is connected with any of the organs of the pelvis. One has to ascertain the position and size of the uterus, and the connexions of any tumour with it; and all this can be done before any questions need be asked of the patient beyond a few preliminary inquiries. The examination by the vagina—feeling the uterus, feeling any tumour between the uterus and the rectum, or any tumour that interferes with the movement of the uterus, or presses it downwards, or draws it upwards, or presses it to one side—is an examination which I need not enlarge upon now; but there are one or two points on which I wish to say a few words. In the first place, examining by the vagina in a young unmarried woman with a perfect hymen is often quite needless. One can ascertain all that is necessary by rectal examination. With one finger in the rectum of a woman, one can feel very well the posterior surface of the uterus, and can make out pretty clearly whether there is anything below the brim of the pelvis, without examining by the vagina at all. In married women, or in women where it is necessary to make a vaginal examination, the simple vaginal examination only does not, as a rule, afford very much information. You can tell whether the neck of the uterus is in its normal position, whether it is enlarged or whether it is small, whether it is hard or soft, or with any apparent growth from it; but one can get a great deal more information in cases of suspected tumour by combining the internal and external examination—putting one hand on the abdomen, and passing the finger of the other hand into the vagina, feeling the uterus; and then, moving about any abdominal tumour that there may be, one is able to tell pretty clearly whether the uterus is closely connected with any tumour, whether the tumour moves independently of the uterus, or, supposing it does move with the uterus more or less, whether that movement is transmitted or one closely associated with it; whether the uterus itself is enlarged and moves with the tumour, or whether any movement that affects the cervix of the uterus is simply communicated to it.

One may go further than this in combining internal and external examination. By passing a thumb into the rectum and a forefinger into the vagina, one can feel very clearly what is contained in Douglas's pouch; and, on the other hand, putting a thumb of the right hand into the vagina and the forefinger into the rectum, one can feel very distinctly a considerable part of the uterus even to the fundus, and so get a notion of its size and form, and that of anything attached to its exterior, either in front, behind, or at the fundus. Supposing this fold is depressed by fluid, or that the small intestines come down lower than usual, on pressing the thumb and the finger together, one gets very clear and distinct information of anything there may be between the uterus and the rectum, or the posterior wall of the vagina and the rectum.

Simon of Heidelberg laid great stress on the combined examination of the bladder and the uterus after dilatation of

the urethra, believing that this was not only useful in completing examination of the bladder itself, but also for examining growths in the pouch between the bladder and the uterus. If you have anything formed between the front of the uterus and the top of the bladder, if you dilate the urethra well, you are able to make a very accurate examination, not only of the state of the bladder, but also of anything there may be between the bladder and the uterus. I cannot say I have myself ever found this very necessary, or have got much information from it.

In some cases, where there may be a doubt as to the state of the uterus, and where the cervix is small, and one is doubtful what may be its conditiou, then, if the sponge-tent be introduced, left for a few hours, and the cervix well dilated, one is afterwards able to make more complete and accurate examination. By a combined examination between the abdominal wall and the rectum, one is occasionally able to ascertain that there is a congenital absence of the uterus; for one's finger in the rectum meets the finger depressing the abdominal wall, and that may be sometimes checked also by examination of the bladder.

Hegar has lately added a good deal to our knowledge of this combined examination by showing what one gains by pulling the neck of the uterus downwards after fixing it by a long hooked forceps. I have used Sims's hook, as less likely to do harm, and, by drawing the cervix downwards, one is often very able to ascertain whether the uterus forms part of a tumour or growth, or whether it is separated from it. Combining this pulling down of the uterus with a hand on the abdominal wall and a finger in the rectum, one can get a very accurate idea of the contents of the pelvis; or, entrusting the uterus pulled down by a hook to a careful assistant, who will not pull too violently, with one finger of the surgeon's hand in the rectum and the other hand depressing the abdominal wall, one obtains a very complete idea of what there may be below the brim of the pelvis. Of course, I am supposing that there is not any extraordinary amount of fat on the abdominal wall, or any peculiar rigidity in the vagina. In this way, one is able to recognise any flexions of the uterus, and may be able to replace them without the use of the sound. The examinations may be carried out sometimes with the patient on her back, sometimes on her side; and sometimes one observation is checked by the other, examining first in one position and then in the other; and occasionally, though very rarely, it is necessary to try the knee and elbow position, raising the pelvis and lowering the chest. In this position a heavy tumour falls upwards and forwards, and a tumour which is low down, and giving great trouble by its pressure on the bladder or the rectum, may, by the mere position of the patient on her elbow and knees, be pressed out of the pelvis, pushed into the abdomen, and in this way great relief be given.

Simon of Heidelberg laid great stress upon the fact that, when a patient is deeply narcotised by chloroform, the whole hand of the surgeon may be passed into the rectum. He showed this to me at Heidelberg one day. A patient was put deeply under the influence of chloroform, and, without much difficulty, I put my whole hand into the rectum and passed it upwards, so that, under Simon's direction, I could quite distinctly feel the left kidney. There was no doubt about it. I got my hand well up into the descending colon, and felt the kidney very distinctly. In some two or three cases of very doubtful diagnosis of tumours in women, I have done this in England; but I really cannot say I have gained more information by it than I could gain by the finger in the vagina or rectum, combined with pressure upon the abdominal wall.

All this knowledge one has gained for one's self without any questioning of the patient at all; simply by what one has been able to see, and feel, and hear. From that we must come to questioning. One is obliged to get from the patient some account of the state of her digestive organs and nervous system, the state of her respiratory organs and blood-circulation—all of which is noted in succeeding pages of the note-book. Following the examination of the pelvis, one comes to questions as to the state of the catamenia; when they commenced; when they ceased, if they have ceased, in an old woman; and any history of sudden suppression of catamenia from cold or any other cause; if there be any history of excess or deficiency, or any leucorrhœal discharge, or discharges of any other kind. A very few questions enable one to fill up this page. The state of the urinary organs requires a little more time, because the urine has to be examined afterwards, unless the patient has previously sent a specimen; and then one gets the ordinary information about the colour and odour of the urine; its specific gravity, and what it contains. Then one comes to the history of the disease for which she applies for relief, and one learns something about any hereditary influence and the fecundity of the females, and the general duration of life in the family; with regard to her mode of life; to any moral causes, and any previous diseases or accidents: these all require some slight note.

Then with regard to the early symptoms of the present illness, one likes to know something about the first signs: what was the first departure from good health; whether there has been pain or tenderness, particularly in the groin or the pubic region; any sense of fulness in the vagina, or bearing-down of the uterus; any pressure on the bladder; any pain, numbness, or weakness in the thighs or legs; whether there is any constipation; what the state of the breasts was; whether she suffers from much nausea; whether the symptoms were aggravated at the monthly periods; and then as to when the tumour was discovered. Whether she noticed it for herself, or whether, as is likely, it was discovered by some medical man; then the rate at which it enlarged, whether rapidly or slowly, or whether there was any regularity in its enlargement; and particularly whether the increase or diminution was associated in any way with the monthly periods. Women with uterine tumours will frequently tell you that they are distinctly larger before the period and smaller afterwards; and this helps us a great deal in the diagnosis between uterine tumours and tumours that are not uterine. Then as to movements felt in it, particularly with regard to pregnancy, and then a note of any early treatment often become interesting.

Proceeding from the early history of the case to the progressive symptoms, a note is made of any changes one is told of in the situation of the tumour, and you are very frequently told some odd stories about it. I do not think there is much confidence to be placed in what patients tell you about these things; but still, occasionally, some history of particular changes in situation becomes of importance afterwards.

Then with regard to the aggravation of the early symptoms: any increasing difficulty of breathing; any increasing distensiou of the abdomen or intestines; any history of febrile attacks; any inflammation of a cyst or peritonitis surrounding it; whether there have been successive attacks of peritonitis, and any proof of the presence of peritoneal fluid. Next, if there have been any discharge of any kind, either through the uterus, the vagina, the bladder, the bowel, or through the abdominal wall. All this would have considerable weight at times. And then, whether there has been any history of a rupture spontaneously, or by a blow or fall. Frequently there will be this sort of history given—that the abdomen gradually got larger and larger, and, at last, the patient suddenly fell down, or got a blow; or that, without any reason at all, there was a sudden alteration in the shape of the abdomen; a sudden attack of acute pain, followed by a large discharge of fluid, either by the kidneys or by the bowel; and then the abdomen flattened down more or less. Then, supposing the patient had been tapped, one likes to get the date of the tappings, and, as far as one can, some report of the nature of the fluid removed, and its quantity.

With all this information we really ought to be able, and generally are able, to arrive at the heading which follows on the eleventh page of the book—a diagnosis of what the tumour may be; whether the patient has got a tumour; what it is; and, generally speaking, I think this can be done at the first visit of the patient. It is very seldom one has to put off a patient and say the case is so doubtful that, until one has examined the urine, or made a more complete examination of something or another, it is impossible to say what it is. That, no doubt, is occasionally necessary; but, as a rule, with the sort of examinatiou I have been trying to describe, we are pretty well able, by the time that we arrive at this eleventh page of the note-book, to make a diagnosis which is fairly and reasonably accurate.

Before deciding as to the treatment, one is able, I think, to form some kind of estimate as to what the probable duration of life will be if the patient is left alone, or if she is simply treated medically, or by palliative methods. We do know what the duration of life is in patients who have

abdominal tumours of a sufficient size to interfere with locomotion and respiration—we know it is not long—and we are able to make a kind of approximate guess at what it is likely to be in any particular case.

One can also form a pretty good idea of what the general treatment should be as to diet and mode of life, and medical treatment, if any is necessary, and is able to say what surgical treatment may possibly be required hereafter.

Now, I will suppose we have a patient who has a collection of fluid, either free in the abdominal cavity, or contained in some cyst.

[Two diagrams were here shown, representing the abdomen of a patient containing fluid.] We will suppose the central dark shade to represent fluid, and that the rest of the surface is resonant on percussion. The part of the abdomen which contains the fluid is dull on percussion. In this other case, the dark shade shows dulness on percussion on both sides, the patient lying on her back; the centre is resonant on percussion, but the sides are dull. In the first case, the central part is dull on percussion, and the sides are quite clear. The inference would be at once that, with intestines at the sides and the fluid in the centre, the woman lying on her back, the fluid must be enclosed in a cyst. On the other hand, here the intestines are floating, giving a clear sound on percussion, and the fluid gravitates to the most depending parts of the cavity, and you will see at once the fluid must be free; the intestines are floating about and the fluid is beneath. As a rule, I suppose, in nine cases out of ten, that would probably be the correct diagnosis. You would say here was a case of ascites, and here, where the intestines are pressed backwards and the fluid is in the centre, that will be encysted fluid; and, in a large number of cases, that will be certainly true. But there will be exceptions. There may be so much fluid in the peritoneal cavity that the intestines do not touch the front of the abdomen, or the intestines may be fastened backwards by adhesions; and fluid, which appears to be in front and is in front, is there, not because it is enclosed in a cyst, but because the intestines are held back. And, on the contrary, one may get a case where fluid is enclosed in the front by coils of intestine round it, and is circumscribed in that manner.

I have had a number of preparations brought down to show the way in which adhesions of different portions of the intestine to each other, and to the abdominal wall, may simulate cysts, may become false cysts. The fluid is encapsuled, not by a cyst, but by surrounding portions of intestine or omentum adhering to each other, or to some part of the abdominal wall. Those are our most puzzling cases in diagnosis at times. In the book on "Diseases of the Ovary," which I published some years ago, there is rather a full account of all this, with which I need not trouble you now. I ought, however, to have mentioned that this fluid, when it is free, will move from side to side as the patient is moved. If she is turned on to her left side, the intestines go to the right; and when she is turned back again, the fluid sinks to the right side, and the intestines float up to the left. So when she is sitting up more or less, and her shoulders raised, the fluid sinks down towards the lower portion of the abdomen, leaving the upper free. If you put a pillow under the hips and lower the shoulders, it at once goes upwards towards the sternum. So, occasionally, one may be deceived by a cyst of moderate size sinking, if it is movable, from side to side as the patient is moved.

The alteration of the position of the patient makes considerably greater and more rapid changes in cases of ascites than in patients with ovarian cysts; the cyst moves about much more slowly than fluid. The superficial veins are more commonly enlarged in ascites than in ovarian dropsy, and, on measurement, the enlargement of the abdomen in ascites is more likely to be symmetrical than in the ovarian cyst; and then, on feeling the abdomen, you are more likely to get a flaccid abdominal wall in ascites, and a more tense wall in a cyst; and very often, in ascites, the greatest girth is at the umbilical level; whereas, in ovarian dropsy, it is sometimes considerably lower.

The way in which the fluctuation is felt is of some importance in ascites, the wave being a wave felt more immediately beneath the hand, and not limited so distinctly by the cyst as in ovarian dropsy. Then, a very important question is the way in which the movements of respiration affect the dulness. Supposing one finds that, as the patient breathes deeply, resonance descends, it will often guide you correctly in a doubtful case, by a careful examination, as to how far the line of clearness on percussion varies or corresponds with the line of fluctuation. When you get distinct fluctuation beyond the limit of dulness—when you get evidently a wave of fluid moving about amongst the intestines—it is pretty certain that the fluid is free. However, it may be limited; if one finds one has a distinct wave of fluctuation where one has a resonance indicating the presence of intestine, that must always certainly be free peritoneal fluid, and it is the same whether it is ascitic fluid or fluid escaped from a cyst. The fluid is free, with the intestines floating about. In the other case, you feel the wave of fluctuation limited exactly by the outline of the dulness. One can very seldom go wrong by carefully observing these two points.

I have said just now a doubt may arise where the quantity of fluid free in the peritoneal cavity is so very large that the front of the abdomen is pushed forward far beyond the reach of the intestines, the intestine cannot reach the surface of the abdominal wall, and so one has the fluid in front.

Another point of doubt and difficulty may arise from the air having entered an ovarian cyst; for, as an ovarian cyst contains a certain amount of fluid, it may also contain gas, and either the fluid is decomposed after tapping, or there may have been some possible communication set up between the intestine and the interior of the cyst. Sir Thomas Watson records a case in which a patient had a cyst filled alternately with fluid and with air; when the fluid collected to a certain quantity, it seemed to open some valve-like communication with the intestine, emptied itself, and became filled with air. As the fluid gradually re-formed, the air was displaced, and the same series of changes went through again. I have known a case in which air distinctly entered an ovarian cyst through the Fallopian tube, at least, we could find no other means of entrance; and, after death, it was found there was a large and distinct communication between the interior of a large ovarian cyst and the uterus through an enlarged Fallopian tube; there would have been, at any rate, no difficulty in air entering in that way.

Supposing doubt does arise as to whether fluid is free or not, one has always the resource of tapping; and a chemical and microscopical examination of the fluid that is removed will settle any doubt as to whether it is free peritoneal or ovarian fluid, or fluid of some other cyst. Years ago, before Scherer's test to distinguish albumen in its true form from the forms of albumen that chemists do not seem very accurately to determine, it was sometimes extremely doubtful to arrive easily at this determination. But Scherer showed that the albumen which, when coagulated by heat, is redissolved by acetic acid is a very different albumen from true albumen. Paralbumen or metalbumen are forms that, when coagulated by heat, can be dissolved by acetic acid boiled. One takes a test-tube and boils the fluid, and the albumen is coagulated. You add a little strong acetic acid, and give it a good boil, and shake it up; and if the albumen be true, the coagulum does not redissolve in the acetic acid. But supposing it to be paralbumen, then it either dissolves, or forms a whitish, transparent fluid, or breaks up into a kind of jelly-like transparent mass, which is quite easily distinguishable from undissolved albumen coagulated by heat. This was supposed to be, for a long time, a pretty certain means of distinguishing between ascitic fluid and ovarian fluid. If the coagulated albumen were dissolved in acetic acid, it was said to be ovarian, and if it did not redissolve it was said to be ascitic; and that was frequently right. Sometimes part would redissolve and part would not, and then the supposition was that it was a mixed fluid, some ovarian and some peritoneal; that an ovarian cyst had burst, and some of the fluid was in the peritoneal cavity; a certain amount of fluid had been poured out, and there was a mixed fluid, which contained some true albumen and some paralbumen.

After a little further examination, one saw that there were exceptions to this rule. For instance, Dr. Schetelig, of Hamburg, once examined the fluid from a large renal cyst that I had emptied, and he found paralbumen and cholesterine, and no trace of urea, because the proper structure of the kidneys seemed to have been completely destroyed. He found in another patient that the fibrine found at the first tapping of the patient disappeared after another tapping, and he concluded that, at the first tapping, the fluid was removed from the peritoneal cavity, and, at the second

tapping, from an ovarian cyst. It is quite possible, in tapping the abdomen, to remove a certain amount of peritoneal fluid and leave an ovarian cyst behind; and that, at another tapping, the ovarian cyst might be tapped and emptied, and the fluid escape.

After the chemical examination of the fluids removed, one has to resort to the microscope, and this we will consider at the commencement of the next lecture.

ON THE BAEL FRUIT AND ITS MEDICINAL PROPERTIES AND USES.

By SIR JOSEPH FAYRER, K.C.S.I., M.D., F.R.S.

(*Concluded from page* 613.)

Sir R. Martin, alluding to the composition of the bael, says in the *Lancet* (in regard to an analysis of the fruit by Mr. Henry Pollock) that "the pulp and the hard shell of the fruit do not appear to differ chemically in any respect except as to quantity. They both contain—(1) tannic acid; (2) a concrete essential oil; (3) a bitter principle which is not precipitated by tribasic acetate of lead, and a vegetable acid. The pulp also contained a considerable quantity of sugar, in which it was preserved. All three of the substances I have mentioned exist in the largest quantities in the rind. There is most acid in the pulp."

Many medical officers in India have used this remedy in their practice, and generally have recommended it. The most elaborate and instructive paper on the subject is that by Mr. A. Grant, in the *Indian Annals*. Dr. Annesley, Dr. Jackson, Sir R. Martin, Dr. Waring, Dr. Duncan Stewart, Dr. E. Goodeve, Dr. Aloir, Dr. Chuckerbutty, Dr. Cleghorn, and others have borne testimony to its value as a remedy in chronic dysentery, in diarrhœa, in some dyspeptic conditions, and in bowel complaints of children. I shall refer to some of their remarks on the subject, and then, in conclusion, briefly notice the conditions of disease in which I think the bael is likely to be useful in Europe.

Mr. A. Grant says:—"Given in the form of sherbet, it acts as an aperient to persons subject to habitual constipation; a small tumblerful taken in the morning will produce action of the bowels. In cases where dyspepsia is accompanied by obscure symptoms of land-scurvy, it seems to act favourably, and produce alterative as well as antiscorbutic effects." To this I may add, on my own part, in the irregular action of the bowels, diarrhœa alternating with constipation, when the abdomen is distended, the appetite bad, the secretions defective, and the nervous system depressed, as one so often sees in the damp, tepid atmosphere of Bengal, especially towards the end of the rains, when the mucous membrane of the intestinal canal is disordered and in a state of atony, the bael is not unfrequently an effective remedy, and, at all events, gives some relief, acting either as a laxative or tonic, according to circumstances, by stimulating the bowel to more healthy action, and, combining with the ingesta, seems to promote digestion and assimilation. In the low and chronic forms of diarrhœa, among the weak and exhausted from whatever cause, whether as the sequel of malarious poisoning, fever, or dysentery, it may prove of benefit where opium and ordinary astringents have failed; or it may be still more beneficial in combination with these remedies; and Mr. Grant says that when he wanted to produce a more stimulating effect in asthenic cases, he combined it with the tharrie or palm spirit. He mentions several cases of subacute dysentery successfully treated.

Dr. John Jackson, Dr. Duncan Stewart of Calcutta, and Sir R. Martin have borne similar testimony to its utility, not only as an astringent, but as a preventive of diarrhœa in persons subject to that complaint, and also as a valuable agent in the treatment of some of the more chronic forms of dysentery. Dr. Jackson speaks favourably of its value in the treatment of the diarrhœa that sometimes follows cholera.

Dr. Cleghorn says it has proved useful not only in obstinate diarrhœa, but in the irritability of the mucous membrane of the intestine that followed the expulsion of tænia by kousso. Mr. Sanderson, a distinguished medical officer of Madras, speaks well of it.

Sir R. Martin made the following remarks:—"On what the curative property depends I know not; it is certainly not astringent to the taste, or at all events very slightly so. I am inclined to believe that much of its efficacy may reside in the thick mucilage which surrounds the seeds of the fruit. A singular property of the fruit is this, that it does not merely restrain undue action of the bowels, as in diarrhœa and dysentery, but also in cases of obstinate habitual constipation acts as a mild and certain laxative. It may in all cases be said *to regulate the bowels.*"—*Lancet*, July, 1853, page 53.

Dr. Moore, of the Bombay Medical Department, who, at the instance of Government, has written a popular work on Medicine, for the use of persons away from medical aid, for which he received the reward offered for the best essay, says:—"It acts as an astringent to the mucous membrane of the bowels, and is also slightly aperient, a union of qualities not found in other astringents. It is useful in chronic diarrhœa and dysentery."

In the March (28) number of the *Indian Medical Gazette*, I find the following remarks by an officer, who—as is often the case in India—being left to his own resources for medical assistance, had been obliged to fall back on such knowledge as he had, or could gather from books, and treat as he best might the complaints occurring in natives or others who were serving under him in that particular locality. India is not a country for specialists, and men holding responsible offices are often obliged to be their own doctors. The writer is Colonel Parsons, Deputy Commissioner of Gujerat, in the Punjaub:—

"My attention was first called to the subject some years ago by a brother officer when I was stationed in a very damp district, where diarrhœa and dysentery were not uncommon complaints. I was myself attacked with the latter form of disease, which rapidly disappeared under bael treatment. Since then I have frequently been in localities where European medical officers were not always present, and I have suggested and administered the same remedy to both Europeans and natives suffering from either of the above complaints, and invariably the bael has caused most satisfactory results.

"The subject of the use of bael is not by any means a new one, and I believe the fruit is extensively used for medicinal purposes by Presidency surgeons; but as far as my experience goes, it might with great advantage be much more used in Upper India for the above complaints than it is at present. I feel sure that a great deal of mortality in English regiments from the scourge of dysentery would be saved by the free use of bael fruit, as I have found its effects absolutely marvellous, both as regards rapidity of action and effectual cure. I believe that Pogson's preparation of bael was tried in the army; but I am not aware whether it was considered efficacious. I did not find it of use. The fresh fruit is the best form, but that is not always procurable. I have, however, found Bathgate's dietetic bael all that could be desired in the absence of the fresh fruit. The mode of administering the fresh fruit I have always adopted is to strain the juice from the pulp through muslin, add a little water and sugar; it then makes a very palatable drink. Two baels a day (this applies to small ones), of the size of an orange, one in the early morning, the other in the evening, I have found sufficient to effect a cure in a very few days, provided animal food be avoided or very sparingly used."

I might easily add to these attestations in its favour, but it would be tedious and wearisome to do so. I will just remark that you may observe that all tell much the same story, and declare it to be a valuable remedy in certain chronic diseased conditions of the *primæ viæ;* but by none is it regarded as a remedy for acute disease. It is a mistake, not unfrequently made, to give remedies at the wrong time; and this is sometimes done in the case of bael, which consequently has been unjustly blamed for not doing that to which it never had any pretensions. As a remedy in chronic disease it may be of much value, but it is useless in the acute forms. The conditions in which it is likely to be useful in India, I have already indicated; and I must now bring these remarks to a close with a brief description of the cases in which, if the fresh fruit can be imported, or if the pharmaceutists can make us an active preparation, it is likely to be useful here.

In the chronic condition of dysentery into which the bowel is apt to pass when it is thickened, perhaps ulcerated and indurated from cicatrisation, and subject to frequent recurrence of subacute inflammation and dysenteric action, indicated by straining and the discharge of mucus and blood,

and where the entire intestinal mucous membrane is sympathetically involved, the use of the fresh bael taken in the form of sherbet is likely to be of service. It will not always alone be sufficient, and it may be necessary to combine it with other remedies, such as opium or Dover's powder, but as an adjuvant to these or to astringents it may be beneficial; and from the power it possesses of giving tone to the alimentary canal generally, of improving the condition of the mucous membrane and its glandular apparatus, and of favouring cicatrisation, it will not unfrequently aid in producing satisfactory results where other remedies have failed. Vegetable and metallic astringents and tonics, such as kino, catechu, tannin, hæmatoxylon, eucalyptus, Wrightii antidysenterica, pomegranate, sulphate of copper, acetate of lead, alone or combined with opium, frequently give temporary relief, though ultimately they prove insufficient; the disease continues to advance, and the patient to lose ground; the least error in diet, or alteration in temperature or in the hygrometric condition of the air, aggravating the symptoms until change of climate is resorted to. Such cases are not infrequent here, and may be seen on board the homeward-bound steamers and at English and Continental health-resorts. No doubt they have taken the wisest and most effective step for restoration of health in coming home—one in comparison with which drugs are insignificant. In such cases the bael is indicated, and I believe would often materially aid in restoring the diseased intestine to its normal condition. Of course it is not likely to meet all the morbid conditions that may arise in cases of chronic dysentery, and I need hardly remind you that any recurrence of acute symptoms may need active treatment by ipecacuanha, Dover's powder, injections of opium in solution of gum or arrowroot. In the chronic states of which I speak, I think you will find under its influence that the reparative changes in the large intestine progress quietly and favourably, until cicatrisation is accomplished, thickening is removed, and, as far as may be, tone, vigour, and healthy action are restored.

But, unhappily, many cases have not this favourable termination under any circumstances, and the result is fatal, after long and severe suffering; the structural changes in the bowel are beyond repair, and the patient succumbs. In other cases the disease, though not fatal, is very tedious; the cicatrix may be formed, but the gut remains thickened, indurated, and contracted, by loss of the mucous membrane from dysenteric sloughing; the functions of the bowels are imperfectly performed; a condition of chronic disease and suffering remains, diarrhœa, sometimes dysenteric in character, continues, and the patient is worn and wasted by continued suffering. The evacuations are light-coloured—grey, sometimes yellowish; often passed without pain or tenesmus; but at times accompanied by both, and mingled with blood and mucus. These conditions ultimately undermine the strength, and the patient may sink from exhaustion. In the stages that lead to this state of things the bael is more likely to be of service in retarding, if not of altogether checking, the mischief, than remedies that have a more directly astringent action.

Chronic cases of dysentery of a milder character not unfrequently come under our notice. There is thickening and perhaps contraction of the large intestine, which may be felt through the abdominal wall, with or without tenderness on pressure. The general health may be improving, indeed, may be fairly good (the appetite, too, good); and all seems comparatively well, except that the bowels are irregular—sometimes confined, at others relaxed. There is straining, and the evacuations are mingled with mucus and sometimes blood. The patient suffers much at times, and is in constant danger of relapse. In this state diet is of the utmost importance; the bowels should be kept regular with occasional doses of oil, or the tepid-water enema. No active drugs are needed, but in such cases the bael sherbet would, I think, be often useful.

Again, either as a sequel of dysentery, or altogether independent of it, an intractable and obstinate form of diarrhœa is met with, especially in persons who have been long in India, China, or other tropical and malarious climates. The diarrhœa sometimes called "alba, or white flux," described by Mr. A. Grant in the *Indian Annals*, is a painless disease, characterised by frequent, liquid, light-coloured, frothy motions, which gradually reduce the strength and exhaust the vital energy. The person slowly wastes and becomes anæmic, his skin is harsh and dry, his abdomen tumid, the tongue red and dry, the papillæ gradually shrink, until in the later stages they disappear altogether, and the tongue becomes smooth, polished, and glazed, or it is coated with white layers of epithelium, which also form on the mucous membrane of the mouth and fauces, often accompanied by aphthous spots.

There is not necessarily evidence of structural changes in the liver or spleen; indeed, there is reason to believe that these organs only share in the wasting or shrinking of the body generally; and so it is found in fatal cases; and also that the whole intestinal tube is thinned, almost transparent, the mucous membrane softened, and the glandular structures wasted or destroyed; not unfrequently a certain amount of ulceration being observed, especially towards the lower portion of the ileum and in the large gut.

Digestion, absorption, and assimilation are all interfered with, and gradual wasting from inanition results. This condition of disease is frequently seen in the hill stations of India, but most generally in those persons whose constitutions have already been damaged by long residence in the plains. It is also seen in some who have never been in the hills at all.

Early removal to another climate is the best, and, indeed, the essential remedy; and it is, I believe, absolutely necessary in many cases, to save life. The great mistake generally made is of not resorting to it sufficiently early, and before progressive degenerative changes have gone so far as to be irreparable. In this form of diarrhœa, diet is a most important element in the treatment, and it should be of the blandest, most unirritating kind—milk, animal butter, farinaceous food—which will not always agree, and careful abstinence from over-stimulation either by alcohol or any other form. All forms of medicine have been tried with more or less good effect—opiates in small and repeated doses, either as laudanum or Dover's powder, often giving the greatest and most enduring relief; astringents at times being beneficial, but often failing miserably to do any good.

Now, in such cases, before they leave India, it has sometimes been found that the fresh bael sherbet has produced excellent effects, and done more good than any other remedy. Such are far from uncommon in England in the cases of Indian officers or others, who come home for the purpose of shaking off a complaint that they find is steadily getting worse in India; and it is with the hope of providing a remedy for such that I am anxious this popular Indian remedy should be better known and more used in England.

After all, medicine of any kind, however efficacious, is of secondary importance to change of climate, carefully regulated diet, and scrupulous avoidance of chills and cold by extra warmth of woollen dress, which should never be neglected. A remedy that has often produced happy results in India, could hardly fail, I think, to be even more satisfactory here, where it would have the advantage of the improved climate and other conditions of life to give effect to its beneficial action.

I have given you but a mere outline of the diseased conditions in which the use of bael may be advocated; but my object was rather an account of the remedy than a clinical lecture on the diseases in which it is useful. And as I have already, I fear, exhausted your patience, I must conclude by saying that, though the subject has been rather a dry one, yet I hope it has not been altogether uninteresting.

A Society for Artistic, Scientific, and Industrial Excursions.—A new Society has just been founded at Paris, under the presidency of M. Krantz, Commissary-General of the Exposition, and under the patronage of the Ministers MM. Teisserenc de Bort and Bardoux. Its object is to organise for monuments, museums, workshops, and expositions (and especially that of 1878) series of visits, at which the auditory, as far as possible of the same age and amount of instruction, assembled around an able demonstrator, will receive from him explanations suited to their aptitudes. At first the operations of the Society will be confined to Paris; but at a later period it will visit the monuments, museums, etc., in the provinces. The Society will evidently supply a want, for our museums, etc., contain crowds of highly curious and instructive objects, the mere sight of which does not suffice. A detailed explanation by a competent person is absolutely necessary in order to derive advantage from them.—*Revue Scientifique*, June 8.

ORIGINAL COMMUNICATIONS.

EXOPHTHALMIC GOÎTRE: LESIONS OF THE CERVICAL GANGLIA.

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The following paper is intended to supply a record of a typical case of Graves's disease, in which, after death, definite lesions of the cervical sympathetic system—both coarse and microscopic, the one affecting one ganglion only, the other affecting all the cervical ganglia—were observed. No attempt is made to elucidate the whole pathology of the disease; the absence of any information as to the cerebro-spinal nervous system impairs the value of the case, excepting from the one point of view, the implication of the sympathetic system.

Margaret W., aged twenty, domestic servant, was admitted to the Bristol Royal Infirmary on October 11, 1877, with a condition of well-marked exophthalmic goître. Very little history could be elicited from her beyond the fact that the symptoms had been of seven months' duration, and were first noticed a short time after her marriage. From the patient's mother the following facts were gathered:—That the daughter had manifested shortness of breath for years, and that she "always had large eyes"; that she had been engaged for twelve months, and was fairly well at the date of her marriage (March 31, 1877); that after the marriage she had a great deal of anxiety, had lived with her husband only six months, and during that time had twice left him, and "made it up again"; that she had menstruated twice after her marriage, but not again since; that three years before she had amenorrhœa for several months; that a month after her marriage her eyes were noticed to be more prominent than formerly, she complained of feeling ill, and went to the infirmary at Cardiff, and here it was noticed that some "swelling of the throat" existed; that for a month before the marriage the mother had noticed a "dirty colour" of her daughter's face, and that at same time she once had an attack of palpitation, which lasted all night, but did not incapacitate her from work on the following day; that she had been getting thin ever since the marriage, but had not complained much of palpitation; that she was formerly of an amiable disposition, but since her illness had become irritable and quick-tempered.

No family history of nervous disease could be gathered. The father was invalided home from the Crimea with heart disease, but is still living. The mother is a thin, weakly-looking woman, but seems well. There are no brothers or sisters.

Her condition on admission was as follows:—A weakly-looking, emaciated girl, looking older than the age given, with very prominent eyeballs, enlarged neck, dusky face, complaining of palpitation with much dyspnœa, and vomiting. The eyeballs were equally prominent, both showing a considerable band of sclerotic all round the cornea; the insertions of the recti muscles could be seen; on closing the eyes, about a quarter of an inch in vertical width remained uncovered. The conjunctivæ were much injected, tears overflowed on the cheeks; large tortuous veins could be traced over the sclerotic, giving it a dusky aspect. The neck was found to measure fourteen inches in circumference around the centre of the thyroid enlargement. Both thyroid lobes were enlarged equally; very large tortuous arteries could be traced along the surface of each lobe, and an arterial thrill could be felt and heard over these distended vessels. The whole face was markedly cyanotic, but there was no marked distension of the cervical veins. The heart-pulsations were 140 per minute; the pulse was small and weak. Nothing abnormal could be detected on auscultation—heart and lung sounds were normal. Tongue was blue, and slightly coated. Urine had a specific gravity 1015, acid, clear, light-coloured, no albumen, no sugar. She was ordered ext. belladonnæ gr. ¼, in pil., every four hours.

On October 14 the vomiting was much worse; it gave rise to considerable lividity of face, and there was marked dyspnœa. Pulse 140. She had slept fairly, in fact, was unnaturally drowsy. Was ordered liq. atropiæ ♏iij., hypodermically, night and morning, and to take an effervescing draught every four hours.

On October 18 the vomiting had subsided, and the pulse had come down to 120.

On October 20 pulse again 140. The eyes did not seem to protrude so much, and the neck measured thirteen inches and a half. She was much depressed in spirits; would cry and sob violently without reason, and at other times would break out into hysterical laughter.

On October 21 her face was much less dusky; there had been no more vomiting. Pulse 120.

There was little variation from day to day till the 29th, when the pulse was 156, very small and compressible. She complained of headache and of feeling very hot. The pupils had not become dilated, and she had not complained of thirst. The atropine was continued from the 14th to the 31st; at first it gave great relief, as it seemed to allay the vomiting, relieve the dyspnœa, and slow the pulse, but the effect was evanescent, and it was therefore discontinued. Ext. ergotæ liquidæ in drachm doses three times a day was ordered.

November 1.—Pulse 136; she complained of not feeling so well. The eyes appeared to be less prominent than before. She was able to get up, and to sit up the greater part of the day. The neck measured thirteen inches.

24th.—Pulse 136. She felt pretty well, and was in good spirits. Neck thirteen inches and a quarter.

December 2.—Pulse 104.

14th.—Pulse 120. Neck twelve inches and a half.

19th.—Not so well. She was more emotional and excited; eyes more prominent. Neck thirteen inches and three-eighths. Pulse 136. Was ordered tinct. digitalis ♏x. every four hours.

23rd.—She complained of dyspnœa and of cough; expectorated glairy mucus, not blood-tinged; had been sick again. Pulse 160.

24th.—Pulse about 180; vomiting frequent; was ordered the atropine hypodermically as before.

25th.—Pulse was counted at 208. The eyes were more prominent. She seemed very weak, and had a troublesome cough, but there was no accumulation of fluid in air-passages.

26th.—Pulse was 160, and she felt better; was ordered pulv. digitalis gr. iss. every four hours.

28th.—Pulse 140. She was extremely feeble, and took little nourishment; still complained of dyspnœa, and the cyanosis had much increased. Laryngotomy was performed, but it gave no relief; the pulse rose and was several times counted over 200, but very small and weak. Death occurred about an hour after the operation on December 29, at 12.45 p.m.

Post-mortem Examination, twenty-three hours after Death.—The body was small and much emaciated. Skin slightly jaundiced. Eyes still prominent, but less so than before death. Rigor mortis absent. Thyroid gland enlarged bilaterally and equally; each lobe was about three inches in vertical length, and two inches antero-posteriorly; laterally it was an inch and a half in diameter. Its surface was markedly lobulated over the whole convexity, especially at the upper and lower extremities, where definite, almost isolated, nodules were seen to project. The surface, looking towards the middle line of the body, was deeply concave for the trachea, around which the two lobes closely fitted, the groove for the trachea passing from above downwards and obliquely backwards. On cutting into the gland it was found to have a loose, spongy texture; no spaces or cysts were visible, and no fluid escaped, but the surface of the section was divided up by bands of areolar tissue continuous with and prolonged from the fibrous enveloping capsule into lobules about one-eighth of an inch in diameter. The trachea was slightly flattened by lateral pressure, the antero-posterior diameter being enlarged; but there was no actual obstruction or anything to impede the free passage of air. The lungs were much congested, and there was some consolidation of both lower lobes. The right cavities of the heart contained pale coagula; the right auricle was distended; the left cavities and the heart fibre appeared to be healthy. The liver was slightly enlarged from congestion; the spleen was also large and firm. The renal and uterine structures did not present anything abnormal. The brain was not examined. The sympathetic ganglia of the neck were removed for subsequent examination. They were placed in chromic acid solution (half per cent.), and allowed to

remain two or three weeks. The superior and middle ganglia presented no abnormality visible to the naked eye, but the inferior ganglion of the left side could not be found. The cord from the left middle ganglion was traced downwards, and was seen to spread out over a small gland-like swelling adhering to the left side of the trachea. This swelling occupied exactly the position of the inferior cervical ganglion, but no nerve-fibres could be traced beyond it. The nodule was of an oval shape, but flattened on the side towards the trachea, and intimately connected with the trachea by dense fibro-cellular tissue; it measured half an inch vertically and quarter of an inch laterally. Its surface consisted of dense fibrous tissue, into which the nerve-fibres were traced. This capsule measured about one-tenth of an inch in thickness. Internally was a hard calcareous substance forming a small calculus, the nucleus of the nodular mass. The calcareous mass consisted chiefly of carbonate of lime, with an organic matrix; fragments of it dissolved to a large extent, giving off bubbles of gas when treated with dilute acid. A few crystals of cholesterine were seen amongst the granular organic *débris* left undissolved by the acid.

Microscopic Appearances.—*a*. Thyroid: This gland presented a condition of vascular and villous hypertrophy. The circular spaces which exist normally were not enlarged, no cysts were visible, and there was no colloidal degeneration of the epithelial lining. The spaces were occupied by villous growths, the result of vascular and epithelial proliferation of the walls of the loculi. The villous projections were covered and the locular spaces were lined by a single layer of epithelium of the flattened columnar variety. *b*. Sympathetic Ganglia: Those ganglia which were found and could be examined were ascertained to present similar appearances. Sections were made by the freezing process of both the superior, both the middle, and the right inferior ganglion. The nerve-structures were alike in all; the degree of vascularity and the connective-tissue element did not present abnormalities. In all there was a definite fibrous capsule, with fibrous septa running through the substance of the ganglion. In all of them the neuroglia element presented numerous nuclei, but not more than are found in other ganglia presumed to be healthy. The nerve element, more particularly the nerve-cells, did, however, present a very striking and characteristic deformity. The true nucleated and nucleolated cells were visible as granular masses, for the most part stellate in form, surrounded by a clear space, outside which a distinct nucleated cell-capsule could be traced. The cells varied much in size: some of them filled about two-thirds the area of the space enclosed by the cell-capsule, others had retracted to such an extent that they appeared to occupy not one-tenth of their normal space; some still remained in direct contact with the surrounding cell-sheath, others had broken away entirely, and appeared to be free within the capsule. In most cases delicate processes could be seen to connect the granular protoplasmic mass with the surrounding neuroglia element. The space surrounding the cells was for the most part clear, and appeared to be occupied by the fluid in which the sections were mounted; but in many cases rounded, small, nuclear masses seemed to lie free, or almost so, in the space, or projecting into it from the cell-sheath. Small oil-globules were seen in the same position in a few cells. The nerve-fibres had a perfectly normal appearance, the multi-oval-nucleated grey fibres, and the axis-cylinder fibres could be readily seen in sections through either of the ganglia: the grey fibres showed best in longitudinal sections, the axis-cylinders best in transverse sections. Particular attention was given to these fibres, in consequence of the observation of Poniklo (*Lancet*, February 23, 1878), that in five cases of diabetes there was an absence of the medullated bundles of fibres from the sympathetic system in the abdomen. In a fatal case of diabetes recently under the care of my colleague Dr. Waldo, there was no difficulty in the demonstration of the dark-bordered axis-cylinder fibres in the semilunar ganglion, in the splanchnic nerves, and in the superior cervical ganglion; there appeared to be an excess of the connective-tissue nuclei in the solar ganglia, but on comparing the sections with others taken from the solar plexus of a healthy man who had died by accident, and which were prepared in a precisely similar manner, no difference could be observed.

Remarks.—This case, interesting from a clinical point of view, derives its chief interest from its pathological aspects. Few cases are on record in which any very definite lesion of the sympathetic system has been connected with the symptoms of exophthalmic goître. In this case, however, a very manifest coarse lesion existed, which had given rise to the entire destruction of the inferior ganglion on the left side of the neck. Whether the morbid process commenced in the ganglion itself or in the surrounding structures—*e.g.*, a neighbouring gland—is difficult to decide; but it is clear that a morbid process had been going on in immediate proximity to this ganglion, and, as a result of this process, the ganglion tissue had been entirely destroyed, its place being occupied by an inert mass of calcareous matter and fibrous tissue. The fact that the calcareous mass contained a small amount of cholesterine may be taken as an indication that the mass may have resulted from a degenerative process occurring in diseased nerve-tissue; the amount of cholesterine observed was, however, too small to warrant such a definite conclusion. The absence of any such change in the other ganglia, and, on the other hand, the absence of calcareous or caseous glands elsewhere, must leave us in doubt as to the essential nature of the commencing lesion, and as to the exact tissue involved. Whether any morbid process affecting a small portion only of the cervical sympathetic system may be considered as a sufficient cause of the whole train of symptoms present in Graves's disease, is open to question. Accordingly, we are not justified in assuming that this was the primary or even the most important lesion present.

In most of the cases where morbid appearances in the sympathetic system have been observed, the pathological condition has been one of sclerosis: an excess of connective tissue has given rise to a wasting of the nerve elements. Dr. Reith records a case of exophthalmic goître where this condition was observed (*Medical Times and Gazette*, 1865); Poniklo describes a similar condition in the sympathetic ganglia of diabetes (*Lancet*, February 23, 1878). In the case now published no such increase of the connective-tissue element and no increased infiltration with connective-tissue nuclei were apparent. The condition observed was one of true atrophic shrinking of the nerve-cells proper. Such a lesion of the cells, not in one ganglion only, but affecting all and equally so, may be supposed to give rise to such symptoms as exist in the disease under consideration. We must not, however, forget one important fact, viz., that the ganglia had been submitted to the prolonged action of a weak solution of chromic acid (one-half per cent.). This reagent is well known to have a powerful action on nerve-cells; it causes them to become granular and contracted. In the spinal cord and brain-tissues this contractile action of chromic acid on the nerve-cells is not so manifest, but on the sympathetic ganglia of persons dying from various diseases the chromic acid has been found to give rise to a marked degree of contraction, similar in kind to, but less in extent than, that which was found in the ganglia of the exophthalmic goître patient. Why the chromic acid should act differently on the nerve-cells of different parts, may be a questionable topic, but the fact that it acts far more powerfully on the cells of the sympathetic than on those of the cerebro-spinal system has been shown by numerous observations. The action of the preservative and hardening agent on the ganglia may partially account for the appearances described; but, over and above the results of the chromic acid action, there must have been either a previous atrophic condition of the cells, or such a condition as would cause under the influence of the chromic acid a far more marked contraction than occurs in the cells when in their normal state. No such contraction occurs under the influence of Müller's fluid or of spirit: it would therefore be desirable in future observations to use one of those two fluids in preference to the chromic acid solution.

It would be interesting to inquire how it is that a condition of vaso-motor paralysis such as exists in this disease can depend on the same condition which gives rise to acceleration of the heart's action. Presuming that the atrophic state of the ganglion cells is an important factor of the symptoms manifested, one must argue that the cardiac nerves and the cervico-facial system of vaso-motor nerves are affected differently, that there results a paralysis of the "vaso-motor" set, and at the same time a stimulation or irritation of the accelerator cardiac nerves. No marked abnormality of the patient's pupils was at any time noted; they were always rather large, but equal, and sensitive to light. The lachrymal glands secreted very freely under

emotional influences, and no abnormality of the salivary function was noticed. The functions of the cervical sympathetic were accordingly perverted, but not destroyed: the vaso-motor paresis alone indicated a paralytic condition of the sympathetic; other symptoms would rather indicate a condition of irritation of the ganglion cells of the cervical system.

Little comment on the symptoms and course of the disease is needed. The emotional condition of the patient was quite in accord with the usual reports of this disease. Mental worry and emotional excitement were the most prominent etiological facts elicited; the patient was constantly at one extreme or the other—at one time laughing, at the other crying. Her tendency to crying and sobbing was so great that it interfered, to some extent, with the treatment. Attempts were made to pass the constant current through the cervical cords, but on each occasion such profuse crying, and consequently increased prominence of eyeballs, resulted, that more harm than good was done. Any emotional disturbance of this kind always increased the capillary engorgement of the head and neck, and was usually accompanied by increase of dyspnœa. Vomiting was a very troublesome symptom on several occasions, and it always took place when the other symptoms were at their worst; it did not seem to depend on any gastric condition, but was presumed to result from vascular cerebral disturbance. The dyspnœa was frequently extreme, but not accompanied by any laryngeal stridor. At the post-mortem examination the trachea was found to be only slightly compressed. No actual obstruction to the passage of air existed; hence it was presumed that this symptom also depended on vascular disturbance of the medulla oblongata. The immediate cause of death was probably the very great difficulty in the circulation arising from the unusually rapid action of the heart. The accompanying lithograph, from a drawing by my friend Mr.

George M. Smith, shows well the appearances presented in a transverse section through the right superior cervical ganglion under a power of about 360 diameters. The cells, with their fine processes surrounded by a distinct but much larger capsule, the areolar stroma, and the medullated fibres in section, are well represented.

THE TREATMENT OF RECTAL FISTULÆ BY IMMEDIATE LIGATION.

By H. A. REEVES, F.R.C.S. Edin.,

Surgeon to the Hospital for Women, to the Royal Orthopædic Hospital, and to the East London Children's Hospital; Assistant-Surgeon and Teacher of Practical Surgery at the London Hospital.

To divide fistulæ which run some distance up the bowel is, as is well known, a dangerous proceeding, on account of the serious risk of hæmorrhage. Various methods have been devised to prevent this, such as the use of the écraseur, the galvanic cautery, the ordinary ligature, and the elastic ligature.

Some time since I adopted a method at the Hospital for Women, which, so far as I can ascertain, is new. It consisted in passing a strong and well-waxed silk ligature along the track of the fistula into the bowel. An ordinary surgical probe, with an eye at its end, carried this thread into the rectum. My bivalve expanding speculum was previously introduced, and by its use there was no difficulty in seeing and seizing the ligature and bringing it out through the anus. The probe was then withdrawn, and the ends of the silk were wound round two strong pieces of wood, which were held between the fingers of each hand. An assistant passed a finger on either side of the track of the fistula, to steady the tissues, and to resist the traction which was put on the silk thread. The two pieces of wood were then drawn towards me with a rapid sawing motion, and the fistula was quickly divided with the loss of scarcely any blood. Some oiled lint and a pad and bandage were applied in the usual way, and the wound healed well. No anæsthetic was administered, and although the patient did not relish the operation, still it was quite bearable, and what she felt most was a burning sensation, due doubtless to the friction of the silk.

Since then I have rapidly divided a fistula which ran rather high up, by passing a strong piece of waxed twine, and tying the tissue till it was divided. This is somewhat easily effected by drawing on the ends of the twine until the parts included in the knot have given way. The vessels are crushed before they are torn through, and no blood, or the merest drop, is lost.

Either of these methods (but the latter by preference) can be adopted in any or all rectal fistulæ, and it is not absolutely necessary to administer an anæsthetic. It will solace the patient to know that he or she will not be cut; and further, the wound heals kindly, and there is no bleeding.

When performing the first of these operations, I remarked that I thought of this plan in consequence of noticing how easy it was to cut through a hard cheese with a piece of string; and I determined to try the method at the first opportunity. As I have pointed out, the proceeding was simple, speedy, and quite satisfactory.

I must add that the use of the speculum mentioned greatly facilitates the operation, because it allows the end of the probe carrying the twine or whipcord to be easily seen, and also because it steadies the lower end of the rectum.

Grosvenor-street, W.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

MIDDLESEX HOSPITAL.

ABSTRACT OF CASES OF DIPHTHERIA IN 1876-77.

[For the following concise notes we are indebted to Dr. Finlay, Medical Registrar.]

Case 1.—William C., aged two years and three-quarters, admitted January 11, 1876. Family History: Father and mother healthy; one child had croup at the age of eighteen months; six others all healthy. Previous History: Till two years of age very healthy; ten months ago said to have croup; ill about a week; recovered completely. Present Attack: Five days ago appeared to have a severe cold; yesterday began to breathe very rapidly and with much difficulty, making a hoarse whistling noise; refused food, and was very restless. On admission, pulse 145; temperature 102·6°; respirations 50; breathing laboured and gasping; face somewhat cyanosed; fauces much injected; no exudation visible; bronchitic râles all over back. 1.20 p.m.: Tracheotomy. 2 p.m.: Pulse 135, weak; temperature 101·4°; respirations 42; breathing much easier. 3.45 p.m.: Breathing very quietly; expels a good deal of mucus through the tube; rather restless. The specific gravity of the urine 1028; acid; no albumen; loaded with lithates. January 12, 3 a.m.: Temperature 104·8°; asleep, breathing quietly. 12 p.m.: Great difficulty in breathing; tube had to be removed, and wound kept open by expanding forceps; pulse very weak; respirations 70. 13th, 4 a.m.: Weaker; pulse just perceptible. 7 a.m.: Breathing suddenly stopped, and death took place.

Post-mortem Examination, eight hours after Death.—Tonsils, pillars of fauces, and pharynx perfectly natural, and free from exudation; epiglottis also healthy; laryngeal mucous membrane roughened and vascular; just below left vocal cord, a small granular slightly raised oval patch of paler colour than the surrounding membrane; thence down to incision in trachea, mucous membrane natural; at seat of incision and below it (first to fourth rings of trachea) down to bifurcation, tracheal mucous membrane covered by a thin layer of exudation of an opaque greenish-yellow colour, not uniformly spread over the mucous membrane, which in the intervals is of a vivid red colour; the whole tube filled with viscid mucus. The exudation passed down the right

bronchial tubes to the third division, and there ceased somewhat abruptly; on left side, as well as below the exudation on right, is vivid injection of mucous tract, and a considerable amount of secretion plugging the tubes. Lungs presented patches of collapse. One of the bronchial glands was in a state of suppuration. Heart: Both sides contained clot; walls firm and healthy. Intestines: Peyer's patches in lower part of ileum notably swollen and vascular; other viscera healthy.

Case 2.—Percy J., aged three years and three months, admitted February 7, 1876. Family History: Father suffers from winter cough; mother delicate. Previous History: Good health till present illness. Present Attack: Six days ago lost his voice, and began to cough a dry, hard cough; has taken plenty of food; has had two emetics to day, and vomited slightly. On admission (7 p.m.), hoarse, husky cough, with very laborious respiration; pulse 180; temperature 99·8°; respirations 32. Skin moist; tongue coated; tonsils swollen and congested; no patches of exudation on any part of mucous membrane of mouth or fauces. Cough pretty frequent, accompanied by expectoration of colourless viscid sputa. 8.45 p.m.: Breathing very laboured; face rather livid; epigastrium retracted. Tracheotomy; after which much relieved; pulse 150. 10 p.m.: Temperature 98·4°; breathing quietly. February 8: Specific gravity of urine 1034; acid; no albumen. 8.30 a.m.: Pulse 150; respirations 30; temperature 102·6°. Face flushed; pulse weaker. Coughs occasionally, and brings up a good deal of mucus; no membrane. Back of chest resonant; dry and moist râles over base of both lungs. 10 p.m.: Breathing more distressed. February 9, 1 a.m.: Severe paroxysm of dyspnœa; gasping; face livid; respirations 65. A larger tube inserted, which seemed to give great relief. 2.30 a.m.: A similar attack; face livid; pulse 160. 6 a.m.: Pulse 150; respirations 40; temperature 102·6°. Urine acid, contains albumen, no blood. Breathing fairly. 9.15 a.m.: Severe paroxysm of dyspnœa; face cyanosed; gasping; pulse weaker. 11.30 a.m.: Death.

Post-mortem Examination, twenty-seven hours after Death.—No exudation on fauces or tonsils; latter presented a few spots of follicular ulceration. Mucous membrane of palate and fauces of a livid bluish-red colour; mucous membrane of larynx and trachea wholly concealed by a layer of exudation. This commenced at lower part of epiglottis (posterior surface), where it was tough, leathery, adherent, and of a buff colour. It extended through greater part of trachea; portions could be stripped off, and displayed a bright red surface beneath. At lower part of trachea the exudation lost its firm character, and was less adherent to the wall of the tube; a portion passed into bronchi as far as tertiary divisions. No consolidation or collapse of either lung. Heart-tissue firm and healthy. Liver, spleen, and kidneys healthy. No swelling or ulceration of Peyerian or solitary glands of intestine; a few of the former rather vascular.

Case 3.—Alice H., aged four, admitted April 20, 1876. History: Had measles two months ago. This was followed by a "cold." Throat has been affected since 11th inst., the breathing being sometimes very laboured. A sister, aged between two and three, died after two days' illness of "croup," having been taken ill one week later than present case. On admission, pulse 136; temperature 97·6°. Both acts of respiration laboured, especially inspiration, and accompanied by some stridor. No cyanosis. Tonsils a little enlarged and swollen. Nothing abnormal in chest-sounds. Specific gravity of urine 1020; no albumen; no blood. April 21: Pulse 126; temperature 98°; respirations 36. Has had occasional paroxysms of dyspnœa. Epigastrium retracted on inspiration. 11.30 a.m.: Breathing worse; face livid; lips blue. Tracheotomy; after which much improvement. No membrane coughed up. 23rd: Feathers bring up a good deal of tough, tenacious mucus through tube, and some membrane. Pulse 160; temperature 102°. 24th, 4 p.m.: Sudden attack of dyspnœa. Artificial respiration, and clearing out trachea with feather, etc., tried, but without effect. At 4.25 p.m. the patient died. "Membrane" given to a rabbit to eat, and some rubbed on mucous membrane of nose: rabbit quite well a week later. No post-mortem.

Case 4.—Louisa G., aged four years and a half, admitted June 3, 1876. History: Parents healthy. Is one of five children, none of them healthy, all being subject to coughs and colds. At three years of age had whooping-cough; since then whenever she gets a cough it takes on a croupy character. Three days ago, cough and breath short; last night began to wheeze with inspiration; expectoration of yellow phlegm. One brother aged two years and a quarter has had a cough for a fortnight, and it is said now to have a croupy character. No croup or diphtheria known to be in neighbourhood of patient's residence. On admission, pulse 140; respirations 48; temperature 98·2°; severe dyspnœa, with laryngeal stridor, retraction of epigastrium; cough frequent; sibilant râles all over chest; tonsils a little swollen and reddened, no exudation. Specific gravity of urine 1030, acid; a trace of albumen, no blood. Sick after emetic; no membrane brought up. At 8 p.m., throat injected, tonsils swollen, a patch of greyish membrane on right tonsil. At 10.30 p.m., breathing worse, face dusky, lower ribs retracted in inspiration. Tracheotomy, followed by great relief; a good deal of muco-purulent secretion expelled through tube; no membrane brought up. June 4, noon: Pulse 162; temperature 103·2°; respirations 60. A shred of membrane coughed up; under microscope shows pus and epithelial cells and a new fibrillæ. 5th: Urine acid, no blood, albumen one-twentieth. Temperature 100·3°. Pieces of membrane either coughed up or brought up with a feather on 6th, 7th, 8th, and 9th. 10th: Child seems weak, but takes food well. 12th: Urine 1005, acid; a faint trace of albumen. 13th: Can breathe through the mouth, and almost blow a candle out. 14th: Tube removed; child can breathe well through mouth and tracheal wound. 19th: A faint trace of albumen in urine. 20th: Urine contains no albumen. July 1: Wound quite closed. 10th: Specific gravity of urine 1028, acid, no albumen. 17th: Discharged convalescent.

Case 5.—Alfred J., aged six, admitted June 8, 1876. Family healthy; child himself always weakly; catches cold readily; usually has a cough; measles a month ago; first complained to-day of sore throat and difficulty in swallowing. On admission, pulse 150; temperature 102·8°, respirations 27; fauces and tonsils red and swollen; no white patches detected; no laryngeal stridor nor alteration of the voice-sounds; some hard enlarged glands behind angles of jaw. 9th: Temperature 99·6°; fauces red and swollen, and bleed readily; some greyish patches on tonsils; specific gravity of urine 1032, acid, no albumen. 10th: Patches on tonsils diminishing. 12th: Only a very small patch on right tonsil; urine not albuminous. 19th: Complains of pain in calf of left leg, and walks lame. 27th: Walks quite well now, and has no pain. Discharged convalescent.

Case 6.—Ann G., aged eight, admitted June 6, 1876. One sister suffering from diphtheria (see Case 4); rest of family healthy; illness commenced on June 3, with pain and tenderness in neck, and pain and difficulty in swallowing. On admission, pulse 144; temperature 102°; complains of sore throat; there is a small whitish patch on left tonsil; some hard glands on both sides, behind angles of jaw. June 9: Swallows bread-and-butter without difficulty; voice rather hoarse; no increase in size of white patch; temperature 100°. 10th: Temperature 99°; pulse 108; fauces and tonsils dark red and swollen, but no patches of exudation visible; can swallow quite well. 11th: Fauces much less injected; temperature 98·4°; patient seems quite well; specific gravity of urine 1025, acid, no albumen; no sequelæ. Discharged convalescent on June 27. Treatment, quinine and iron.

Case 7.—Frederick H., aged six, admitted June 30, 1876. Had measles two years ago. Cervical glands swollen twelve months ago, but did not suppurate. Has never been a very strong child. About a week ago glands of neck became swollen, and he complained of sore throat. When first taken ill he had a slight croupy cough, but this disappeared until last night, when it again became troublesome. Difficulty of breathing came on this morning. On admission, great dyspnœa; face blue; lower part of thorax retracted with each inspiration; skin cold; on left tonsil a greyish patch of membrane; pulse small. Tracheotomy: Breathing became easy and quiet very soon after operation; pulse fuller and stronger; lips red; temperature 102°; pulse 144; respirations 30. Evening: Child sleeping quietly. Lips red. Does not cough much. No membrane has come up through the tube. July 1: Pulse 156; temperature 103°; respirations 24. Passed a good night. Cervical glands were swollen this morning. Chest expands well everywhere. Very little coughed up through tube; no membrane. Breathing rather jerky; breath-sounds harsh, with dry râles all over front of chest. Urine 1020, acid, loaded with albumen, no blood; microscope shows casts, mostly hyaline, some studded with epithelial cells. Died at 7.15 p.m.

Post-mortem Examination.—Right auricle and ventricle filled with a firm decolorised clot, easily separated out; left ventricle firmly contracted, valves healthy. Peyer's patches pigmented and pitted. At base of uvula, in front, a small patch of exudation, with which also both tonsils are covered. Posteriorly, soft palate, uvula, and faucial arches thickly covered with firm yellowish-grey material, which forms for the most part a coherent layer about one-twentieth of an inch in thickness, firmly adherent to the subjacent mucosa. The membrane completely blocks up the larynx, levelling up and obliterating the pouches and vocal cords. Above the cords it is very adherent, but below them it can be easily separated from a subjacent slightly granular surface. The exudation ceases to be a continuous membrane at the level of the cords, but there are some shreds further down the trachea, the mucous membrane of which is exceedingly vascular; it nowhere extends into the bronchi.

Microscopical Examination.—Tubes of kidneys completely blocked, partly with epithelial cells, partly with an amorphous material, which is very granular, and contains in places collections of very small round black bodies, which look like specks of pigment. There is also some hyperplasia of the intertubular connective tissue. Diphtheritic membrane consisted of a firmly fibrillated membrane, enclosing numbers of small round nucleated cells. Floating in the field of vision were also many very large elongated epithelial-looking cells, with large bright nuclei.

Case 8.—Rosa S., aged nine, admitted July 10, 1876. Father suffers from quinsy; rest of family healthy. Illness came on three or four days ago, with sore throat and inability to swallow; since then has been getting weaker and throat worse. On admission, pulse 148; temperature 103·2°; irregular patches of white matter on tonsils; fauces much injected; some swelling and tenderness at angles of jaw. Urine, specific gravity 1025, acid, not albuminous. July 11: Patches on fauces not extending; throat less injected; less pain. July 12: Exudation disappearing from right, but extending on left tonsil. Pulse 108; temperature 101·6°. Swallows easily; no pain in throat. July 14: Still ashy grey exudation on left tonsil and on both sides of uvula. July 17: Very faint grey patch on either tonsil; none on uvula; no pain or swelling at angles of jaw. July 19: Exudation all gone. July 25: Discharged convalescent. No albuminuria at any time.

(*To be continued.*)

An examination of Surgeons in the Royal Navy, who are eligible and who may be desirous of qualifying for the rank of Staff Surgeon, will be held at the Royal Naval Hospitals at Haslar and Plymouth, on Tuesday, July 16 next.

The Secret Reception of Foundlings.—Dr. Marjolin has just communicated a paper to the Academy of Moral and Political Science, having in view the demonstration, from philanthropic considerations and arguments, medical observation, and statistical deductions, that the *tours* or reception-boxes for foundlings should be re-established. These *tours* existed during the ancient *régime*, and an Imperial decree regulated them in 1811. Infants were then received and brought up by the State without any inquiry being made concerning their parents; and their number by 1833 had risen from 68,000 to 134,000 per annum, causing an expense of 10,000,000 fr. Public opinion then became aroused against them; and by a change in the law the *conseils-généraux* were authorised to refuse or diminish the payments for this purpose, while for the *tours* it was attempted to substitute relief given to mothers at home on condition that they suckled their infants, or these last being received into the hospitals after inquiry concerning the position of their mother. M. Marjolin adduces reasons and figures to show that since the abolition of the *tours* infanticide and abortion have been continually on the increase; while the imposition of the duty of suckling on abandoned women is evaded, or made the pretext for the commission of slow murders, which are most difficult of detection. The child saved from these dangers, and provided for by the public, will at twelve years hence cost but 2000 fr., or twice the price of a cavalry horse. It is an error to state that a large number of foundlings become inmates of prisons, for statistics show that natural children brought up at home are those to whom the accusation applies.—*Rev. Scientifique*, June 8.

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The Medical Times and Gazette *is published on Friday morning: Advertisments must therefore be sent to the Publishing Office not later than One o'clock on Thursday.*

Medical Times and Gazette.

SATURDAY, JUNE 15, 1878.

THE MEDICAL ACT AMENDMENT BILL.

Last week we were enabled, after a hasty examination of the Medical Bill, "as amended in Committee on recommitment" in the House of Lords, to inform our readers that, in addition to the compulsory joint-boards clause introduced by the Duke of Richmond, of which they had already been made aware, two or three other amendments of great significance had been made at the instance of the Marquis of Ripon; and we observed that one of these was of such weighty importance that its full meaning and possible effects could not be comprehended without more consideration than it had then been possible to give to it. We now return to the subject of this amendment, feeling that it possibly may very seriously imperil the future status and welfare of the profession. Clause 3 of the Bill as it now stands enacts that "after the commencement of this Act the Medical Registrar shall not register a person in the Medical Register unless either such person has obtained from a Medical Board under this Act a qualifying certificate. . . . . or unless such person is a colonial or foreign practitioner entitled under this Act to be registered." The clause also, of course, provides for the registration of persons who before the commencement of the joint-board system had obtained registrable qualifications, and for persons who at the commencement of the Act are registered, or entitled to be registered. On the other hand, Clause 8, which describes the "contents and form of the Medical Register," makes no mention of qualifying certificates. It enacts that the Register "shall contain in alphabetical list all persons who are either registered at the commencement of this Act, or being entitled at the commencement of this Act to be registered, are subsequently registered, and all persons who are registered in respect of *diplomas* granted after the commencement of this Act by the medical authorities of the United Kingdom"; and shall state "the description and date of the *medical*

diplomas in respect of which they are registered"; and it omits all mention of persons registered in respect of *qualifying certificates*. But this omission is but one of the errors that pervade the Bill, and, if of legal importance, will no doubt be remedied before the Bill becomes law. It must, then, be taken that it is intended that, after the commencement of the joint-board system, the qualifying certificate of a Medical Board shall be sufficient to entitle its holder to be registered in the Medical Register; and it is easy to imagine what has commended this amendment of the Bill to the Duke of Richmond. It is a bit of peace-at-any-price policy, and has been suggested as a happy mode of meeting the difficulty caused by the reluctance of the vast majority of the medical authorities to bestow their diplomas or licences upon medical women; and the Duke had unhappily no responsible skilled adviser at hand to warn him that the amendment, however plausible, would create new difficulties, and that the benefit conferred by it would be anything but an unmixed one. But it really requires little consideration to show that the amendment is to be earnestly and strongly deprecated for two reasons: first, it will create a class of practitioners wholly free from the restraint and discipline of any of the medical authorities; and, secondly, it will create in a new form the very evil which the joint-board system is especially intended to remove.

At first very few, if any, men will, probably, attempt to practise without obtaining, in addition to the qualifying certificate, one or more of the well-known diplomas or licences granted by the Universities and Corporations, though some may possibly do so from the very commencement of the new system; but as time goes on, and the public become more familiarised with the title of "Registered Medical Practitioner," or "Registered Physician and Surgeon," or whatever other title the qualifying certificate may confer, it is not only possible, but very probable, that many medical men, who do not aim at any high professional status, who mean to settle in country districts or in small towns, or who regard the profession solely and simply as a means of making money, and who are dominated by the instincts and feelings of tradesmen rather than by those of professional men, will content themselves with the Medical Board qualification only; and will refuse to affiliate themselves with any of the medical authorities. Then we shall have an ever increasing proportion of the medical practitioners of the kingdom subject to no restraints except such as can be exercised by the General Medical Council: surely a most undesirable result! It may, perhaps, be said that the Corporations very rarely exercise any restraint over the actions and conduct of their members or licentiates; but though their power for restraint, reproof, or punishment may have been rarely, but too rarely, exercised, the knowledge, or the idea even, that such power exists, has been a very real power, and this, and the feeling of *esprit de corps* fostered by the fact of belonging to one of the Corporations, act, we believe, in a highly beneficial measure on the *morale* and conduct of the profession. And we have no doubt that the discipline and behaviour of the medical body as a whole would be seriously lowered by the introduction of any number of "free lances."

Secondly, if none of the diplomas granted by the medical authorities are to be necessary—if they are all to be only additional, ornamental, and in one sense "honorary" distinctions, is it not almost certain that they will be granted on "ameliorated" conditions; that the medical authorities will be almost irresistibly tempted to bid one against another for candidates; and that "downward competition" for diplomas and licences will run riot?

Thus we find that the Corporations, which have existed in some cases for many centuries, would be deprived by this Bill of the power which they have used in most instances with such efficiency that the *morale* of the medical profession in England is superior to that of any other country in the world, while its professional eminence is not less great. A leap in the dark is about to be taken: and if it be taken, there will be no possibility of return. It may be felt and said that never was the profession of Medicine in this country placed in a more critical position than at present. Neither the Church nor the Law could thus be placed without the voices of those interested in these professions being heard, for both are well and powerfully represented in Parliament. But unfortunately our profession has no similar representatives; and even the Medical Council, to which is committed in some measure our political life, appears to be silent. Would this be the case if we had a Brodie, a Burrows, or a George Paget as President? We trust, however, that the prospect of gain by the Corporations by the sale, if not of their honour, of their honorary distinctions, will not prevent them from coming forward to endeavour to amend this Bill; or, if this be impossible, to prevent its passing. It contains very objectionable points independently of the vital one to which we have referred: it permits the examiners under the conjoint boards "to propose alternative questions to women"; and thus what is called a "register of qualified practitioners" may contain the names of persons who had been only partially examined and tested. Again, the amended Bill grants the right of registration of foreign and colonial degrees held by persons who have been legally qualified to practise in their own country for ten years; whilst with marvellous reciprocity it denies that right to the holders of the degrees conferred by the Universities of England, Scotland, and Ireland, unless they have obtained by examination a qualifying certificate! Lastly, as the qualifying power of the Apothecaries' Society would be virtually abolished by the Act, it is extremely doubtful whether we could successfully prosecute chemists and druggists who might choose to practise as apothecaries. For it would be absurd to suppose that persons could be prosecuted for practising as a class that had been extinguished by the Act.

Thus a very simple measure, which might have consisted in conferring power to compel the formation of boards for examining candidates in Scotland and Ireland on the principle already adopted in England, and in framing a penal clause for preventing illegal and unqualified practitioners from continuing their fraudulent pursuits, and which would have in these ways secured the interests of the public, has been converted into a complicated measure, fraught with evil, and calculated to provoke—as it ought to provoke—the most strenuous opposition. We repeat that we are surprised to hear that no steps have as yet been taken for summoning a meeting of the General Medical Council.

THE THROAT HOSPITAL AGAIN.

THERE has been forwarded to us a document which purports to contain the report of the Prince of Wales' Committee of Inquiry, the protest of the Committee of Management of the Throat Hospital, and a rejoinder—by whom written does not appear. There are, besides, certain general comments on the case, unfavourable in their tone to the Committee of Management, a reprint of two letters by General Feilding which appeared in our columns, a letter from Mr. Luck, Chairman of the Committee of Management, which also appeared in this journal, together with two anonymous articles which are reprinted from *Vanity Fair*. But though the document is addressed "to the subscribers of the Hospital for Diseases of the Throat," and contains matters which seem to us more or less distinctly libellous, it does not appear that it has been issued by anyone in particular

and it has no printer's name attached to it. The only clue to the identity of its publishers is a note appended to the introduction, wherein it is requested that "any communications on this subject are to be addressed to the Secretary of the Committee of Inquiry, 86, Brook-street, W." Beyond the fact that this 86, Brook-street is Lord Dunmore's house, we know nothing. It seems to us a grave matter that printed documents of this kind should be so published—much more grave, indeed, than anything contained in the charges brought against the Committee, and dealt with in the report addressed to the Prince of Wales.

The Committee of Inquiry into the management of the Throat Hospital was constituted at the request of the Prince of Wales by the Marquis of Bute, and consisted of the Duke of Grafton, Lord Clarendon, Lord Dunmore, and Sir William Gull. Lord Bute was not present at the inquiry, which took place at Lord Dunmore's house, and the report is only signed by the four other members of the Committee. This report was drawn up for, it is said, the Prince of Wales' own private use, and thus could not be said to be published; but be that as it may, a document purporting to be this report, and signed "Grafton, Clarendon, Dunmore, and William W. Gull," is made public in the document before us. One could hardly conceive that there would have been all this fuss about some of the charges contained in this report, which consists essentially of two parts, and differs in certain respects from that which we formerly discussed. For instance, the plaintive cry of the Secretary, that the Committee, after finding him in the right, did not withdraw a vote of censure they had formerly passed on him, is conspicuous by its absence. On the other hand, an important personage—the Hospital porter—appears on the scene. It is complained with regard to him that he had been taken away to mind Dr. Mackenzie's house; and again, that this or some other porter was dismissed at the shortest notice, without reference to the Committee. Well, this may be a very serious matter, but to us it seems ridiculous that a private inquiry should be conducted in this solemn fashion by three noble lords and a learned baronet into circumstances so trivial in themselves.

The real gravamen of the charges lies in those which deal with the now well-known facts relating to the performance of one particular tracheotomy. There was the inexperienced clinical assistant on the one hand, and the greatly experienced surgeon (up even to as many as fifty operations) on the other; there was the messenger, and the telegraph-wire, all brought on the *tapis*. But we will not weary our readers by again going over this well-trodden ground; and our opinion on the subject is well-known. Suffice it to be said that at no hospital with which we are acquainted is it the rule for the senior surgeon to be invariably called for to perform an operation: it may be the duty of the youngest to attend; and there can be no doubt but that, on the occasion referred to, the clinical assistant was amply qualified to perform the operation.

It is singular what excessively bad English such noble lords can write, and their report is by no means clear; but it seems to us that in it the charges are directed almost, if not entirely, against Dr. Mackenzie in person, and not against the Committee. This, we think, was a mistake; the two sets of charges, if two sets there were, should have been carefully kept apart, and then it would have been seen to which of them, or whether to all of them, the very serious concluding paragraphs of this report would have been intended to apply. The report states that the Committee of Management "declined a continuance of the inquiry, owing to the professional animus shown by Sir William Gull." Then follows, as an answer to the above, a paragraph we must say we do not understand. The noble lords and Sir William Gull write thus:—"This objection we desire to say is gratuitous."

But the concluding sentence of the whole is the most serious, for the report goes on to state that "the course of the inquiry had made it painfully evident that there was no defence to be made, and that the alternative was to evade the inquiry which had been commenced." Now, whatever one may think of the mode of expression used, the meaning of this statement is quite plain; and it seems to us to come perilously near, if not actually to come within, the ground embraced by one or more of the canons of libel. But of course it is a question how far such a communication was, under the circumstances, privileged.

There are certain other features of this anonymous publication which are more or less offensive to our love of fair play. In the quotation of extracts from our own and other columns, all that seemed to bear for the side of Dr. Mackenzie have been excluded, and we have only here before us the facts, statements, and arguments which tell against him and his Committee. Even those comments which we ourselves made in a spirit of honesty and love of fair play are left unquoted, whilst such articles as those that appeared in *Vanity Fair*, of a somewhat violent nature—certainly evincing a strongly marked animus against Dr. Mackenzie—are quoted at full length. What we have here before us, therefore, is merely one side of a question—a one-sided version of a story which has been made far too much of. If nothing more could be said against the management than is here averred, the thing should have been left alone; if there have been other reasons in the background, it is not right that they should have been left there. Too much has been made of a tracheotomy case which might find a parallel any day in any hospital. From questions arising out of this case the minds of laymen have been worked upon by means of improbable terrors.

L'AFFAIRE DANVAL.

France has recently been leaving us well behind in horrors; and though we may boast of such a case as that of Chantrelle (who, by the way, was an importation), and a few cases of kicking to death, we may fairly admit that we cannot compete with our neighbours in this respect. Nevertheless, accustomed as we are to this inferiority, a few words with regard to certain recent cases occurring in France may not be misplaced. We have already pointed out that our institutions as regards the detection of crime are not absolutely perfect, and that whilst affording an undeniable degree of publicity, they may at the same time fail to answer the calls of justice. We all know that the same cannot be said of continental procedure; and those familiar with such writings as those of Balzac, Feval, and Gaboriau, to take certain types of popular literature, well know the importance attached in them to the interrogations of the *juge d'instruction*. It is his business to force from the prisoner a confession, if possible; if not, to draw up a report giving the most life-like account which may be of the crime, its mode of commission, and of the antecedents of the prisoner, together with any fact which may seem likely to insure the condemnation of the suspected person. In certain recent cases, however, it would seem that this *rôle* has been usurped by the medical experts, especially by a certain Dr. Bergeron, whose conduct and capabilities have been severely criticised by the French press. This feeling has apparently reached a high, if not its highest, pitch in the case of M. Danval, recently tried for the poisoning of his wife, in which investigation Dr. Bergeron seems to have borne a prominent part. Instead of confining himself to the strictly scientific aspects of the case, Dr. Bergeron seems to have done at once more, and less. In his report he appears

to have dealt with the man's antecedents, whilst in his own special department he appears to have acted most negligently. Danval was a pharmaceutical chemist, who, after spending a rather loose career as a student, ultimately settled down, and, according to the act of accusation, spent more money in fitting up his shop than his finances could well sustain. He married, apparently for money, and the marriage does not appear to have been a happy one. Probably, as usual in such cases, there were faults on both sides, but from one thing to another the disagreements proceeded till blows were struck, which would not mend matters. At last, according to the theory of the prosecution, Danval resolved to get rid of his wife, and to that end set about poisoning her gradually with arsenic. Madame Danval seems to have exhibited some signs of irritant poisoning, but nothing characteristic or specific. Two medical men were called in, and after this, according to the theory of the prosecution, the administration of the poison ceased, though Madame Danval did not die for a long time afterwards. Nor was it until some time had elapsed after the woman's death that any attempt was made to clear up the case, for before the exhumation putrefaction had extensively taken place, and the only organ which seems to have retained anything like a normal structure was the intestinal tract. This Dr. Bergeron and his colleague looked upon as due to the preservative action of the arsenic, though none was sought for or found in other parts of the body. The brain, when the skull was opened, was so diffluent that it poured out on the floor, and no further attention seems to have been paid to it. In short, the whole post-mortem examination seems to have been conducted in a manner as perfunctory as well might be. Chemical evidence was adduced to show that in the intestinal tube exceedingly minute traces of arsenic had been discovered by means of Marsh's process. But there was opposing evidence, some of it of a very strong character, especially that given by M. Cornil, as to the imperfections of the post-mortem examination, and the absence of anything like accurate or scientific methods in these and subsequent researches. In the end, the jury, moved perhaps by these and such-like considerations, found Danval guilty of murder, but with extenuating circumstances. What these were no one seems to know, but the result was that Danval was condemned to penal servitude for life for the crime of wife-beating, that being the only thing really proved against him. Such verdicts and such results are eminently unsatisfactory. They tend to bring the law into contempt, and they give rise to widespread dissatisfaction with the mode in which it is carried out. More than one case has recently presented similar characteristics as carried out in France, but none of them seem to have produced such effect as this *procès Danval*. We, too, on this side the Channel may learn something from it. First, as it seems to us, that the medical practitioner should stick to his own proper duties, and not interfere with those within the province of the lawyer; and secondly, the importance in all such cases of making the post-mortem examination as complete and perfect as possible. No perfunctory work is here admissible, especially as the life of a fellow-being is at stake. At the same time, it teaches that a thorough training in all that relates to such examinations is an essential portion of medical education. But even in France not all men are perfect.

THE WEEK.

TOPICS OF THE DAY.

The question of dealing with the sewage of large towns, which is still so far from being satisfactorily settled, has recently engaged the attention of the Duke of Sutherland, and Stafford House (which, to do its noble owner justice, is always at the service of those who seek to do some practical good) was last week the appointed place for a meeting held to discuss the method of purifying sewage known as General Scott's cement process. The Duke himself presided, and explained that Scott's Sewage Company, of which he is chairman, was started after a preliminary meeting in that very house. He (the Duke) had not embarked in the undertaking with a view of making money, but because he considered that this was a great national work, and that Scott's process was the right one for preventing the pollution of our rivers. Sir Henry Cole then showed samples in bottles of the sewage water of Burnley, with which that town had been forbidden any longer to pollute the Pendle water; and also of the purified "effluent" which now flows from Scott's Sewage Company's works into the river. This latter looked as clear as ordinary drinking-water. The Corporation of Burnley deliver the sewage into tanks on the works of the Company, where it is treated with lime, which has the effect of precipitating the solid matter in suspension; afterwards, by adding silica and alumina in varying proportions, according to the quality of the cement required, and drying and finally burning the precipitate, Portland or Roman, or other kinds of hydraulic cement are produced at comparatively small cost. A great deal of testimony was adduced as to the efficiency and economy of the Scott process; and in answer to a question, Dr. Siemens gave it as his opinion that after burning in the kilns the cement thus made would, from a sanitary point of view, be perfectly safe to use for building houses. Mr. Alderman Scott, of Burnley, also explained that the works were carried on without being in the slightest degree a nuisance to the neighbourhood. So far the evidence was decidedly in favour of the Scott process, but as the works at Burnley have only been in operation since the beginning of this year, it might perhaps be as well to wait a little longer before giving a decided opinion on the subject.

Everyone in London must have been acquainted with that desolate-looking disused burying-ground nearly opposite the South-Western Railway Station in the Waterloo-road, and general satisfaction will no doubt be felt to hear that it has been at length turned into a public garden. The total expense incurred in this improvement was £700, towards which sum the Metropoliton Board of Works contributed £200. The garden was formally opened on the 1st inst. by the Right Hon. W. Cowper Temple, M.P., and in addition to a handsome granite drinking-fountain erected in the grounds, the Kyrle Society has promised to present some seats. At West Bromwich, also, last week, the Dartmouth-park, a gift of Lord Dartmouth to the inhabitants of that town, was formally opened by the donor. This park consists of fifty-six acres of fine undulating land, in some parts beautifully wooded, and commands one of the best views in South Staffordshire.

Vice-Chancellor Sir Richard Malins last week granted an injunction to restrain the Heston and Isleworth Board from polluting the river Crane with sewage. The plaintiff in this case, Mr. Glossop, resides on the bank of the stream, and he contended that his family had suffered in health from the altered condition of the river, consequent upon the defendants allowing the sewage of the district to drain into it without any attempt to deodorise or disinfect it. The defendants denied most of the plaintiff's statements, although they admitted that the river was not now so pure as it was many years ago, when the neighbourhood was more thinly populated. On a previous hearing both parties had consented to the employment of a scientific gentleman to report upon the locality, and this witness, Lieutenant-

Colonel Hope, now stated that he believed that the report of the medical man as to the unhealthy state of the water was not exaggerated, and that a species of fever might certainly be produced from the exhalations of the river. In granting the injunction the Vice-Chancellor said that he would postpone the drawing up of the decree for six months, in order to give the defendants an opportunity of carrying out such measures as they might be advised.

At St. Thomas's Hospital, last week, the prizes gained by the students of the Medical and Surgical College were distributed in the Governors' Hall by Mr. Le Gros Clark—the Treasurer, Alderman Stone, presiding. The students were introduced by the various lecturers, who remarked that in most cases in which distinctions had been gained the work done was superior to that of preceding sessions. Mr. S. J. Taylor, Grantham, obtained the Treasurer's Gold Medal for general proficiency and good conduct, the highest prize obtainable by a student. From the statement as to the progress of the school submitted to the governors by Dr. Ord, Dean, it appeared that during the past year there were seventy-seven new entrances, the total number of students now being 275. After some remarks by Mr. Le Gros Clark and the chairman, the meeting separated.

At a recent meeting of the Edmonton Local Board of Health, Dr. Frank Reid, the Medical Officer of the district, reported that he had had several cases of infants suffering from arsenical poisoning in the neighbourhood, and, on ascertaining where the violet-powder used for them had been purchased, he sent for the sanitary inspector, who accompanied him to a shop in Water-lane, Edmonton, and brought away all the violet-powder found on the premises. On inspection, the packages were found to bear the label of "King, Abbott's-road, Kingsland." Dr. Reid had no doubt that this powder had been largely used by residents in the neighbourhood, as he had had so many suspicious cases during the past twelve months, and he suggested that notice should be issued by the Board, that all vendors having powder bearing this name and address should immediately forward it to the Board. Instructions were given to the sanitary inspector to warn vendors of violet-powder in accordance with the recommendation of the Medical Officer.

It is reported that a case of fever, which is now so general at Gallipoli, has made its appearance on board her Majesty's ship *Rupert*, and her commanding officer, Captain Gordon, has been sent to Malta Hospital for treatment. With this exception the health of the fleet in the Dardanelles continues good. Some fears have been expressed as to the water-supply of Malta being equal to the greatly increased demand made upon it, through the large number of troops ordered to the island, and orders have been issued for two powerful condensers in the dockyard to be prepared for the service of the garrison should any scarcity be threatened.

A new refrigerator waggon has recently been constructed by the Ashbury Railway Carriage Company, intended for the conveyance of meat, game, fruit, and all such perishable freight. This waggon when loaded is hermetically closed, except where, by an automatic arrangement, air is taken in, and after undergoing a refrigerating and drying process, circulates over the whole contents of the conveyance, being eventually discharged through an exhaust pipe. Waggons of this description are intended to be principally used for the large traffic in meat between Scotland, Liverpool, and London. Importers will thus be enabled to store their provision stocks for several days should the markets prove overstocked. The arrangements for drying the air, and cooling it, have been designed by Colonel W. D. Mann.

Two new classes for the instruction of those who have come forward to learn how to give aid to the injured in peace and war have been opened at the Post-office by the Commissioner for London. There are at the present time thirteen classes for this kind of instruction in the metropolis—two public ones for men at Chelsea and Albany-street Barracks, five private, and six ladies' classes.

On Monday last Lord Derby opened a bazaar in Stanley-park, Liverpool, in aid of the funds of the Stanley Hospital in that town. In the course of his remarks on the general subject of hospitals, he referred to the movement in London for the establishment of hospitals in which the patients should pay a sum for the accommodation and attention provided. He said that outside of this, and even of the skilled artisan class, there is a labouring multitude of whom it is mere mockery to suppose that they could reserve any considerable portion of their earnings for days of illness. On this, and the further ground that hospitals are the schools in which the rich man's doctor receives his training, he appealed for the support of the public to these institutions.

Much alarm has been caused at Kilburn and St. John's-wood, by the appearance, chiefly in the houses of the better classes, of diphtheria of a malignant form. Three children have died at St. Mary's Vicarage; and in the four months ending May 25, twenty-one children died in various parts of the parish of Hampstead. A Government inspector is now employed making inquiries into the cause of the outbreak, which is still prevalent. Professor Huxley, a resident in the Marylebone portion of St. John's-wood, made a personal application to the Medical Officer of the Home Office on the subject. The surveyor of the Hampstead Vestry has caused the sewers to be flushed with sulphate of iron, sewer-gas being suspected as the cause of the outbreak. Authority has been given to the surveyor to inspect private drains.

THE PHARMACEUTICAL SOCIETY AND THE WOMAN DIFFICULTY.

The woman question still troubles the Pharmaceutical Society, and appears to exercise a peculiarly disturbing influence on their powers of conducting business. It may be remembered that several ladies have passed the examinations of the Society, some of them in a highly creditable manner; and of these successful candidates some have applied to be elected as associates, and one, at least, as a member of the Society: but such applications have been made in vain, the Council of the Society, in whom the election is vested, being divided on the questions whether women can, and if they can, whether it is expedient that they should, become either associates or members. In 1873 three ladies sought election as students, or apprentices, of the Society, and the matter was referred to the annual meeting of that year, which decided against their admission. Last year the subject was again brought before the Council, in October and November, and on the latter occasion it was once more decided that the opinion of the Society should be again taken on it at the next annual meeting. Accordingly, at the annual general meeting, on May 15 this year, Mr. Wade moved—"That all persons being duly qualified (irrespective of sex) shall be eligible for admission into the Society in accordance with the by-laws thereof, and this meeting is of opinion that ladies should not be excluded from participation in the privileges of the Society." This was met by Mr. Vizer with the amendment—"That, in the opinion of this meeting, it is not considered either necessary or desirable that ladies should be admitted as members, associates, apprentices, or students of this Society." A very long discussion followed, chiefly on the question itself, and partly on the form in which it should be put to the meeting; and it was finally decided that the vote should be taken on an amendment to be

moved by Mr. Vizer, of "the previous question." This was done by a show of hands, and the President declared that the amendment was lost by a considerable majority; but this opinion having been challenged, a division was taken, and it was then announced that the amendment had been carried by fifty-nine votes to fifty-seven. The meeting was then adjourned to the 15th, when the President's announcement of the result of the division was called in question, it being affirmed that the majority was against instead of for the amendment. The President confessed that he suspected that he thought each of the tellers was telling for his own side instead of for the opposite side; but even admitting that, he was not sure which of the tellers handed in the larger of the two numbers. Mr. Vizer, who was present at the adjourned meeting, could not be sure of the number he gave in, but thought it was fifty-nine, and that a mistake had been made. Mr. Wade, the other teller, was not present, but had written to a member of the Council, who also was absent, to say that he too believed that a mistake had been made. What was to be done? After some discussion it was determined that the President should formally announce that there had been an error in his decision respecting the previous vote, that Mr. Vizer's amendment had really been lost; that he should put Mr. Wade's motion again, that nobody should vote for it; and that he should give his casting vote against it; and this was formally done. At the meeting of the Council this month, three ladies again applied for election, and it was proposed that one of them be elected a member of the Society. The voting at the annual meeting was again questioned. The President said it all depended upon who was the first teller, for it was the first teller that gave the number fifty-nine; and one member of the Council declared he was ready to swear that it was Mr. Wade; while another was equally ready to swear that it was Mr. Vizer. The Council at last divided on the motion for the election of the lady as a member, when eight voted for, and eight against it, and the President, of course, gave his casting vote against it. Two ladies were then proposed as associates, and a vote was taken with a similar result. The question, consequently, stands where it did before the annual meeting. One is tempted to finish with the classical quotation, "*Montes parturiunt,*" etc.; but we will be content to suggest that, had ladies been members of the Society, or of the Council, or even had a lady been in the Presidential chair, the result hardly could have been more—well, we will say, more unbusiness-like.

THE DERMATOLOGICAL CHAIR AT THE ROYAL COLLEGE OF SURGEONS.

It is not improbable, we believe, that the appointment to the vacancy in the Erasmus Wilson Professorship of the Royal College of Surgeons may be for a time deferred. We understand that the President and Vice-Presidents of the College have been led to think that the future usefulness of the Erasmus Wilson Endowment will be greatly increased if the trust, instead of being restricted to the promotion of dermatology only, can be enlarged to admit the whole subject-matter of pathology; and especially if the conditions of the professorship can be so altered that the hope of being appointed to it may act as a stimulus to original research in the sciences which are fundamental to surgery. There is reason to believe that, if the Council of the College agree in this view, Professor Wilson will be ready to join them in modifying the trust so as to make its income applicable, in a much more general sense than now, in aid of pathology and surgery; and the matter was, we hear, to be brought before the Council on Thursday last. Should the suggested change have then been thought desirable, definite proposals for the modification of the terms of the trust will, after due consultation with Professor Wilson, be proposed to the Council at some future meeting; and in the meantime no steps, of course, be taken towards the appointment of a new Professor of Dermatology. What such proposals are likely to be we cannot pretend to say; but unless dermatology is in some way especially named, we should think it is not unlikely to be eventually altogether left out in the cold. It is rumoured that Mr. Jonathan Hutchinson will, however, very likely be appointed to succeed Mr. Spencer Wells in the chair of Pathology and Surgery; and in that case it will still be in his power to take diseases of the skin as the subject of his lectures, should he choose to do so.

THE ELECTION AT THE ROYAL COLLEGE OF SURGEONS.

The time for sending in nominations of Fellows for seats in the Council of the College, at the annual meeting on the 4th prox., expired on Monday last; and we hear that the following candidates are actually in the field; the names are published according to seniority of Fellowship, excluding the retiring members of the Council (Messrs. Erasmus Wilson, F.R.S., Henry Lee, and Barnard Holt, who will offer themselves for re-election):—1. Mr. John Gay, Fellow, December 11, 1843; Member, July 11, 1834. 2. Mr. Joseph Lister, F.R.S., Fellow, December 9, 1852; Member, December 9, 1852. 3. Mr. Thomas Bryant, Fellow, May 12, 1853; Member, August 6, 1849. 4. Sir Henry Thompson, Fellow, November 10, 1853; Member, October 4, 1850. 5. Mr. John Wood, F.R.S., Fellow, May 11, 1854; Member, July 30, 1849. 6. Mr. Henry Power, Fellow, December 1, 1854; Member, May 9, 1851. 7. Mr. Edward Lund (Manchester), Fellow, June 12, 1863; Member, April 9, 1847. As regards the date of membership of the College, it will be seen that Mr. Gay again heads the list, followed in order of seniority by Mr. Lund, Mr. Wood, Mr. Bryant, Sir Henry Thompson, Mr. Power, and Mr. Lister. The number of candidates (ten for three vacancies) is very large, and all are good men, such as have a right to look forward to obtaining seats in the Council of their College. And when it is remembered that, in addition to this, the three members of Council, by whose retirement (by rotation) the vacancies are made, all seek re-election, it may be expected that the contest will be keen and close, and that Fellows will be guided in their voting very much by personal friendships and predilections, or by school and hospital *esprit de corps*.

THE HEALTH OF MACCLESFIELD.

Under careful sanitary supervision the health of the town of Macclesfield is decidedly improving. Thus, in summing up his annual report on the health of the borough for the year 1877, Dr. George Bland, the Medical Officer for the district, records that the death-rate has been lower than for many years, there has been less zymotic disease, there has been a great diminution in the mortality of infants, and the whole of the mortality bears favourable comparison with that of England and Wales. In the words of the Registrar-General, "there appears good reason to infer that much of this saving of life, and consequent decrease of sickness, is both directly and indirectly due to the new era of sanitary progress inaugurated by the passing of the Public Health Acts of 1872 and 1875. It is only, however, necessary to point to the marked variations in local death-rates, to prove how much may be hoped from still further improvement in sanitary organisation and administration." The question of infant mortality has attracted much attention in Macclesfield during the past year, and a committee was formed to investigate the subject. The evidence adduced failed to justify the charge of criminal neglect and child-murder, but showed without doubt that the infant death-rate in Macclesfield is

considerably in excess of the average throughout England. The Committee suggested, as a means of counteracting the evil, that mothers should be restricted from working for a limited period before and after confinement; that nursing-houses should be established under medical inspection; that the sale of narcotics and injurious soothing drugs should be limited; that a more rigid inquiry should be made into the cause of all uncertified deaths, and medical evidence taken; and that all available means should be taken to enlighten ignorant and careless parents, Dr. Lankester's "Plain Rules for the Management of Infants" being constantly distributed.

THE HEALTH OF TAUNTON.

In his annual report on the sanitary condition of the Rural and Urban Districts of Taunton for the year 1877, Dr. Henry J. Alford, the Medical Officer of Health, remarks that it has been frequently urged that a hospital for the isolation of persons suffering from infectious diseases is not required for a rural district, and, he adds, were any facts required to prove the reverse, the various outbreaks of scarlet fever in the Taunton Rural District during the year under notice would amply supply them. This was most forcibly illustrated both at Bishop's Lydeard and Buddlestone. A single case having been introduced into one of a row of cottages, the disease spread from house to house until every child suffered, and many died. Acting upon Dr. Alford's advice, the authorities applied to the Local Government Board for assistauce in the matter, and Mr. Netten Radcliffe visited the town, and strongly recommended that an efficient hospital should be built which would meet the necessities of both the Urban and Rural Districts. This is shortly to be commenced, at an estimated cost of about £3000. In the Urban District of Taunton great efforts at improvement have been made during the past year; the Local Board has purchased the Taunton Waterworks, and completed the sewage works of the town; and Dr. Alford anticipates the happiest results from the spirited action which has been taken to improve the sanitary conditions of the district under his supervision.

THE BRISTOL MEDICAL SCHOOL.

At the meeting of the Council of the Royal College of Surgeons, on Thursday, it was resolved—"That, as recommended by the Court of Examiners, for the present, the recognition of the Bristol Medical School by this College be not withdrawn, in the expectation that the proposed improvements of the arrangements for teaching in that School will be carried out, and on the understanding that a report will be furnished by the Honorary Secretary of the School at the end of the winter session 1878-79 respecting the progress which shall have then been made in effecting those improvements."

THE HEALTH OF LIVERPOOL.

The Medical Officer of Health for the Port and Borough of Liverpool, Dr. J. Stopford Taylor, in his annual report for the year 1877, observes that notwithstanding the prevalence of whooping-cough and small-pox, the health of the town has been on the whole satisfactory; only once during a long period has the death-rate been lower, namely, in 1873, when it was 25·8 per 1000, whilst for the year under notice the rate was 26·4, being 1·1 lower than the previous year, and 2·9 lower than the average of the previous ten years. The most fatal of the zymotic diseases was whoopiug-cough, which occasioned 735 deaths. The deaths of infants under five years of age were 6341, and comprised 45·6 per cent. of the whole deaths. Dr. Taylor records with much gratification the growing interest which the public of Liverpool take in sanitary matters, and he states that in no way is it more manifested than in their willingness to furnish information of the existence of infectious disease, and the desire to have the assistance of the sanitary authority to disinfect their premises and clothing as a preventive measure. To prevent the spread of disease by the assembling of large numbers of children in the public schools, an arrangement was made with the School Board that, when a house was reported to be infected by zymotic disease, a sanitary inspector should visit it, and ascertain if any children were attending school. This information was then communicated to the School Board, and notice sent to the head master of the school at which the children attended; the children were then released from school duties until their homes had been thoroughly cleansed and disinfected. This arrangement was found to work very satisfactorily. The reduction in the number of deaths from diarrhœa and fever in Liverpool during the last twelve years affords, Dr. Taylor thinks, very satisfactory evidence of the beneficial character of the sanitary operations put in force during that period.

THE HUNTERIAN MUSEUM.

Professor and Mrs. Flower received a large party of ladies and gentlemen in the Museum of the Royal College of Surgeons, on the afternoon of Saturday last, to meet his Excellency the Chinese Minister, who, accompanied by Dr. Macartney, his interpreter, and suite, arrived soon after four o'clock, Professor Flower explaining to his Excellency, through Dr. Macartney, the objects of interest. The specimens which had been contributed to the collection from China naturally received much attention. Among these were preparations of Chinese ladies' feet, showing how the peculiar reduction in size is effected; specimens illustrating the artificial production of pearls in the Chinese pearl-mussel; the skeleton of the long-tailed deer, peculiar to the North of China, of which a fine example was lately obtained for the Museum by Sir Rutherford Alcock, a Fellow of the College. The large series of skeletons and skulls of different races of men were also examined with great interest, and the peculiarities of the Chinese skull, as compared with that of the English and other nations, were pointed out to his Excellency, who was so pleased with all he saw that he remained until seven o'clock; in fact, was the last of the guests to leave.

INFECTIOUS DISEASES IN BOLTON.

The annual report on the health of Bolton during the year 1877, furnished by Mr. Edward Sergeant, the Medical Officer of Health, was expected to contain some information as to the working of the important sanitary provisions contained in the local Act of Parliament obtained last year for rendering compulsory the registration of infectious diseases. Sufficient time has not, however, elapsed to form an opinion upon the practical working of the Act, and we only learn that enough has been elicited to justify the high expectations which have been formed of it. The Bolton enactment imposes a necessity upon both householder and medical attendant to give notice of outbreaks of infectious diseases, and as much discussion has arisen as to whether the former or the latter should be compelled to supply this information, subsequent reports will enable us to decide on the respective merits of these two sources of information. Mr. Sergeant inclines to the opinion that the onus should rest with the head of the household, and that the medical man should merely be called upon to inform the householder on the occurrence of infectious disease in his house or family. This will, we think, eventually be found to be the popular view of the case; but, at any rate, Bolton must be congratulated upon having taken the lead in obtaining this important piece of legislation, which will strengthen the hands of its

medical officer of health, and must tend to lessen the risk of mortality from infectious diseases through an early intimation of their occurrence.

COLLEGE LECTURES.

The theatre of the Royal College of Surgeons was crowded on Monday last to hear Professor Spencer Wells deliver the first of his course of lectures on the "Diagnosis and Surgical Treatment of Abdominal Tumours," a subject on which he is so thoroughly at home. It is long since the Professors of Surgery and Pathology have succeeded in drawing such audiences as attend these able lectures, which will be brought to a close on Friday next, the 21st inst. On the following Monday Mr. B. T. Lowne will commence his course of three lectures on the "Physiology of Nerve-Stimulation"; and after that the theatre will be given up to Professor Flower for the annual exhibition by him of preparations about to be added to the Museum, and in which the Fellows at the annual election into the Council always take a great interest. Unfortunately, on the present occasion the preparations will have to be removed on the evening of the 4th prox., for the primary examinations commencing the following day.

GERMAN MEDICAL STUDENTS IN 1877-78.

According to the "Calendar," just published, the following were the numbers of the medical students at the respective German universities in the winter session of 1877-78:—Würzburg, 498; Munich, 477; Dorpat, 367; Leipzig, 365; Berlin, 345; Prague, 235; Greifswald, 218; Zürich, 189; Graz, 177; Breslau, 168; Erlangen, 166; Strassburg, 150; Freiburg, 147; Tübingen, 146; Königsberg, 134; Bern, 134; Bonn, 126; Göttingen, 115; Halle, 106; Marburg, 100; Giessen, 95; Kiel, 82; Heidelberg, 79; Basel, 74; Jena, 73; Rostock, 36.

DENTAL PRACTITIONERS BILL.

The House of Commons went into Committee on this Bill on Thursday, June 6. Mr. Young desired to move an amendment to legalise such terms as "surgeon-dentist" and "dental surgeon" by surgeons who had the general qualifications of a surgeon, and desired to devote themselves to special branches of the profession. Sir J. Lubbock said that no medical authority had petitioned in favour of this amendment, and as it only received individual support it was negatived, and the Bill passed through committee when the remaining clauses were agreed to.

The Glasgow Apothecaries' Hall was completely destroyed by fire on Saturday evening last. The damage is estimated at close upon £30,000.

The Anthropological Society at the Exposition Universelle.—This museum in the Trocadéro Park has just been opened to the public under the presidency of M. Teisserenc de Bort, Minister of Agriculture and Commerce, accompanied by M. Krantz, the Commissary-General of the Exposition, and M. Berger, the Director of the Foreign Sections. The President of the Paris Anthropological Society, M. Henri Martin, the celebrated historian, having thanked the Minister and his colleagues for their presence, presented to them Prof. Quatrefages, the President for the organisation of the Anthropological Section, and Prof. Broca, the President of the approaching International Anthropological Congress. The Minister occupied more than three hours in a minute investigation of the anthropological collections—the proceedings, which were attended by about 500 persons, commencing at nine o'clock, and not terminating until after one. No one, in fact, besides the organisers of the collection and those specially informed, could have imagined how curious and varied it is. Science and art have united and alike contributed to a triumph which for many will prove a revelation. —*Rev. Scientifique*, June 8.

CLINICAL LECTURES
ON THE CONNEXION OF THE DISEASES OF THE THROAT AND CHEST.

DELIVERED AT THE HOSPITAL FOR DISEASES OF THE THROAT AND CHEST.

By ROBERT HUNTER SEMPLE, M.D., F.R.C.P.L.,
Physician to the Hospital.

Lecture II.

The principal topics of the present lecture will be the different forms of throat disease occurring in children, though some of these affections are not exclusively confined to that class of subjects, and are not wholly limited to the region of the throat. Infantile laryngitis, however, as its name implies, is a disease of infancy, for although it is not pathologically distinct from the laryngitis of the adult, yet it presents so many peculiar features as to demand separate and special consideration. The chief differences result, first, from the greater liability of children to inflammatory affections of the respiratory organs, and next, from the relative anatomical peculiarities of the laryngeal structures, the aperture of the glottis being very narrow in children and proportionately much wider in the adult. Hence a degree of inflammation which would not cause any material alteration of the voice or the breathing in the adult, may, in the child, produce that noisy and stridulous breathing which is so characteristic as to have received a special name. The word "croup" or "croupy" is applied to this kind of breathing; and although it is quite as characteristic of some forms of laryngeal disease in the adult, yet popular usage confines the term to the laryngeal affections of childhood. "Croup," in fact, means nothing except a noisy, stridulous kind of breathing, and is a colloquial Scotch expression applied in the case of anyone who has a cold or a roughness in the voice, and it is as absurd to employ it in scientific medicine as it would be to persist in calling the different throat affections by the old Greek name of *cynanche* (literally dog-strangling), which until lately was made to do duty for tonsillitis, mumps, laryngitis, tracheitis, and other complaints; or the Latin word *angina*, which was also used in the same loose and inaccurate manner.

Infantile laryngitis is a very common disease, and is distinctly inflammatory in its nature. It usually occurs in children from one or two to five years old, and it attacks these subjects generally in the middle of the night, the patient waking suddenly with a hoarse, clanging, sonorous cough, and sibilous inspiration, dyspnœa, and fear of impending suffocation. This combination of symptoms constitutes what is called "croup" in common language, and is the terror of parents, who run for immediate medical assistance; but a French writer of the present day (Dr. Sanné) observes that the very nature of the attack indicates that there is more fear than danger, and he calls the complaint the "nightmare" of the doctors, who are continually called out of bed to attend such cases in the dead of the night. I entirely agree with Dr. Sanné, that the prognosis in nineteen out of twenty such cases is favourable. The formidable symptoms in this disease gradually subside during the night, and towards morning the child usually falls asleep, and wakes refreshed, although there may be a return of the attack, but in a modified form, the next night. The pathology of infantile laryngitis is very simple, and consists in an inflammation of the mucous membrane of the larynx, generally extending to the trachea, and sometimes even into the bronchial tubes. In the mild form of the disease the swollen and congested membrane is soon restored to its healthy condition, but in a few cases œdema of the glottis supervenes, and tracheotomy may be demanded; or when the local symptoms are associated with constitutional disturbances, especially with the strumous diathesis, the child may sink from a complication of morbid influences. The treatment must be antiphlogistic; but, speaking from experience, I by no means consider it necessary to adopt such vigorous measures as were formerly deemed essential. Leeches may, however, be applied to the outside of the throat, and moderate doses of tartar emetic should be administered. I consider this salt as eminently useful in infantile laryngitis, and I regard it almost as a specific in the inflammatory diseases of the air-passages.

Laryngismus stridulus, which has also been called "croup," demands consideration in connexion or in contrast with infantile laryngitis, from which it differs entirely except in one of the local symptoms. This affection also occurs very often in the middle of the night, the child suddenly waking with dyspnœa and a crowing inspiration, and sometimes the paroxysm is suddenly fatal. But the fit, under proper treatment, usually passes off, leaving the child, for the time, quite well, but liable to a return of the attack. In this disease there is no visible morbid affection of the vocal cords, the rima glottidis being closed by the convulsive or spasmodic action of the adductors of the cords, which are acted upon by reflex irritation, the cause of the paroxysms being in some organs or structures at a distance from the larynx. Thus the causes of laryngismus stridulus must be sought either in dental irritation, in worms in the intestine, in tumours pressing upon the recurrent laryngeal nerve, or even in unwholesome or unsuitable food; and the treatment must be entirely different from that of infantile laryngitis. In laryngismus stridulus the exciting cause having been sought for must be removed, and what is called antiphlogistic treatment is useless and even injurious.

But I now come to the description of a most serious malady, chiefly prevailing among children, but by no means limited to them alone—namely, laryngeal or laryngo-tracheal diphtheria,—and this has also been called "croup," and is so called still, especially by the French, who call it "true croup." This disease consists essentially in the formation of a distinct pellicle or false membrane, generally appearing first on the uvula, tonsils, or soft palate, and sometimes extending no farther, in which case the disease is comparatively mild. But when it extends downwards into the larynx and trachea (as it unfortunately often does), it is dangerous in the highest degree, and I do not exaggerate its fatality when I state that more than half of such cases end in death. This fatality arises from two causes—first, the presence of false membrane in the larynx and windpipe; and secondly, the existence of the specific poison of diphtheria, which, like that of small-pox, typhus, cholera, or scarlatina, destroys life by toxic influences, independent of visible local lesions.

The symptoms of this disease, when attacking the larynx and trachea, are totally different from those of the diseases I have just before described. Infantile laryngitis, for instance, begins suddenly with a loud, clanging, noisy cough, and urgent dyspnœa, but the symptoms gradually subside, and the child is restored to health. In laryngeal diphtheria, on the other hand, the symptoms are slow and insidious in their onset, the cough is muffled, the voice is low, and the disease gradually advances and becomes worse and worse, until either the child dies asphyxiated or sinks suddenly from syncope. The diagnosis of laryngeal diphtheria, when it has arrived at its last stage, and when the case has not been previously visited, is sometimes difficult, but, if it has been seen from the beginning, the false membrane may usually be detected on the fauces, and then the nature of the malady is only too obvious. Sometimes, however, the disease begins in the larynx and trachea, and then its true nature will perhaps be manifested only by the death of the patient and by the post-mortem examination, unless indeed—what is a rare event—the false membrane has been expelled by vomiting or coughing. The treatment of laryngo-tracheal diphtheria, even when most skilfully conducted, is too often unsuccessful, but the efforts of the practitioner should be directed to the removal of the false membrane, which is the essence of the disease, and this object is sometimes accomplished by the use of emetics, especially ipecacuanha; but more frequently there is but one resource left (and that a dangerous and doubtful one)—namely, tracheotomy, by which an incision is made in the windpipe, and the false membrane is removed through the opening. This proceeding has been adopted with a sufficient amount of success to justify its future performance; but it must be remembered that, even when the operation has been successful, the patient may die from the effects of the diphtheric poison.

Death of Dr. A. Menzel.—Dr. A. Menzel, Primarus-Chirurg. of the Municipal Hospital at Trieste, and formerly one of Billroth's most distinguished pupils, has just died in the Augusta Hospital, Berlin, while on a visit to that capital in order to attend the seventh Congress of German Surgeons.

FROM ABROAD.

Dr. Gaillard Thomas on Laparo-Elytrotomy.

At the meeting of the New York Academy of Medicine, March 21, Dr. Thomas read an important paper on "Laparo-Elytrotomy as a Substitute for the Cæsarian Section," which is published at length in the *American Journal of Obstetrics* for April, the discussion which it gave rise to appearing in the *New York Medical Record* for March 30.

This operation, laparo-elytrotomy (which may be translated vaginal Cæsarian section, as contrasted with laparo-hysterotomy, uterine or ordinary Cæsarian section), Dr. Thomas at first believed originated with himself, but has since learned that it had already been executed by von Ritgen in 1870, and since then it has been performed five times, twice by Dr. Thomas, and three times by Dr. Skene of Brooklyn. The mothers in three of these cases are living, and four of the children were born alive. The operation is a simple one. An incision is carried from the spine of the pubis to the anterior-superior spinous process of the ilium, sweeping upwards directly above Poupart's ligament. The peritoneum having been lifted up with the fingers, the vagina is come into contact with at its junction with the cervix. A large steel sound having been passed by an assistant into the vagina, this is cut down upon, the opening being enlarged by the fingers, and the sound withdrawn. The cervix is next raised by an assistant, by means of the blunt hook, into the iliac fossa, the fundus being depressed in an opposite direction; and the child is delivered through the dilated cervix by version, forceps, or extraction, according to the presentation. In none of these five cases did hæmorrhage occur; and even should it occur in other cases, the danger caused thereby has to be compared with the greater danger consequent on the ordinary Cæsarian operation. In this last, danger arises from peritonitis, metritis, hæmorrhage, shock, incarceration of the intestines in the uterus, and septicæmia. By laparo-elytrotomy the danger from peritonitis, metritis, and incarceration is entirely avoided, while that arising from shock and septicæmia is much diminished in probability. Celluditis might arise, but as neither peritoneum nor uterus is divided, the great risks from inflammation of these parts are avoided. The peritoneal cavity remaining unopened, there is little danger of that sudden nervous prostration which we style "shock"; and as the wound admits of being flooded constantly with carbolised water, the occurrence of septicæmia is rendered much less likely. The great danger is hæmorrhage from the severance of the congeries of large tortuous arteries around the vagina; but this would probably be controlled if it did occur. The operation may be accomplished with rapidity and certainty by any operator of ordinary skill. Lifting the peritoneum is far more easy in the pregnant than in the non-pregnant subject, being in the former ample and movable to a degree which is unknown in the latter.

At the discussion which followed, Dr. Fordyce Barker was the principal speaker, and commenced by suggesting that some more pronounceable term should be devised for the operation than "laparo-elytrotomy," and proposing to substitute for it that of "Thomas's operation." As to the operation, that it would be accepted in certain cases as a substitute for the Cæsarian section he felt perfectly sure, but to what extent it will be so can only be determined after a long course of experience. One important point to be considered is, that the danger attendant on the performance of Cæsarian section may be, like it has been in ovariotomy, greatly reduced when the conditions required to render it safe have been studied with the same care, so that it may be then rendered as safe as, or even safer than, this proposed substitute. One of the great dangers of Cæsarian section arises from the entrance of lochial discharges into the cavity of the peritoneum; and the modification of the operation introduced by Lestocquoy (bringing the uterine and abdominal walls into contact by sutures before the removal of the fœtus and placenta), as a means of obviating this danger, seems to be a great advance in the method of performing it. If, eventually, it is found that the one operation need not be more dangerous than the other, the condition of the patient after the performance of the Cæsarian section is more favourable than after Dr. Thomas's operation, for

it leaves no lesions behind it, and no condition which hinders a patient from fulfilling the functions of a wife and a mother as well as before the operation was performed. Next, considering Thomas's operation in relation to *craniotomy*, is the latter to be abolished as a legitimate operation—craniotomy, with all the instrumental improvements of the present day, which, as regards the safety of the mother, render it altogether a different operation from what it was formerly? This would be almost to revolutionise obstetrical ethics; for if there is any point which is universally accepted, it is that the life of the mother is to be preserved in preference to that of the child. It is believed by all competent obstetricians that craniotomy can be performed with perfect safety to the mother with a contraction of the antero-posterior diameter down to two inches, provided there be a transverse diameter of three inches, and the diameters of the inferior strait are normal. In such cases are we justified, for the sake of saving the child, in performing an operation which involves serious danger to the mother? "I will close by saying this: Whatever the future may determine as to limit in the class of cases to which Thomas's operation is applicable,—whatever the decision of the future may be as to how far it is to take the place of Cæsarian section or craniotomy,—I am certain that the great merits of the operation will be so established in obstetrics by the profession at large throughout the entire world as to satisfy the ambition of any man to be regarded as a great contributor to the advance of the obstetric art in a limited number of cases."

Prizes of the Académie de Médecine.

At the annual public meeting of the Académie, on June 4, M. Béclard, the Perpetual Secretary, delivered what is pronounced by the press as one of his most successful *éloges* on Nélaton. Before this, however, Prof. Henri Roger accomplished what, at all events, must be regarded as a more difficult task, by his "General Report on the Prizes decreed during 1876 and 1877." Seeing that this report occupies more than thirty pages of the *Bulletin* of the Academy, and is engaged in expounding the circumstances which have caused the subjects of the prizes to be selected, and giving something like an analysis of the views of the successful candidates—and that all this, relating to all kinds of medical and surgical subjects, had to be made interesting and proper for a large mixed assemblage, consisting in great part of ladies—its successful rendering must be regarded as no slight feat.

The following are the prizes adjudged:—1. The Academy Prize for 1876; subject, "A Comparison of the Different Methods for Dressing Extensive Wounds." None of the essays sent in were thought to be deserving of the prize, which was divided between the authors of the two best, 600 fr. being awarded to a military surgeon, M. Cassedebat, and 400 to Dr. Devals, of Bordeaux. 2. The Academy Prize for 1877, "Glycosuria in Relation to its Etiology and Prognosis," was not awarded, 600 fr. being, however, given as an "encouragement" to Dr. Jules Cyr, of Paris, and 400 to Dr. Dauvergne, of Monosque. 3. For the Portal Prize for 1876, for the best memoir on any subject in Pathological Anatomy, no one competed. 4. The Portal Prize for 1877, "Does Caseous Pneumonia exist independently of Tuberculosis?" was adjudged to Dr. J. Grancher, *agrégé* Professor at the Paris Faculty. 5. The Bernard de Civrieux Prize for 1876, "The Part taken by the Nervous System in the Production of Glucosuria" was not adjudged, an "encouragement" of 1200 fr. being awarded to Dr. Bussard, of the Val-de-Grâce. 6. The Civrieux Prize for 1877, "By what Treatment can General Paralysis be Arrested at its Commencement, and the Amelioration or Cure obtained be Assured?" was given to Dr. Lagardelle, Principal Medical Officer of the Marseilles Lunatic Asylum. 7. The Capuron Prize for 1876, "Alterations of the Placenta, and their Influence," was not adjudged. 8. The Capuron Prize for 1877, "Chloral in Eclampsia," was given to Dr. Delauncy, of Paris. 9. The Barbier Prize for 1876 was not adjudged, but a "recompense" of 1500 fr. was given to M. Junod for his work, "Traité Théorique et Pratique de l'Hémospasie"; and one of 500 fr. to M. Trideau for his *brochure* entitled "Traitement de l'Angine Couenneuse par les Balsamiques." 10. The Godard Prize for 1876, for the best work on Internal Pathology, was given to Dr. Legrand du Saulle for his two *brochures*—"La Folie de Doute," and "La Folie Héréditaire." 11. The Godard Prize for 1877, for the best work on External Pathology, was given to Dr. Luton, of Rheims, for his "Traité des Injections Sous-Cutanées"; a "mention très-honorable" being accorded to Dr. Reclus for his "Du Tubercule du Testicule et de l'Orchite Tuberculeuse." 12. No memoir was sent in for the Orfila Prize of 4000 fr. for 1876, "Aconite and Aconitine." 13. The Itard Prize, for the best work on Practical Medicine or Applied Therapeutics, was adjudged to M. Marvaud, of the Military Hospital at Mascara, Algeria, for his "Les Aliments d'Epargne." 14. For the St. Lager Prizes for 1876 and 1877, "On the Experimental Production of Goître," no essay was sent in. 15. The Falret Prize for 1876, "Insanity in Relation to Epilepsy," was not adjudged; but a "recompense" of 1500 fr. was given to Dr. Christian, and an "encouragement" of 2500 fr. to Dr. Lagardelle. 16. The Huguier Prize of 1876 for the best work on diseases of women, especially surgical diseases, was given to Dr. Puech, of Nimes, for his "Des Atrésies complexes des Voies Génitales de la Femme, ou de l'Hématométrie Unilatéral."

The following prize questions are announced for 1879, all essays and works must be in French or Latin, and sent in to the Academy before May 1:—1. The Academy Prize of 1000 fr., "Determine the Clinical Value of Antiseptic Methods in Surgical Practice." 2. The Portal Prize of 1500 fr., "The Condition of the Uterus and its Appendages in the Diseases comprised under the name Puerperal Fever." 3. The Civrieux Prize of 1500 fr., "Hystero-Epilepsy." 4. The Capuron Prize of 2000 fr., "Varices during Pregnancy and Accouchement." 5. The Barbier Prize of 6000 fr., for discovery of the Cure of Diseases reputed Incurable, as hydrophobia, cancer, scrofula, typhus, cholera, etc.; "encouragements" to be given to those who nearest approach to the fulfilment of the testator's design. 6. The Godard Prize of 1500 fr., for the best work on External Pathology. 7. The Desportes Prize of 1500 fr., for the best work on Practical Medical Therapeutics. 8. The Buignet Prize of 1500 fr., for the best manuscript essay or printed work on the Applications of Physics and Chemistry to Medical Science. 9. The Amussat Prize of 1500 fr., to the author of the work or researches, simultaneously based on anatomy and experiments, which has most realised or prepared the way for progress in Surgical Therapeutics. 10. The Itard Prize of 2000 fr., for the best work on Practical Medicine or Applied Surgery—such work having been published at least two years ago. 11. The Rufz de Lavison Prize of 2000 fr., "Establish by authoritative and sufficiently numerous facts, observed among men and animals who change from one climate to another, the modifications and alterations of functions and the organic lesions which may be attributed to acclimation." 12. The St. Lager Prize of 1500 fr., for the experimental production of enlargement of the thyroid gland by the administration to animals of substances derived from the water and soil where goître is endemic. 13. The De Alfaro Prize of 2000 fr., for "an investigation of the means by which a larger employment of moral treatment, and an increase of the means of active employment, may be attained in public or private asylums for mental diseases. 14. A Prize of 1000 fr. is offered by the Committee for the Hygiene of Infancy for the best essay on Artificial Suckling.

Collége de France.—To the great regret of many of his admirers, Prof. Charcot has withdrawn from the contest for the post of successor in the chair of medicine to Claude Bernard; and Prof. Brown-Séquard has been presented to the Minister as the candidate recommended by the Professors of the College.

The Harvey Tercentenary Memorial Fund.—The meeting of London subscribers which was to have been held on Wednesday last, did not, in consequence of a resolution passed by the London Executive Committee, take place. Instead of it, there is to be a meeting of all the subscribers at the Royal College of Physicians, Pall-mall East, on Tuesday next, the 18th inst., at 5 p.m. The business of the meeting will be the following:—1. To receive a report from the London Executive Committee; 2. To receive a report from the auditors; and 3. To consider other important matters in connexion with the objects of the subscribers.

REVIEWS.

Illustrations of Clinical Surgery. By JONATHAN HUTCHINSON, F.R.C.S. Vol. I. London: J. and A. Churchill. 1878.

MUSEUMS may consist of either specimens or plates. Collections of the former are necessarily limited in value, because everyone has not constant access to them. Collections of plates are more accessible, and therefore even more valuable when published at a reasonable price, if they be well selected and well executed.

In the present volume we have presented to us an instalment from the collection of one of the most accurate observers and profoundest thinkers of the day. All Mr. Hutchinson's work bears the impress of minute, thorough, and painstaking investigation, of the John Hunter stamp, and one instinctively feels that it is work that will endure, and even be enhanced in value by, the test of time. The present volume is no exception to this. It consists of a series of plates, and an accompanying series of observations, bearing on some of the rarer or less known subjects of surgical interest.

The plates are most beautiful delineations, commending themselves at once to those who have witnessed similar appearances, by their faithfulness and accuracy. The author now and then points out some shortcoming in them himself, but it is really hardly necessary to call them inaccurate. With the exception of those of xanthelasma palpebrarum, which, like all plates of skin diseases, are only an approximation to truth, all the delineations in the work are as perfect as in the nature of things can exist.

The accompanying observations do not fall behind the plates in merit. Some of the chapters, such as those on Xanthelasma, Chancres, Mercurial Teeth, and Vaccine Syphilis, are models of careful and exhaustive work, well grouped and sufficient facts, with consequent logical and unassailable conclusions deduced from them, without confusion and without prolixity. We question much whether better work has ever issued from the hands of any medical or surgical writer.

The volume indeed deserves the highest praise we can give it, and were we disposed to make any adverse criticism, there is hardly any portion we could assail. We would differ from the author in his opinion concerning the removal of orbital exostoses, as in our experience these frequently grow as much into the interior of the skull as into the orbit, and have very usually such attachments as make removal an impossibility. We would also point out that recent investigation has shown that the hydrocele of the neck is sometimes a blood-cyst taking the place of an absent internal jugular vein, and opening below into the innominate vein; and we confess that in the operation of trephining our practice is to use the chisel and mallet where the author uses the trephine for the removal of depressed bone.

But doctors will always differ, and we rise from the perusal of the work with the feeling that from it we have learnt much, that many of our unformulated convictions have been strengthened, and that we feel ourselves on a firmer basis in the subjects Mr. Hutchinson has treated in the present volume.

The style of printing, both in letter-press and plates, leaves nothing to be desired, and we can sincerely congratulate the author on his publishers, and the publishers on their author.

A Course of Operative Surgery. With Coloured Plates. By CHRISTOPHER HEATH, F.R.C.S., Surgeon to University College Hospital, etc. London: J. and A. Churchill. 1876-77. Five Parts.

THE surgical profession may well welcome a course of operative surgery by so able an anatomist and surgeon as Mr. Heath. The experience he has gained during twenty years' teaching of operative surgery is incorporated in this work, and, coming from the hands of so careful an observer and enthusiastic teacher, it could not fail to be a valuable addition to publications on operative surgery. The descriptions are for the most part clear and concise, and the diagrams represent truthfully the parts interfered with during the operations. It is a pity that one so well able to handle the subject as Mr. Heath is, prefaces his work by the statement that the subject is not treated exhaustively. However, although the work is not proposed to be exhaustive, still there are some important omissions, and most markedly that of ovariotomy. Most operators know the details of the more common surgical operations, and it is only on subjects of occasional occurrence that they wish to consult authorities. We were struck when reading the book that the descriptions of operations were all dead-body details. Thus, the moment one reaches the stone in the bladder, the moment the stricture is cut in hernial operations, the details practically cease. Now, the operation cannot be said to be complete until the patient is removed from the operating-table, and although the minutiæ in regard to dressings in all operations are out of the question in a work of the kind, still there are many difficulties to be encountered after those that have been mastered by dissecting-room experience cease. Unless Mr. Heath heads his work as "A Course of Operations on the Dead Body," he can have little excuse for omitting these.

The advice to use the director as little as possible in the exposure of arteries is, to say the least of it, doubtful advice to any except those in constant practice. The directions how to proceed when an artery is approached are meagre. The heading to the chapter on the Tibial Arteries is hardly worthy of one in Mr. Heath's position. That he should condescend to describe the tying of arteries for no practical value but for the purpose of examinations is surely departing from the tone the work ought to assume. Examinations ought not to be—although in this country they largely are—the guides by which a man is to shape his thoughts and writings. The examination-level is a groove that has done much harm, and it is a pity that Mr. Heath should foster the notion that special works are required to be written for them.

The practical recommendations are trustworthy, and the anatomical details all but correct. In the operation for ligature of the common carotid below the omo-hyoid, it is unnecessary to alarm the operator about the descendens noni, as the nerve is on the inside, and not on the sheath below the level of the omo-hyoid muscle. The brachial artery rests on the outer and middle, and not on the inner head of the triceps. The possibility of opening the pharynx is conceivable behind, but not in front of the posterior belly of the digastric. The advice to use the bivalve tube in tracheotomy is surely a mistake. The adhering to the usual methods of describing and performing flap amputations in the middle of the arm and thigh are sufficient to alarm all but those who are in constant practice on the dead body; as the possibility of transfixing vessels or nerves must alarm many an operator who may be far from any means of gaining confidence in operations but from such a text-book as this.

The diagrams are very clear, and help largely in following the details of the operations. One or two plates, however, would be little missed; notably plates 9 and most of 13. The attempt to impress the position of arteries in flaps by plates is not, in our opinion, successful; the figures are too sketchy to be of any practical value. With a few such exceptions the work is so good that we are almost ashamed to take exception at all. Of its kind it is the best we know. Nevertheless, it is from a friendly critic that an author learns best how to make improvements in subsequent editions of his work.

Insanity in Ancient and Modern Life; with Chapters on its Prevention. By DANIEL HACK TUKE, M.D. London: Macmillan and Co. 1878.

DR. HACK TUKE has lately given to the public another of the books which, while interesting and suggestive to the medical practitioner, are highly instructive to the public at large. The present work, like those which we already owe to the same author, exhibits deep research in various directions, and teems with allusions and quotations which prove the author to be not only an accomplished psychological physician, but a scholar of no mean order. The book is divided into three parts, in the first of which Dr. Tuke has made an inquiry into the prevalence of the causes of insanity among the nations of antiquity, and he has brought a very considerable amount of antiquarian lore to bear upon the subject. As there are no means of proving to what extent insanity itself was present in those nations, Dr. Tuke has taken *seriatim* the causes found at the present day to be most

concerned in the production of mental disease, and, by ascertaining, so far as possible, the degree in which these causes prevailed in bygone times, he has endeavored to arrive at some conclusion regarding the frequency of occurrence of insanity in the various epochs under consideration.

Dr. Tuke classifies these causes broadly as follows:—(1) Intoxication, both in its influence on the individual and on his offspring; (2) Defective nourishment and bad hygienic conditions of every description; (3) Moral and emotional causes of all kinds; (4) Intellectual strain.

In the various ancient civilisations most of these causes seem to have come into play, but the most universal was the abuse of alcohol, which can be traced back to the most distant times of which we have record. In each civilisation as it grew older these causes came into greater and greater prominence, and degeneration of race was doubtless accompanied *pari passu* by increase in insanity. One thing, however, is certain, namely, that there was no accumulation of hopelessly insane persons in those countries. In some cases they were killed; and when this was not the case, they were suffered to die by neglect.

Having examined into the probable relation of insanity to life under the old *régimes*, Dr. Tuke passes on to its bearing on modern life as it affects (1) the working classes, and (2) the higher classes. In his inquiry into the relative frequency of insanity in these two classes Dr. Tuke has not been able to arrive at any very definite results, on account of the difficulty of obtaining statistics of sufficient accuracy; but the conclusion he has himself come to is, that it is on the whole more common in the lower than in the upper strata of society. The causes at work are different in the two cases. On the one hand we have drunkenness, grinding poverty, and bad hygienic conditions of every description; on the other we have to take into account overwork and its opposite, want of definite occupation; mental anxiety and worry, and religious excitement. Drunkenness has been found by Dr. Tuke to be the immediate cause of 12 per cent. of all cases of insanity. As Dr. Tuke remarks, however, this probably does not give us the true measure of the influence of alcohol in the production of mental disease, for we should have to add cases in which the disease was attributed to causes other than drunkenness, but which causes were themselves traceable to intemperance, and also those cases where an hereditary tendency to insanity had been set up by drunkenness in past generations.

Dr. Tuke dilates fully on the relative influence of overwork and anxiety. Next to drunkenness they are, perhaps, the most important factors in the production of insanity in the present day, and the latter of the two far more so than the former. The two conditions generally go hand in hand, for the tendency to overwork is, in by far the larger number of cases, induced by anxiety of some sort—either the anxiety of a young man to distinguish himself in his examinations and thus smooth his way to future success in life; or the anxiety dependent upon a professional or literary career, where the support of himself and his family depends upon the quality and quantity of work accomplished by a professional or literary man; or the anxiety inseparable from the conduct of a large business in these days of over-competition. The probability is that overwork in itself, apart from anxiety, is only a minor element in the causation of insanity, partly, no doubt, because disturbance of the emotional side of the mind is far more efficacious than simple overstrain of the intellectual centres in the production of disease; and partly because without the constant stimulus of anxiety to go on with work, the intellectual centres would break down at a much earlier stage, and, the reparative powers being consequently greater, the ulterior results would be far less severe. Where men in their prime are striving for their living, either in a profession or business, we are afraid that there is no means of lessening the wear and tear and friction inseparable from all pursuits in which competition is developed to its fullest extent; and in such cases the remedy must be sought in careful regulation of the habits and rigid attention to the rules of health, in order that heavy work may be performed with the least possible strain to the system. It is of this branch of the subject that Dr. Tuke treats in the third division of his book, under the term "auto-prophylaxis"; and it is this part of his work which will prove of the greatest practical utility. As its name implies, it is especially written for the general public. As a rule, we think that descriptions of disease for general reading are undesirable, for the class of persons who take up such books is largely composed of valetudinarians and persons with a tendency to hypochondriasis, and we have known no small mischief arise from the perusal by such persons of medical works. In the present case, however, these remarks do not apply: the subject is treated so carefully, and the remedies described are so simple, and so easily within the reach of everyone, that this section of Dr. Tuke's work cannot fail to be useful to a large number of persons. In his chapter on "Warnings of Danger" he calls attention to a series of symptoms, such as insomnia, depression of spirits, morbid irritability of temper, nervous dread, etc., which are only too common, and which in nearly all cases indicate a condition of things that, if neglected, will lead to a complete break-down of brain power, even though it may not end in actual insanity. A large number of persons who suffer from these premonitory signs of mental exhaustion allow the symptoms to go on until they have assumed an aggravated form before consulting a physician, by which time it is often too late to effect a complete cure. It is highly important, therefore, that the general public should get more information on such points, that they should be ready to recognise symptoms of this description at an early stage, and should learn that they are only forerunners of worse evils.

We have said that the remedy against overwork and concentration of work in the case of professional and business men, who are taking part in the great struggle of existence, can be sought alone in this "auto-prophylaxis," and that it is useless to attempt to stay the strong tide of the world's business, or to smooth in any appreciable degree the path for those who plunge into the vortex of modern competition. The case is altogether different when we come to deal with the matter of education, for here the control lies to a very considerable extent in the hands of those who frame the regulations which form the basis for the curriculum of study, and who set the standards for the various examinations. It is true that "auto-prophylaxis" must not be neglected here more than in the other forms of overwork; but less is to be expected from individual care for their health in the case of young students than in the case of older men, not only because they are thoroughly inexperienced and are not on the look-out for danger, but also because in their youthful energy and enthusiasm they are more apt to make serious calls on their reserve capital, and on the strength of this to go on in seeming good health, until at last the collapse comes, which is all the more complete for having been longer postponed.

It is not possible for teaching bodies, and still less so for examining boards, to prevent an occasional thorough breakdown, with permanent results of a more or less disastrous character, on the part of a certain proportion of their students; for there must be examinations in which competition takes a prominent part, and some students are sure to compete whose health will give way under the tremendous strain. In this case we are afraid there is no help for it, and the few will have to be sacrificed for the sake of the general advantage to be derived from the system. In ordinary teaching, however, and in pass-examinations where there is no competition, the matter lies very much in the hands of the authorities, and we are not sure that the responsibility is in all cases recognised. Dr. Tuke brings forward a number of instances in point; for instance, he quotes from Mr. Brudenell Carter the case of a "large public school in London from which boys of ten to twelve years of age carry home tasks which would occupy them till near midnight, and of which the rules and laws of study are so arranged as to preclude the possibility of sufficient recreation." Dr. Tuke adds—"The master of a private school informs me that he has proofs of the ill effects of overwork in the fact of boys being withdrawn from the keen competition of a public school career which was proving injurious to their health, and sent to him, that they might, in the less ambitious atmosphere of a private school, pick up health and strength again;" and he further quotes from a letter written to him by a gentleman on the committee of an endowed school—"In the five years I have been here, it is beyond dispute that three boys have died from over-study, and another is hopelessly injured. I do not believe that the damage has ended there, but if a boy lives it is difficult to measure the injury done, and hence some will dispute it."

From our own experience we could all of us multiply instances of this description, where young and inexperienced lads, whose studies should have been closely watched and directed, have been allowed to hopelessly overstrain their intellects. There can be no doubt that in many of our great schools much more care should be paid to this matter, and a much closer oversight kept of studious boys whose zeal outruns their discretion.

As regards pass-examinations, we think that, with very few exceptions, these are not of so stringent a nature as to involve great risk to the brains of the candidates, if the work has been properly distributed over the time available for preparation, instead of being put off till the last moment. But now that the examinations of the London University have been thrown open to women, and women are admitted to many courses of lectures in various colleges, we would lay the greatest stress on the responsibility attaching to such university and collegiate bodies to exercise the most watchful care in this respect, and to use their utmost endeavours to reduce the chances of mental or bodily break-down to a minimum.

In conclusion, we have to thank Dr. Tuke for an interesting and suggestive work, and we trust that the attention he has drawn to the matters of which we have above spoken will be productive of greater care on the part of those with whom the responsibility lies.

Gunshot Injuries, their History, Characteristic Features, Complications, and General Treatment. By Surgeon-General T. Longmore, C.B., F.R.C.S., Honorary Surgeon to Her Majesty, etc. London: Longmans, Green, and Co. 1877.

The author of this work has done good service in publishing so detailed and accurate a history of gunshot wounds, for it is of great interest to watch the ever-varying nature of these wounds, and to compare the injuries inflicted by one kind of firearm with those produced by another, either during the same or different periods of time. The work is divided into sections, the first of which treats of "gunshot injuries and the means by which they are produced," giving, in addition to their distinguishing features, a description of the agents—guns, explosives, and shot—by which these injuries are brought about. We gather from the author's remarks that the present breech-loading firearms are more dangerous than their muzzle-loading predecessors, chiefly on account of the infinitely greater number of shots which can be fired, and the consequently greater number of men wounded in a given time. In Section 3, when speaking of the tracks of bullet-wounds, we notice that Mr. Longmore says nothing of the so-called "Lochschüsse"—penetrating wounds of bone. We ourselves have seen many cases in which the shaft of a long bone, such as the tibia, femur, or humerus, has been traversed by a bullet, leaving a mere hole, and without any fracture or even splintering of the bone. These wounds were chiefly produced by chassepôt bullets, and nearly always at very short distances. The most typical "Lochschüsse" occurred at the upper or lower extremities of long bones. We are not quite at one with our author in thinking that mere velocity means greater amount of destructive power; for wounds (especially of the soft parts) produced by bullets travelling at a high velocity present the characters of incised rather than of contused wounds (such as result from bullets travelling at a slower rate), and their danger to life is proportionately less. Not only so, but the wound produced by a bullet, the velocity of which is high, produces a more local effect—that is, there is less general shock; and the reason appears to be that the elasticity of the whole structure has not time to come into action as assistant to the part which is attacked by the shot. When the velocity of a bullet is small, the bullet is stopped by the united effort of the frame, and not by the local part which it strikes; hence greater shock. In the former case the shock is only great when a part of vital importance is injured. The difference, in effect, may be practically illustrated by the effects of target-practice, as seen in "perforated" or "racked" targets.

After a general survey of the subject, the author proceeds to discuss, in a very thorough manner, the special features of gunshot-wounds, and gives the complications to which they are subject. Pyæmia, tetanus, hospital gangrene, are each and all carefully considered. The administrative arrangements are also discussed. Mr. Longmore's book will take rank as one of the most exhaustive treatises on the subject of which it treats.

The Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the United States for the Fiscal Year 1875—John M. Woodworth, M.D. Washington: Government Printing Office. 1876.

The Marine Hospital Service of the United States appears to have been established in the year 1798, and was reorganised on its present basis in 1871. A great many of its duties are analogous to those performed in this country by the Board of Trade. Offices for duly appointed surgeons and hospitals under their supervision are established at ninety-four sea and inland ports of America for the treatment of seamen of the mercantile marine, and during the year to which this report refers 15,009 sick and disabled men received advice and assistance. To meet the expenses incurred in keeping up these hospitals, a hospital tax is levied on native vessels, collected by the officers of the Customs, who are accordingly constituted custodians of these buildings at the ports where they are located; but Dr. Woodworth recommends a change in this respect, inasmuch as he considers that the surgeons in charge should be the proper custodians. The crews of foreign vessels are permitted to use the hospitals of the Service on payment of a certain sum for each patient; and men of the United States Navy and other Government services of that country are admitted on a similar method of payment. The condition of the hospitals of the Service mentioned in this Report can hardly be returned as satisfactory, since they are most of them described as being constructed on a defective plan, the result of having been built so many years ago, before the sanitary arrangements of the present day had come into force.

Very ample medical and surgical statistics are given for the year under notice, and the appendix contains contributed papers on yellow fever, syphilis, consumption, scurvy, and the use of the seton in paralysis and epilepsy, by medical officers belonging to the Service. It is only necessary to add that the Report, which consists of 229 pages, is got up in the finished and complete manner which distinguishes similar productions published on the other side of the Atlantic.

The Ottoman Red Crescent Society has given notice to all foreign surgeons in its employment, whose contracts terminated at the close of the past month, that those contracts will not be renewed. Most of the surgeons had served in various ambulances in Europe and Asia.

Sore Nipples.—Dr. Brochard, so well known by his efforts in favour of maternal suckling, observes that sore nipples are often due to the habit which many young mothers have of applying mallow lotions to them, which only render the mucous membrane unnaturally tender. These young mothers also frequently induce sore nipples by the practice of applying the child to the breast every few minutes. On the other hand, the same effect is produced by following the advice of many nurses to defer commencing suckling to the second or third day. The breast then has become hard and swollen, and the infant cannot draw milk by sucking. However, from whatever cause sore nipples may arise, Dr. Brochard strongly advises abstinence from employment of any of the numerous remedies (especially those of a greasy character) which are being constantly recommended as infallible, and as constantly falling into disuse. Instead of these he recommends, however deep or extended the chaps may be, the following simple procedure:—Wash the nipple in pure water and carefully dry it, and then powder it and the sores well with suberine, *i.e.*, the impalpable powder of cork. This, too, is much to be preferred in the hygiene of infancy to the inert powder lycopodium, for it is cheaper and contains some tannin. Over the suberine is to be placed a portion of gold-beaters' skin cut star fashion, in the centre of which some apertures have been made by means of a very fine needle. Whenever the infant is about to suckle, the suberine is to be washed off and the gold-beaters' skin reapplied, by means of which the child will suck without causing any pain. When it has finished, the suberine and the gold-beaters' skin are to be replaced; and so on every time. This simple treatment always succeeds.—*Rev. Méd.*, May 20.

GENERAL CORRESPONDENCE.

THE AMENDED MEDICAL BILL.

[To the Editor of the Medical Times and Gazette.]

SIR,—I trust that you will give me an opportunity of saying a few words on what occurred to me after reading the amendments on the Medical Acts Amendment Bill. As I understand the Bill, it means that the several medical authorities should altogether give up their individual qualifying or licensing powers, and form conjoint examining boards for the purpose of granting *registrable qualifying certificates*—in other words, that they should combine for their own destruction, or for the performance of what may be called *the happy despatch*. As the Bill reads, to me it might be headed, "An Act for the Disestablishment and Disendowment of the Medical Authorities in the United Kingdom." The suggestion for this proceeding was made by the Lord President of a Liberal Government, to whom such practices were familiar: but it is more difficult to understand how it came to pass that the Lord President of a Conservative Government was moved to adopt the suggestion and carry it out. If other members of the profession feel as I feel, the noble lords have undertaken a more serious task than they imagine; and I believe that they will find it more difficult than they anticipate to humiliate the medical profession by converting the whole body into persons holding licences to practise, like publicans and cabmen. Indeed, one may next expect to see us provided with badges hung at our buttonholes. I ask for your powerful influence to assist the profession in resisting this revolutionary and degrading proposal. I am, &c., MINIS SUBJECTUS.

ON SOME ARMY MEDICAL MATTERS.

[To the Editor of the Medical Times and Gazette.]

SIR,—We have heard more than once the question asked by men in office, What do the doctors want? War Secretaries have expressed their desire to satisfy the legitimate demands of medical men, if the latter would only agree among themselves as to what it was they really required. A Committee is now sitting to try and ascertain the true causes which prevent young surgeons from entering the Army Medical Department; and while we wait patiently for the conclusions they may arrive at, I would ask another question, What is it that the authorities want? There are reasons for thinking that heads of departments are as much confused in their minds as to what the public service requires from State-paid doctors, as doctors are with regard to the payment they require for their services to the State. There would seem to be but a faint belief in some official minds as to the necessity for any Army Medical Department, even while the Secretary for War is apparently doing his utmost to consolidate and increase its power. The military chiefs hold in theory that it is absolutely necessary that highly-trained Army Surgeons should alone be employed with troops in the field; and the last "Field Hospital Regulations" go so far as to direct that civilian practitioners employed with an army should be kept for duty in "stationary hospitals" only, leaving the men under fire to the care of trained Army Surgeons at the different "dressing stations." And yet we find that the guardians of the public purse are quite willing, for the sake of economy, that civilian surgeons should be employed at the Cape of Good Hope, to serve with the troops now fighting against "the Kaffirs." But surely it is ill-judged to enforce this small economy now, if the War Office is sincere in its belief that medical aid can only be efficiently rendered by Army medical men. It is surely inconsistent to suggest special training to the medical officers of our volunteer corps as a necessity if they should desire to serve with their men under fire, and at the same time practically to admit that at the Cape of Good Hope it is immaterial whether the doctor serving with the troops has had any special training whatever!

It may be urged that there is another reason besides economy which suggests the employment of civilian practitioners at the Cape; for England may before long be at war with an European power, and require the services of all the Army Medical Officers she can lay her hands upon. Well, I hold with Antony's great captain, who replied to the assertion that small to greater matters must give way—"Not if the small come first." No wonder that the idea is spreading among the general public that one doctor is just the same as another. A letter has appeared in the *Times*, dated May 23, which is startling in its suggestiveness. The writer says—"Were you to propose that each regiment should have one medical officer, a surgeon-major, attached to it permanently, and, on its being raised to a war footing, that the commanding officer should obtain a second medical officer, or third or fourth if you please, the difficulty of providing recruits for the Medical Service of the Army would be at an end." Now, the *Times'* correspondent seems to suggest the annihilation of the Army Medical Department. It is obvious that while medical recruits will not come forward for service in the Army, no commanding officer could obtain a second, a third, or a fourth medical officer by simply applying to Whitehall-yard. The proposal of the writer is that the commanding officer should be permitted to nominate medical officers drawn from the great body of civil practitioners; and the meaning of the letter coincides with the teaching at the Cape, that in time of danger one medical man is as good as any other. There is yet another question affecting the medical profession which seems rather to puzzle statesmen and doctors alike. The reorganisation of the Indian Medical Department is in contemplation. Now, a "leading article" in the *Times of India* of April 22 says—"It will be the policy of Government to introduce into the civil branches of the Medical Service as large a number of native practitioners as possible, not only as a matter of economy, but because also it is believed that there are numerous posts in the Medical Service in the hands of European officers, which could be equally well filled, and in some cases even more appropriately filled, by a native." It strikes me that the substitution wholesale of natives for Europeans for employment in the Indian Medical Service, tends to the annihilation of the Indian Army Medical Department. Civilian employment has long been the coveted prize, and in the *Bombay Gazette* of March 25 we find a medical officer not only protesting against the removal of military medical officers, but positively stating that the civilian training is an absolute necessity to insure the efficiency of an army doctor. "M.D." writes:—"If we were to have the charge of native regiments alone, our medical knowledge would deteriorate. The cases in a native regimental hospital are of the most uninteresting kind; there is nothing to stimulate inquiry, and no prizes to promote a friendly rivalry; and hence the regimental surgeon becomes indolent, and may fall behind in knowledge. In campaigns it has frequently occurred that civil surgeons have been taken to fill important charges in the field, and the results have justified the selection." I am ready to make every allowance for the special requirements of India, but it is certainly curious to find that at Aldershot nothing will be accepted but the exclusively military doctor, while at the Cape the civilian practitioner is found to do nearly as well, and is by far the better man of the two in India! The truth is, of course, that a slight army training is a necessity for all civilian practitioners, to enable them to be as useful as they should be in the field, and that the training should always be insisted upon, and never overdone. The authorities at the War Office require perhaps a little too much, while those who rule the destinies of the Cape are satisfied with too little. I like no strong distinctions between civil, military, and naval practitioners, although the civilian must consent to take some routine instruction from the members of departments which have themselves been formed and are based upon civilian teaching in the large medical schools. I conclude with again asking, What is it that the authorities really require from the doctors?

I am, &c., A MUCH PUZZLED SURGEON.

PUBLIC HEALTH DEMONSTRATIONS.

LETTER FROM Mr. J. TEEHARNE.

[To the Editor of the Medical Times and Gazette.]

SIR,—From a note at page 638 of your journal for the 8th inst., it appears that the magistrates of Buda-Pesth have given their consent to Professor Fodor to conduct demonstrations at the various sanitary works and institution of the town, for the benefit of his pupils.

Instruction in public health is very difficult to impart

without demonstrations on actual appliances and works connected with sanitation. Knowledge that may be acquired by an hour's inspection of a sanitary process or institution is incomparably more useful and complete than such as might be gained in several hours from lectures and books.

It would be both interesting and useful for students of public health to know what provisions exist at the various medical schools of this country for practical instruction in the subject. The general impression is that in most schools the teaching is entirely theoretical. As to the Edinburgh Medical School this is not true, for the instruction given by Dr. Littlejohn, Lecturer on Medical Jurisprudence and Public Health, is eminently practical. As Dr. Littlejohn holds in addition the appointments of Police Surgeon and Medical Officer of Health to the city, the students under him have unusual advantages, as they are admitted to the mortuaries, etc., on the one hand, and to all sanitary institutions and works on the other. For many years Dr. Littlejohn has been able to afford his pupils advantages that are only now afforded those of Professor Fodor. All places of interest, from a sanitary point of view, are regularly visited and exhaustively examined and explained. As one instance of the usefulness and practical nature of these demonstrations, I may name that of comparative pathology, and the manner of determining whether meat is diseased or not. These demonstrations were conducted in the pathological room of the public *abattoir* on abundance of material. This is a kind of instruction which our medical officers of health stand very much in need of, in order to enable them to arrive at something like a scientific decision.

I am, &c.,

JOHN TREHARNE, M.B., C.M., B.Sc. Edin.

Edinburgh, June 10.

VOLUNTEER AMBULANCES.

[To the Editor of the Medical Times and Gazette.]

SIR,—As volunteer aid has been applied for, and appears likely to supplement the Army Medical Department in its present difficulty, perhaps a few extracts from the "Report on the Organisation of the American Ambulance during the Franco-German War," by G. E. A. Crane, M.D., Secretary, would be acceptable and worthy of insertion in your valuable and influential journal. Enclosing my card,

June, 1878. I am, &c., S. M., A.M.D.

"During the recent war, the *rôle* of the French sanitary associations was not that of supplementing any existing military service; so far as they acted, they supplanted, not only the Medical Department, but the Government itself; they supplanted the Medical Department completely, and the Government—to speak exactly, I should perhaps say the Intendance—to this extent, that just in proportion as it yielded to the demands made by private charity to assist in taking care of the sick, it abandoned to such charity its responsibility (to the public) for the care and treatment the sick and wounded might receive." . . . .

"Every little coterie was ambitious to have its ambulance, which it could direct and talk about. Hospitals had their 'lady managers,' whose sole qualifications were rank, wealth, and the unconquerable determination to keep at the head of the fashion, through whatever singular paths it might lead. In these private establishments 'the doctor' often played an inconsiderable *rôle*. He did whatever he was told to do; he was obedient and submissive; he was necessary—so was scullion." . . . .

"The name which is given to an army medical department is of little consequence. It must, however, form an integral part of the machinery of the army, be represented by a single person, and be made directly responsible, through that person, for all its acts to the chief of the war department." . . . .

"There can be no place in any well-regulated army for a volunteer health service. It is as anomalous a creation as would be a volunteer ordnance department, or a volunteer commissariat." . . . .

"The French Société de Secours aux Blessés completely mistook its own proper vocation. It misconceived, apparently wilfully, the true province of voluntary effort in behalf of the sick and wounded of armies, and, a new field once opened to it, seemed even at times to be led on rather by an inordinate desire of securing to itself official and popular power, and the brilliant insignia of a new order of hospitallers, than by a desire to fulfil in the most effective manner the conscientious duties of charity and citizenship." . . . .

"In war there may be large and frequent opportunities for the exercise of private charity and benevolence, but an unlimited exercise of these sentiments must often be incompatible with the public welfare, the welfare of the army, and with a wise humanity itself. The Army Medical Department has been created for the sole purpose of giving succour to the sick and wounded. If composed of the proper personal elements, when clothed with sufficient power, and provided with the necessary means, it would serve the purpose of its creation as perfectly as is possible—certainly much more perfectly than a heterogeneous society of civilians, foreign to the army, slightly acquainted with its necessities, and uncontrolled by its discipline." . . . .

MEDICAL NEWS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College having undergone the necessary examinations for the Fellowship, at the half-yearly meetings terminating on the 3rd inst., were reported to have acquitted themselves to the satisfaction of the Court of Examiners, and at a meeting of the Council yesterday, the 13th inst., were admitted Fellows of the College, viz.:—

Boulter, Harold Baxter, L.R.C.P. Lond., Hull, diploma of membership dated July 27, 1874, student of St Bartholomew's Hospital.
Brockman, Edward Forster, L.R.C.P. Lond., Addison-gardens North, Kensington, November 14, 1865, of St. George's Hospital.
Cross, Francis Richardson, Redland, Bristol, January 25, 1871, of King's College Hospital.
Edwards, Frederick Swinford, L.R.C.P. Lond., St. Peter's-park, Harrow-road, November 17, 1875, of St. Bartholomew's Hospital.
Firth, Charles, M.B. Lond., Norwich, November 18, 1873, of St. Bartholomew's Hospital.
Frost, William Adams, L.R.C.P. Lond., Ladbroke-square, W., July 22, 1874, of St. George's Hospital.
Hames, George Henry, L.R.C.P. Lond., Leicester, April 20, 1875, of St. Bartholomew's Hospital.
Harrison, Charles Edward, M.B. Lond., Grenadier Guards, January 21, 1874, of St. Bartholomew's Hospital.
Manders, Horace, L.S.A., The Green, Marlborough, November 16, 1875, of St. Mary's Hospital.
Mercier, Charles Arthur, Manchester, July 28, 1874, of the London Hospital.
Paul, Frank Thomas, L.R.C.P. Lond., Rodney-street, Liverpool, July 22, 1873, of Guy's Hospital.
Pughe, Rhinallt Navalaw ap Joan, M.B. Lond., St. Paul's-square, Liverpool, April 22, 1873, of the Liverpool School.
Roth, Bernard Mathias Simon, L.S.A., Wimpole-street, July 28, 1874, of University College Hospital.
Schofield, Robert Harold Ainsworth, M.A. and M.B. Oxon., Cambridge-gardens, Notting-hill, May 23, 1877, of St. Bartholomew's Hospital.
Williamson, George Edward, L.S.A., North Shields, April 21, 1874, of the London Hospital.
Wright, George Arthur, M.B. Oxon., Romford, April 26, 1877, of Guy's Hospital.
Yeo, Gerald Francis, B.A. and M.D. Dub., Albemarle-street (not a Member), of the Dublin, Paris, Berlin, and Vienna Schools.

Five candidates having failed to acquit themselves to the satisfaction of the Court of Examiners, were referred to their professional studies for twelve months. At the same meeting of the Council the following Members of the College were elected Fellows, viz.:—

Houghton, John Hyde, L.S.A., Dudley, a magistrate for the county of Worcester, diploma of membership dated April 2, 1838.
Kellock, William Berry, L.S.A., Stamford-hill, May 5, 1843.
Mann, R. James, Wandsworth, June 26, 1840.

The following Member having been elected a Fellow at a previous meeting of the Council, was admitted as such, viz.:—

Arny, Edward Scott Docker, diploma of membership dated May 1, 1840.

The following were the questions on Pathology, Therapeutics, and Surgery submitted to the above candidates at the written examination for the Fellowship, viz.:—1. Give an account of the changes produced by healthy and strumous inflammation in the tissue of bone and periosteum. 2. How may traumatic rupture of the bladder occur? Describe the diagnosis of such an injury, the chances of recovery, and the measures which might be taken to prevent a fatal result. 3. Describe the operation by which the bones of the wrist and carpal joints, including the heads of the metacarpal bones, may be removed without wounding any large blood-vessels or nerves, and with the least possible injury to other structures. 4. Describe the congenital malformations of the

brain which are perceptible externally, and their diagnosis from other surgical affections with which they might be confounded.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 6 :—

Hine, Alfred Leonard, Oakley-street, Chelsea.
Prince, Herbert Francis, Park-street, Taunton.
Stewart, John McDougall, 12, Cambridge-gardens, N.W.
Taylor, Richard Stanley, Friargate, Derby.

The following gentleman also on the same day passed his Primary Professional Examination :—

Livy, Frederic Young, Manchester Hospital.

NAVAL, MILITARY, &c., APPOINTMENTS.

WAR OFFICE.—Surgeon-Major William Snell retires on half-pay, with the honorary rank of Deputy Surgeon-General. Surgeon-Major William John Page retires upon temporary half-pay.

MILITIA.—Surgeon-Major John William Williams (Westmeath), Surgeon-Major John Laird Gaussen, M.D. (Antrim), and Surgeon George Allen Norman (Royal Monmouth), resign their commissions.

BIRTHS.

BEVAN.—On June 4, at Walter House, New Romney, the wife of Richard Bevan, L.R.C.P., etc., London, of a son.

CORNEY.—On March 13, at Suva, Fiji, the wife of Bolton G. Corney, M.R.C.S., Government Medical Officer, of a son.

EADY.—On June 11, at Turner's-hill, Sussex, the wife of G. J. Eady, M.R.C.S. Eng., prematurely of a son.

FERRIER.—On June 6, at 16, Upper Berkeley-street, W., the wife of David Ferrier, M.D., F.R.S., of a son.

GREIG.—On June 3, at York-place, Clifton, the wife of Charles Greig, F.R.C.S., of a daughter.

HERON.—On June 5, at 40, Margaret-street, Cavendish-square, W., the wife of G. A. Heron, M.D., of a son.

KEALY.—On June 6, at Ashley House, Gosport, the wife of John Robert Kealy, M.D., A.K.C. Lond., of a son.

LEONARD.—On June 1, at Sloane-terrace, S.W., the wife of William Leonard, L.K.Q.C.P. Ire., of a daughter.

MAXWELL.—On June 11, at Wellington House, Woolwich-common, the wife of Theodore Maxwell, M.D., of a daughter.

PEARLESS.—At Tarraville, Australia, the wife of Walter R. Pearless, M.R.C.S., of a daughter.

ROBERTSON.—On June 6, at West Dulwich, the wife of W. B. Robertson, M.D., of a son.

ROBERTSON.—On June 6, at The Friarage, Penrith, the wife of J. D. Robertson, M.D., of a son.

MARRIAGES.

ARDEN—SNOAD.—On June 5, at St. Peter's Church, Yoxall, Staffs, George Edward Arden, eldest son of G. P. Arden, Esq., of Roman-hill, Colchester, to Alice, eldest daughter of Edward H. Snoad, M.R.C.S. Eng., Yoxall.

BARK—LOVIBOND.—On June 12, at Farnborough, Ernest G. Bark, L.R.C.P., of 87, Aston-road, Birmingham, to Alice Mary, daughter of J. L. Lovibond, Start's-hill, Farnborough, Kent.

BARNARDO—BULLOCK.—On June 8, at St. Peter's, Bayswater, Frederick A. E. Barnardo, L.K.Q.C.P. Ire., L.R.C.S. Ire., to Isabelle Florence, youngest daughter of the late Samuel Bullock, of Lyddington, Rutland.

COCKBURN—JENKINSON.—On June 5, at Yealand Conyers, Jamison Cockburn, M.B., C.M., of Ulverstone, to Eliza, elder daughter of John Jenkinson, Esq., of Yealand.

COCKIN—MOXON.—On June 4, at Brigg, the Rev. I. B. Cockin, B.A., Vicar of Esholt, to Frances Charlotte, youngest daughter of James Burdett Moxon, M.R.C.S., of Brigg.

NEWBERRY—MANSFIELD.—On June 4, at Highgate, James Newberry, son of J. Newberry, M.R.C.S., of Leonard House, Barnsbury, to Ellen B. Mansfield, stepdaughter of W. Ruddock, Esq., of Southwood, Highgate, N.

PARKINSON—HUNT.—On June 6, at St. George's, Hanover-square, Richard Colvill Parkinson, L.K.Q.C.P. Ire., Surgeon Army Medical Department, to Edith Annie, third daughter of Thomas Hunt, Esq., of The Holt, Middleton Cheney, Northants.

PIERCE—PEARSON.—On June 6, at Rusholme, Frederick Morrish Pierce, M.D., of Manchester, to Hannah Sophia, only daughter of John Pearson, J.P., of Heald Grove, Rusholme, Manchester.

POCOCK—KAYESS.—On June 8, at St. George's, Hanover-square, Thomas Charles, second son of William Pocock, M.D., of Brixton, to Jane Tucker, eldest daughter of William Kayess, Esq.

POOLE—SPOONER.—On June 5, at Bayswater, George Devereux Howel Poole, to Gertrude Emily, youngest daughter of E. O. Spooner, F.R.C.S., of 14, Stanley-crescent, Kensington-park-gardens.

THOMPSON—HORNER.—On June 6, at Shrewsbury, Edward Turner Thompson, L.K.Q.C.P. Ire., second son of the late William Boxwell Thompson, H.E.I.C.S., to Anna Maria, second surviving daughter of the late Captain Horner (55th Regiment), of Market Drayton.

THOMSON—STAINTHORPE.—On June 6, at Hexham, George Thomson, of Annan, to Charlesina Lily, only daughter of Thomas G. Stainthorpe, M.D., F.R.C.S.E.

WELSH—JAMES.—On June 5, at the Cathedral, Bombay, Surgeon-Major J. T. Welsh, M.D., Bombay Medical Establishment, to Harriot Thadea, widow of Dr. R. W. James, of Aden, and daughter of G. C. Myers, Esq., Town Clerk, Montrose, N.B.

DEATHS.

BAKER, HARRIETTE, wife of J. E. Baker, M.R.C.S. Eng., at Teheran, Persia, on June 5.

SQUIRES, WILLIAM WESTBROOKE, M.D., eldest son of the late William Westbrooke Squires, M.D., of Walton, near Liverpool, at Nelson, New Zealand, on April 21, in his 37th year.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

GENERAL HOSPITAL, BIRMINGHAM.—Assistant-Physician. Candidates must be graduates in medicine of a university by examination, and Fellows or Members of the Royal College of Physicians in London, but twelve months from the date of election will be allowed for obtaining the F.R.C.P. or M.R.C.P. Applications, accompanied by diplomas or certificates of registration and original testimonials, to the House-Governor, William T. Grant, on or before June 29.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, N.—Surgeon, Out-Patients' Department. Candidates must be Fellows of the Royal College of Surgeons of England. Applications, with copies of testimonials, to the Secretary, on or before July 2.

HOSPITAL FOR SICK CHILDREN, PENDLEBURY, MANCHESTER.—Junior Resident Medical Officer. Candidates must be qualified both in medicine and surgery. Applications, with testimonials, to the Chairman of the Medical Board, at the Hospital, on or before June 25.

KENT AND CANTERBURY HOSPITAL.—Physician. Candidates must have been practising as physicians for the space of two years previous to election, and be registered as regular graduates in medicine of some University of Great Britain or Ireland, or Fellows or Members of the Royal College of Physicians of London. Qualifications and testimonials to be sent to the Board of Management on or before June 28.

MANCHESTER ROYAL INFIRMARY.—Ophthalmic Surgeon. Candidates must be Fellows, Licentiates, or Members of one of the Royal Colleges of Surgeons of the United Kingdom. Diplomas, original testimonials, and a certificate of age to the Chairman of the Board on or before June 29.

MIDDLESEX HOSPITAL, W.—Assistant-Physician. Applications for the office must be made in writing, and addressed to the Chairman of the Weekly Board, on or before July 2. Candidates must be approved of by the Medical Committee before they can be admitted as candidates by the Weekly Board.

ROYAL HOSPITAL OF BETHLEHEM.—Assistant Medical Officer. Candidates must be Fellows or Members of one of the Royal Colleges of Surgeons, also Members or Licentiates of one of the Colleges of Physicians or Licentiates of the Company of Apothecaries. All applications and testimonials must be accompanied by answers to a printed form, which may be obtained from A. M. Jeffreson, Bridewell Hospital, New Bridge-street, Blackfriars, to whom applications must be forwarded on or before June 20.

SEAMEN'S HOSPITAL, GREENWICH.—House-Physician and a House-Surgeon. The former must be a Member or Licentiate of the Royal College of Physicians of London, or a Licentiate of the Company of Apothecaries. The latter must be a Fellow or Member of the Royal College of Surgeons of England. They must in each case be unmarried and under the age of thirty years. Applications, with particulars of professional qualifications and references as to moral character, to Henry C. Burdett, Secretary, on or before June 27.

WILTS COUNTY LUNATIC ASYLUM.—Assistant Medical Officer. Candidates must be unmarried, duly qualified, and registered. Applications, stating age, accompanied by not more than six recent testimonials, "To the Clerk to the Committee of Visitors," on or before June 15.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population in computed according to the census of 1871.

RESIGNATIONS.

Drayton Union.—Mr. George R. Armstrong has resigned the Fifth District; area 11,201; population 2438; salary £21 per annum.

Poplar Union.—Mr. R. Webb has resigned the Bow District. Mr. D. H. Bastable has resigned the South District.

Thrapston Union.—Mr. Morris has resigned the B District; area 18,295; population 3441; salary £82 10s. per annum.

Totnes Union.—Mr. G. C. Searle has resigned the Brixham District; area 7590; population 7225; salary £45 per annum.

Watford Union.—Mr. Michael D. Lavin has resigned the Bushey District; area 8228; population 6472; salary £70 per annum.

APPOINTMENTS.

Bromyard Union.—Charles J. Connon, B.M. and M.C. Aber., to the Cradley District.

Devizes Union.—John S. Lush, M.R.C.S. Eng., L.S.A., to the Seventh District.

Halifax Union.—Cecil A. Bindley, M.R.C.S. Eng., to the Brighouse District.

St. Thomas Union.—George G. Bothwell, L.A.H. Dub., M.R.C.S. Eng., L.S.A. Lond., to the Topsham District.

THE PHYSIOLOGY OF NERVE STIMULATION.—A course of three lectures, by Mr. Benjamin Thompson Lowne, F.R.C.S., "On the Physiology of Nerve Stimulation," are to be delivered in the theatre of the Royal College of Surgeons, on Monday, Wednesday, and Friday, June 24, 26, and 28, at 4 p.m. each day, of which the following is a syllabus :—Lecture I. *Introductory; Changes in the Sensory End Organs.*—New views as to the nature of force and matter in their relation to nerve physiology; nerve force; the theory of specific sensibilities; Young and Helmholtz;

the kinetic theory of nerves; Fechner and Bernstein; on the nature of nerve stimuli and their relation to the nerve-end organs; pressure; vibrations and chemical stimuli; on electrical stimulation; the discoveries of Boll and Kühne; on the retinal purple; on the nature of the stimulation of the auditory end organs; the views of Helmholtz and Exner; the chemical stimuli; the views of Hering. Lecture II. *Changes in the Nerve.*—The discoveries of Du Bois Reymond; the negative variation; the investigations of Bernstein and their results; the wave theory of nerve action; the relation of nerve to muscle; the interference of waves of stimulation; summation of stimuli; the investigations of Romanes and their relation to the wave theory of Fechner and Bernstein; the observations of M'Kendrick on the optic nerve; Schiff on the evolution of heat in nerves; explanation of Schiff's experiments on the views of Bernstein; Wundt on the mechanics of nerve action. Lecture III. *On the Relation of Sensation to Nerve Stimulation.*—Conduction in nerve centres; specific conductibility and resistance; the psychophysic of Fechner; Fechner's law; the physical facts represented by Fechner's law; the arbitrary hypothesis in Fechner's law; Weber's law; the modifications of Fechner's law proposed by other investigators; various experiments bearing on Fechner's law; conclusion.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

Medical Alliance Association.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

Sir,—My attention has been called to two statements in your columns of Saturday last, which require a notice from me as the Secretary to this Association. The first describes the Medical Alliance Association as an "offshoot of the Medical Defence Association," whereas the fact is, that if there be an "offshoot," the Defence Association is an "offshoot" of the Medical Alliance Association, the latter having been in existence and won three of its prosecutions, under the name of the East London Medical Association, some months before the former was formed. The second statement is, that the profession has no objection to chemists prescribing for "*simple*" cases of illness. I think I am in a position, acquired by my connexion with this Association for upwards of three years, to know *fairly* what the feeling of the profession is upon this point, and that I am justified from that knowledge in saying that it is adverse to any such licence being given to chemists, and for this reason above all the others—that chemists cannot distinguish "simple" cases from dangerous cases. At all events, this Association will continue the course it has hitherto pursued, and so include amongst its prosecutions those unqualified persons who violate the Apothecaries Act by prescribing over the counter; and that this statement is made in earnest may be gathered from the circumstance that single-handed, and without any appeal to other associations or to the profession for help, it has already conducted twenty-seven prosecutions to their termination, and is now energetically engaged in others.

I am, &c.,

Stockwell, S.W., June 3. R. H. S. Carpenter, Hon. Sec.

Thomas Boyle.—Better apply direct to Dr. Henry Martin, Boston, U.S.A., or to Dr. Warlomont, Brussels, who furnish the largest quantity of animal vaccine matter.

A Poor-Law Guardian.—According to the 155th article of the Consolidated Order, it requires that a majority of the votes of all the guardians actually present at the meeting should be given in favour of a candidate for an office or appointment under that Order, in order to constitute a valid election. It is requisite that those guardians who, though present, do not vote should be counted, for the purpose of ascertaining whether there has been an appointment by a majority of the whole number of guardians present at the board meeting. Where two candidates are proposed for election, the one who has the larger number of actual votes will not be duly elected if that number does not constitute an actual majority of the guardians present at the meeting of the board.

The Medical Officer of Health, Llanelly District, and the Registrar.—Mr. N. Edward Atkin, Medical Officer of Health, in his last report to the Rural Sanitary Authority of the Crickhowell Union, concludes by stating that "he was unable to make any remark on the birth-rate, or compare it with the infantile mortality, as on applying to the Registrar for the lower end of his district he was refused the return asked for. He was also unable to complete the returns which have to be furnished to the Local Government Board." The Board thought the incomplete state of the report, in consequence of the information required by the Medical Officer not being supplied by the Registrar when applied for, should be inquired into, and it was resolved that the Clerk should write to the Registrar on the subject.

A Heavy Amercement.—Henry Longdon, a Derby butcher, has been fined £33 10s. by the Ripley magistrates for offering for sale in the Ripley market meat which the Medical Officer of the Local Board testified was part of an animal which had either died without being slaughtered or which had suffered from some acute fever.

A Water-Drinker and its Vindicator.—Mr. Rawlinson, C.B., in his evidence before the Select Committee on the Public Health Act (1875) Amendment Bill, in reply to a question, whether he agreed with a statement in the report of the Rivers' Pollution Commission, that, although rain-water can be occasionally collected under favourable circumstances of wind and rainfall, yet the average of water so collected, even in favoured localities, would probably always be found to be much below the standard of purity which is easily obtained from springs and deep wells, said—"No, I do not believe one word of it; but I am afraid that I have had my attention directed to so-called impure water-supply to such an extent, and that I know so many facts proving that what is termed bad water has little to do with local disease, that I have ceased to care very much as to what chemists tell me, or the medical officers of health, because, if only one-tenth part of what is said about water happened to be true, my only surprise is that a human being lives on the face of the earth." He acknowledged that injurious effects might be caused to the constitution by drinking bad water, but he added—"I do not believe that a hundredth part of the mischief is done by water that is imputed to water. I am before you—the Committee—a sanitarian, a person who has to spend his life in preaching sanitary doctrine, and I could give chapter and verse for my opinions over and over again. I do not say that bad water is to be taken where good water can be got, but I do say this, that many of the charges which are brought against water in modern times have, in my opinion, no foundation in fact."

Official Contrariety.—The question as to who shall maintain the inmates of the Infectious Diseases Hospital at Barrow is agitating the Guardians and Town Council of that town. Each seeks to shift the responsibility on the other. The Town Council, as the Sanitary Authority, built the Hospital a few years ago, and they now produce a return which shows that six-tenths of those who have been treated there were paupers. They contend the Guardians ought to bear the cost of maintenance of all patients in the Hospital as soon as they are destitute. The Guardians are prepared, it appears, to do this, provided the patient is destitute on entering the Hospital. Unable to come to any agreement, the question has been referred for settlement to the Local Government Board. One feature connected with the matter is noticeable—namely, the fact that fourteen of the eighteen Guardians are members of the Town Council,—and the anomaly, therefore, of their disagreeing with themselves.

Mortality among Military Surgeons during the Turkish War.—The excessive rate of mortality among military surgeons during the war with Turkey, compared with that in the combatant portion of the army, has led to an inquiry if such was singular to the late war; and a Russian medical journal, in an article on the subject, compares the ascertained losses of surgeons in former wars with the late war, with the following result:—During the campaign in 1813-15 there were 2170 surgeons in the Prussian army, of whom about 10 per cent. were either killed or wounded, being in about equal proportion to the casualties among the combatants. In the French campaign against Constantine in 1837, while every thirteenth combatant officer was killed, every sixth surgeon died. This, in proportion to the numbers, shows that the mortality among the surgeons (16·66 per cent.) was more than double that of the officers (7·7 per cent.). During the Crimean war the mortality among the surgeons was, according to French official statistics, 18·2 per cent., and among the combatant officers 7·3 per cent. In the late Russian campaign 355 surgeons, out of a total of 2839, have died, being equal to about 12·5 per cent. In the Mexican Expedition the rate of mortality among the surgeons was about 20 per cent., while that of the combatant officers was only about 4 per cent. The Prussian army, during the Franco-Prussian war in 1870-71, is the single instance recorded where the proportion of deaths among the combatant officers was larger than that of the surgeons.

Statistician.—The total English population of the whole of our foreign possessions, including the Crown colonies so-called, such as Jamaica and the other West Indian possessions, did not in 1850 exceed 2,000,000.

The Abuse of Tobacco.—The French Society for Preventing the Abuse of Tobacco announces that during the past year it received 108 manuscript essays in competition for the prizes offered, and that fifteen were from England. Prizes have been awarded to these as follows:—Messrs. Palliser, John, and Sergeant Brown, honourable mention; Messrs. J. Chapman, John Carter, W. Marsh, and Miss Blundell, bronze medals; Mr. James Driver, a silver medal; and Madame Emma Reynolds Pitman, a sum of 200 francs for her essay entitled "Influence du Tabac sur la Jeunesse, les Études," etc.

The Convalescent Home, Kenilworth.—The ceremony of opening the Convalescent Home at Kenilworth took place last week at the new premises in High-street. The building was formerly used as a furniture warehouse; and it was purchased at a considerable cost by Miss Jane Woodcock, of The Firs, from whom the Committee of Management of the Institution have taken it on a tenancy. The Home is very eligibly situated, and twelve beds have already been fitted up for the reception of patients; one room has been set apart for the use of a private female patient, the charge for which will be one guinea per week. Drs. Wynter, Clarke, and Bourne, of Kenilworth, are the medical officers; and the great interest felt in the institution by influential residents of Leamington, Kenilworth, and the neighbourhood, augurs well for its future usefulness and success.

Two Married Brothers.—The Fiji is an exhausting climate, and although fairly well adapted to white men of sound constitution, is by no means a suitable country for women and children. As the rainfall is excessive the evaporation constantly going on is extensive, and thus the air is overcharged more or less with moisture, and acts almost like a vapour-bath. No endemic diseases prevail, and notwithstanding the wearing-out nature of the clime, ordinary health, with care, may be enjoyed. Medical theorists have sent consumptive patients to Fiji, but it is a great and fatal mistake to do so.

Thirsty Work.—The drink taken during "puddling work" by the men is oatmeal and water—nothing stronger.

COMMUNICATIONS have been received from—

Dr. E. Sparks, London; Sir Joseph Fayrer, London; Dr. Thomas Barlow, London; Mr. J. Chattle, London; Mr. H. A. Reeves, London; Dr. J. M. Bruce, London; Mr. T. M. Stone, London; Dr. W. A. Sturge, London; Dr. A. Ogston, Aberdeen; Dr. Ogilvie Will, Aberdeen; Dr. Octavius Sturges, London; Dr. J. F. Smith, London; The Registrar of Apothecaries' Hall, London; Mr. J. T. W. Bacot, Seaton; Mr. A. W. Mayo Robson, Leeds; Dr. John Tarhaane, Edinburgh; The Secretary of the Royal Institution; Dr. Gillespie, London; Mr. Thomas Boyle, New Quay; Messrs. Bowdler and Bickerdike, Church; Mr. M. Becker, London; Dr. R. H. Semple, London; Dr. F. Churchill, London.

BOOKS AND PAMPHLETS RECEIVED—

Report of the Metropolitan Board of Works, 1877—Dr. Ernst Schwimmer, Die Idiopathischen Schleimhautplaques der Mundhöhle—Dr. Moriz Benedikt, Kraniometrische Mittheilungen—Dr. G. M. Kletke, Die Medicinal-Gesetzgebung des Deutschen Reichs und Seiner Einzelstaaten—Jonathan Hutchinson, F.R.C.S., Lectures on Clinical Surgery, vol. i.; part 1—The Transactions of the American Medical Association, instituted 1847, vol. xxviii.—James Mansergh, M.I.C.E., F.G.S., The Thirlmere Water Scheme of the Manchester Corporation—Newcastle-upon-Tyne Borough Lunatic Asylum Report for 1877—Borough of Sheffield Medical Officer's Annual Report for 1877.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Practitioner—Boston Journal of Chemistry—Estudos Medicos—New York Medical Journal—American Supplement to the Obstetrical Journal of Great Britain—Students' Journal and Hospital Gazette.

APPOINTMENTS FOR THE WEEK.

June 15. *Saturday (this day).*

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

Royal Institution, 3 p.m. Prof. H. Morley, "On Joseph Addison."

17. *Monday.*

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

Royal College of Surgeons of England, 4 p.m. Prof. T. Spencer Wells, "On the Diagnosis and Surgical Treatment of Abdominal Tumours."

18. *Tuesday.*

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

Royal Institution, 3 p.m. Rev. W. H. Dallinger, "On Researches in Minute and Low Forms of Life."

19. *Wednesday.*

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Royal College of Surgeons of England, 4 p.m. Prof. T. Spencer Wells, "On the Diagnosis and Surgical Treatment of Abdominal Tumours."

20. *Thursday.*

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

21. *Friday.*

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Royal College of Surgeons of England, 4 p.m. Prof. T. Spencer Wells, "On the Diagnosis and Surgical Treatment of Abdominal Tumours."

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 8, 1878.

BIRTHS.

Births of Boys, 1287; Girls, 1154; Total, 2141.
Average of 10 corresponding years 1868-77, 2133·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	774	707	1481
Average of the ten years 1868-77	673·6	620·1	1293·7
Average corrected to increased population ...	...	...	1384
Deaths of people aged 80 and upwards ...	...	...	36

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	10	3	4	1	22	...	1	...	4
North ...	751729	22	6	9	5	22	...	3	...	6
Central ...	334369	...	4	...	1	9	...	2	2	2
East	639111	1	3	3	5	36	...	3	1	4
South	967692	9	2	11	4	46	2	6	2	9
Total	3254260	42	18	27	16	135	2	15	5	25

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·812 in.
Mean temperature	57·1°
Highest point of thermometer	72·4°
Lowest point of thermometer	40·7°
Mean dew-point temperature	50·4°
General direction of wind	Variable.
Whole amount of rain in the week	0·80 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 8, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending June 8.	Deaths Registered during the week ending June 8.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2141	1481	72·4	40·7	57·1	13·95	0·80	2·03
Brighton	103923	44·1	66	39	71·0	47·0	56·8	13·78	0·08	0·20
Portsmouth ...	129161	28·9	81	42	64·0	49·0	55·6	13·12	0·35	0·89
Norwich	84620	11·3	48	32	73·8	42·0	55·8	13·23	0·70	1·78
Plymouth	73599	52·8	35	28	68·5	49·0	57·1	13·95	0·38	0·97
Bristol	206419	46·4	149	82	71·9	44·0	...	...	0·65	1·65
Wolverhampton ...	74240	21·9	52	27	67·3	39·6	53·0	11·67	1·74	4·42
Birmingham ...	383117	45·6	305	144	...	...	...	...	..	..
Leicester	121473	38·0	91	31	72·5	42·8	56·1	13·39	0·72	1·83
Nottingham ...	165267	16·6	104	47	74·0	38·2	55·5	13·06	1·27	3·23
Liverpool	532681	102·2	397	265	64·8	45·7	54·5	12·50	1·35	3·43
Manchester ...	360514	84·6	259	172	...	...	...	...	...	...
Salford	170251	32·9	134	61	68·8	36·9	53·0	11·67	1·16	2·95
Oldham	107366	23·0	78	44	...	...	...	...	...	...
Bradford	185088	25·6	107	68	66·7	42·0	52·0	11·11	1·22	3·10
Leeds	304948	14·1	225	106	68·0	41·0	52·6	11·45	1·37	3·48
Sheffield	289537	14·7	206	141	70·5	38·7	52·9	11·61	1·19	3·02
Hull	143139	39·4	121	43	70·0	4··0	53·7	12·06	1·43	3·63
Sunderland ...	112459	34·0	83	41	62·0	46·0	51·1	10·62	0·52	1·32
Newcastle-on-Tyne	144570	26·9	101	62	...	...	...	...	...	...
Edinburgh	222371	53·1	147	96	...	...	...	...	...	...
Glasgow	566940	94·0	439	284	62·0	40·5	51·5	10·84	1·23	3·12
Dublin	314666	31·3	180	165	71·4	42·5	57·1	13·95	1·50	3·81
Total of 23 Towns in United Kingdom	8373953	37·8	5849	3494	74·0	36·9	54·4	12·44	1·04	2·64

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·81 in. The highest reading was 30·06 in. on Thursday at noon, and the lowest 29·46 in. at the end of the week.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON THE DIAGNOSIS AND SURGICAL TREATMENT OF ABDOMINAL TUMOURS.

Delivered at the Royal College of Surgeons of England.

By T. SPENCER WELLS, F.R.C.S.,
Consulting Surgeon to the Samaritan Hospital, etc.

LECTURE II.

Semi-solid Abdominal Tumours; Different Kinds of Ovarian Tumours—their Diagnosis—Complications with Pregnancy; Extra-urine Pregnancy—Specimens illustrating various other Conditions resembling Ovarian Tumours; Fibroid and Fibro-cystic Uterine Tumours; Tumours of Abdominal Wall; Tumours of Omentum and Mesentery, of Liver, Spleen, Kidney, and Mesenteric Glands; Cancer and Tubercle; Aneurism; Hæmatocele and Pelvic Abscess; Fæcal Accumulation; Phantom Tumours.

At the last lecture I was speaking about the chemical qualities of the fluid removed in tapping ovarian cysts; and yesterday I had an opportunity of removing from a young lady sixteen pints of fluid, of which this is a portion. You will see that it is very nearly the colour of distilled water. Through this green bottle there is a little tint visible; but if it be put into a white glass jar, there is no colour to be seen, only the very slightest opalescence. The specific gravity is 1006, which is a little more than we occasionally find in these fluids removed from simple cysts. Then the albumen which it contains is not true albumen, but the form I have described to you as being the coagulum which, formed by heat, is redissolved upon the addition of boiling acetic acid; so that the albumen is not true albumen, but paralbumen. On examining for the deposit, there is nothing whatever to be seen, and the fluid may be looked upon as a very fair or typical specimen of that from a simple or single ovarian cyst, or of an extra-ovarian cyst—a cyst formed in the broad ligament near one or other ovary. Yesterday, also, I had the opportunity of removing a single ovarian cyst; and thinking it might interest you to see it, I have brought it here. You will see what a very thin-walled cyst it is, completely single, absolutely free from all adhesions, and the only opening in it is that made by the trocar in emptying the fluid from it, in order that the empty cyst might follow the fluid removed. The case very well bears out what I was saying about the difficulty occasionally met with in ascertaining whether the fluid in a large cyst is really in a cyst, or whether it is free in the peritoneal cavity. The lady was fifty-seven years of age. Last summer the abdomen began to increase in size. She consulted two or three physicians, who all told her she had liver-disease and dropsy, but whether the dropsy depended on cancer or tubercle they did not seem very well to know. Then Dr. Risdon Bennett, the President of the College of Physicians, saw her, and had no doubt at all about the fluid being encysted, and advised the patient to see me. I at once advised that she should be tapped, seeing that the cyst was a single cyst, and possibly it might be one of those cases in which the fluid would not re-form after tapping. I tapped it last October, and eighteen pints of fluid were removed. The lady improved very much in health, and went to Brighton. Last March it was again tapped, about the same quantity of fluid being removed. It was a curious instance of the different reports one gets about the quantity of fluid being removed. The surgeon who tapped her wrote to me that he removed "seven gallons of fluid." I thought it very strange, and on questioning the patient I found instead of being seven gallons it was seven quarts. That is the kind of mistake one sometimes meets with inadvertently made in the reports of cases. After the second tapping the cyst refilled; and as it seemed a case in which mere tapping would be of very little use, it was arranged that I should remove the cyst yesterday, which I did; and here it is. It is a thin transparent cyst, which yesterday contained eighteen pints of fluid, and which came out through a very small opening as soon as it was emptied. As the fluid escaped, so the empty cyst came out. There is nothing more to be said, except that the patient is perfectly free from fever, and in all probability will do very well.

Then I was going on, at the close of the last lecture, to speak about the microscopical examination of the fluids removed by tapping. Long ago, Dr. Hughes Bennett, of Edinburgh, described certain cells, which are extremely well figured in his little book—cells which he considered were quite distinctive of the fluid removed from ovarian cysts. He believed that when those cells were found in fluid, it could come only from an ovarian cyst, and from nothing else. This examination was afterwards carried on, and in my own book on "Disease of the Ovaries," which I formerly mentioned to you, there are about one hundred figures, embracing nearly everything which had been described up to that time as having been found in cysts of various kinds. Mr. Nunn had previously described some of the same sort of granular cells or epithelial cells and granules; and then, in America, Dr. Drysdale, the son-in-law of Dr. Atlee, of Philadelphia, having the opportunity of examining nearly all the cysts removed by Dr. Atlee, carried on this investigation, and described as "ovarian granule cells" that sort of cell which differs very little from the cell which Dr. Bennett described years before as characteristic of the fluid of ovarian dropsy. One supposes these to be simply the nuclei of the epithelial cells which line the interior of the cyst. The scales are thrown off, the cell-wall breaks down, and the nucleus alone remains.

After a good deal of controversy as to the exact meaning and value of these things, whether they are found in ovarian cysts only, or in the kidney, or the spleen, Mr. Knowsley Thornton, who for some time past has examined a great many of the tumours which I have removed, made a great addition to our knowledge in pointing out that, in addition to these cells of Drysdale—which are common only in simple or innocent ovarian tumours—in malignant tumours you have very characteristic groups of cells of different sizes. He describes them as large numbers of large pear-shaped, round, or oval cells, containing a granular material with one or several large clear nuclei with nucleoli and a number of transparent globules or granules. The cells comprising the groups are many of them very large, but the great variety in size and shape is the marked feature of the group. If you will bear these different forms in mind, and these different cells, I believe you will find that they are characteristic, and of great value in the examination of these fluids, putting us on our guard when we have to deal with tumours doubtfully malignant. If these large groups of cells are seen, one may be pretty certain the tumour is malignant of some kind; or if they are found in fluid removed from the peritoneal cavity, probably a sort of infecting process has been going on in the peritoneum from the rupture of an ovarian cyst of a malignant character; these cells may have planted themselves upon some part of the peritoneum and multiplied.

I think, before passing on to speak of the different varieties of semi-solid tumours, ovarian tumours and others, I will just draw attention to this very large cyst of the left kidney which I removed during life; and close beside it is the uterus from the same patient, showing the ligature which has been placed on one of the ureters, and also showing that in the cavity of the uterus there is a polypus. That is one of the points in which we were led wrong in the diagnosis of the case. The patient was a woman, twenty-nine years of age, the wife of an agricultural labourer. She was sent to me from Yorkshire, and was stated to have had an ovarian tumour for some years, and to have been tapped several times. I found that there were cicatrices of the tapping punctures in front of the abdomen, and that the abdomen was distended by this very large cyst. The uterus was large, and it was difficult to make out what the exact connexion between the tumour and the uterus was. I do not think anybody who saw the case had any doubt that it was an ovarian cyst; the only question in the case was whether or not the woman was pregnant, and I proceeded to the operation without the faintest shadow of a doubt that I was trying to remove an ovarian cyst. But, as soon as the abdominal wall was divided, I found I was coming upon something peculiar; that I could not find the peritoneum as one generally does, but came rather upon the cyst-wall covered with a loose layer of cellular tissue, and I then began to think I was dealing with an extra-ovarian cyst, the sort of cyst one often finds covered by an expansion of one or other of the broad ligaments; so I emptied the cyst, expecting to be able to separate it more easily. When it

was empty, I began to try and separate the adhesions. I found the uterus and both ovaries quite healthy; and then, of course, came the question of what should be done. I was disposed to leave it alone, and see what drainage would effect; but so many adhesions had been separated, that that seemed to be rather hazardous; and although I perceived it was a kidney-cyst, I thought I had better remove it, and so I did. I tied the vessels, and the operation seemed to have been completed satisfactorily. The tumour was removed, and there was no very great loss of blood. The patient was put to bed, and for some time looked as if she were likely to go on pretty well; but on the fourth day she died, without any very characteristic symptoms having been observed. There was nothing peculiar in the urine, and nothing more than one commonly sees in cases of ovariotomy where the patient gets an amount of fever after the operation. On examining the tumour, it is seen very distinctly that the kidney has been expanded, as it were, into that large cyst. I thought it might be interesting to bring this specimen under your notice, as showing that we may get very large single cysts simulating ovarian cysts; and that, when they are associated with a large uterus and with a history of ovarian fluid having been removed at previous tappings, it would take a great deal of care indeed to avoid this sort of error.

The case leads me to speak of another which was somewhat similar, in which we did not make a mistake in diagnosis. A certain amount of pointing in the right loin led to a more careful examination of the state of the case, and making an opening into the loin, introducing a drainage-tube, and tapping it antiseptically, keeping the end of the tube covered with a sponge wetted with carbolic acid, and occasionally injecting, that case was completely cured. I do not think that the tumour was so large as the first, but still it did contain a very large quantity of fluid, and fluid which, singularly enough, had a great deal of cholesterine in it. I do not think this has been previously noticed in renal cysts. I will not say more about renal cysts at present, and will proceed, in the order which I have laid down in the printed prospectus of these lectures, to speak of the semi-solid abdominal tumours which one may meet with in great variety. Of these we have several specimens on the table.

Here are four very good specimens of encysted tumours. I will just say a word about the different kinds of ovarian tumour. Here is a very good specimen of the multilocular form, which has been very well injected, showing the arrangement of the vessels of the walls of the cyst: and here is an interesting specimen of a cyst in the ovary from a child only five weeks old. Oddly enough, there were twins; one died at five weeks, and one at seven weeks, and they both had ovarian cysts. There was nothing wrong about the mother, who was a healthy woman.

Solid tumours in the ovary are much more rare than semi-solid ones, but here is a good specimen of a solid tumour which I removed some years ago from a young lady nineteen or twenty years of age, a patient of Mr. Prescott Hewett—a case of perfectly characteristic soft cancer of the ovary. She got well for a time; but a day or two after the stitches were removed there was a partial reopening of the wound, accidently caused by coughing; peritonitis followed, and death. I do not suppose the patient would have ultimately recovered with such a growth as that; but still there would have been a temporary recovery had it not been for that accidental occurrence.

The different kinds of ovarian tumours and their diagnosis of adhesion may be made out by some little attention in the examination of a patient. We can ascertain with a little care whether a cyst is a single cyst with limpid contents, or whether the contents are likely to be viscid, and this will assist us in forming some opinion as to whether one should be content with tapping and drainage, or whether it would probably be ultimately necessary to resort to ovariotomy. The reasons which would induce us to suppose that the cyst is single, and that it probably may be cured by tapping, are that it may have existed for many years without any great effect upon the general health of the patient; or, on the other hand, that it has formed with such extreme rapidity that it is almost certainly mistaken for ascites. You see a young woman whose abdomen has rapidly enlarged (one may sometimes see this one's self, but it is more frequently reported); but I saw it in the case of a young lady I examined many years ago with Dr. Rigby. Neither Dr. Rigby nor I were at first certain that we could discover anything in the abdomen. We thought we could make out a little dulness and doubtful fluctuation, but there was no enlargement; and yet, in three weeks, that cyst was as large as an adult head. It rapidly increased, and had to be removed in three weeks after the first examination. That is a very rare and exceptional case. When you get this very rapid formation of a cyst, it is pretty certain the cyst is a single one; and so also if the cyst has existed a good many years, and the patient has not suffered much from it, it is probably single. And these are cases in which tapping alone may not only afford temporary relief to the patient, as it does, but may possibly complete the cure; the fluid may never re-form. In such a case as this, one can detect no hardening of the cyst-wall, no nodules, and the surface is so smooth one can make up one's mind that there are no groups of secondary cysts about it, and that it is practically unilocular. When you get resistance to the wave of fluctuation in different directions, then you may also be pretty certain that there are septa dividing the cyst into different portions, and that it is of a multilocular character, and in that case tapping would be of no use; although one compartment might be emptied, the others would remain full. Supposing we find cartilaginous or hard bony projections, or nodules, in different parts of the cyst, then the probability is strong that the tumour is one of the forms of dermoid tumour, in which we may find cartilage, bone, fat, hair, teeth, and other things, of which we have some good specimens in the museum. Occasionally one begins to doubt whether both ovaries are affected or not. We may meet with a sulcus going immediately down the abdomen, and, if we find intestine there, in that case it is extremely probable both ovaries are affected. Sometimes this is deceptive. I have seen a very large sulcus on the surface of one ovarian tumour, made by the Fallopian tube pressing it in the centre, so that there was a very distinct bulge on either side, and we felt almost certain that both ovaries were affected, whereas only one was diseased. The belief of Boinet, that one can foretell before tapping the character and colour and consistence of the fluid, has a certain amount of foundation. The progress of the disease, the more or less acute pain complained of, the other signs of inflammation more or less rapid, and the state of the general health of the patient, will lead to suspicion probably that one has some purulent fluid, or mixture of blood and serum, or pus in a cyst: if there have been a rise of temperature at night, loss of appetite, and other signs of fever, you may be pretty certain there has been some inflammatory change going on in the substance of the tumour or cyst, which will lead to changes in the condition and character of the fluid.

The solid tumours I need not say anything more about, except that they do not fluctuate; they are solid. These are much rarer than cases where one finds a portion of the tumour solid and a portion of it fluctuating.

Then with regard to the diagnosis of adhesions, it used to be thought a matter of very great consequence to determine, before undertaking to remove an ovarian tumour, whether it was adherent or not; and, in the early days of ovariotomy, great trouble used to be taken by Dr. Frederic Bird and others to ascertain, if they could, whether the tumour was free. They would tap and watch carefully the way the canula moved as the cyst emptied; and Dr. Bird used to put needles through the abdominal wall into the cyst, to see the way in which the ends of the needles were deflected, and, if there were signs that the cyst was adherent, then it was not considered a case in which ovariotomy ought to be attempted. When I commenced practice in this particular department of surgery, I soon began to doubt whether this was a point of much consequence, and, when one began to number cases by hundreds, there seemed to be very little difference in result between cases of adhesion and of non-adhesion, so that I do not think we need give more time or attention to this point, but it is as well to remind you of it.

I have here some specimens of bone and teeth, from a cyst which I removed, prepared by Dr. Junker, who for five years was in Japan teaching the Japanese surgery, establishing a surgical school there, and carrying the benefits of our surgical knowledge to the Japanese. They illustrate extremely well the sort of bone-like matter one occasionally meets with in dermoid cysts of the ovary.

To revert for a moment to the subject of diagnosis of adhesions. Practically, I think, the question of extent of adhesion to the abdominal wall is not of much consequence.

The result is pretty much the same, so far as the adhesions go, to the patient; but the amount and intimacy of pelvic adhesions are a matter of very much greater moment. Supposing an ovarian cyst is adherent low down in the pelvis, between the uterus and rectum or the uterus and bladder, or on either side, the attempt to separate it is necessarily a dangerous one. If any bloodvessels be torn, it is difficult to find them. Although by artificial means one can occasionally throw a strong ray of light to the bottom of the pelvis and secure a bleeding vessel, yet it is troublesome and difficult to do; and the results of these cases are by no means so satisfactory as when there are only adhesions to the abdominal wall. One can pretty well ascertain if there be such adhesions as these, by a careful examination of the pelvis by the vagina. You find that they do not move with the position of the patient; they do not move when she coughs; they do not move when the shoulders are lowered and the hips raised; and it is impossible, either with the uterine sound or in any other way, to separate the uterus from these pelvic portions of the adherent tumours. Occasionally there will be an ovarian tumour low down in the pelvis which does move, from which the uterus can be separated, and need not interfere at all with ovariotomy; and in such cases it is sometimes quite curious to hear the rush of air into the bottom of the pelvis when the lower portion of the cyst is separated from the hollow of the sacrum. Air rushes down with a gurgle, the tumour is easily brought up, and there is no more difficulty than in an ordinary case. It occasionally becomes very doubtful whether an ovarian tumour is simply jammed down into the pelvis, or whether it is fixed there by strong adhesion; but still I think this can be made out by care—ascertaining whether the uterus is movable; ascertaining whether the lower portion of the cyst moves in different positions of the patient; and, if it really be firmly fixed, whether the sensation to the finger is that it has been absolutely glued down to the bottom of the pelvis. If there be this intimate adhesion pretty low down, as a rule I think the operation is not one that is likely to succeed.

The specimens on the table illustrate extremely well a number of conditions which may be mistaken for ovarian tumours, and which frequently are mistaken for them. The fibroid and fibro-cystic uterine tumours are those which are most commonly mistaken, and there will be other specimens brought down at the last lecture of this kind; but there is one here which is a specimen of a case of very great interest, in which Mr. Adams removed an extra-uterine fœtus from the abdomen. Here is another, in which a fœtus was retained for fifty-two years in the abdomen. I do not suppose either of these cases would have been mistaken for an ovarian tumour; but still, in calculating what one may meet with, it is well to bear in mind that this sort of thing may exist. In the last lecture, we will have other specimens of fibroid and fibro-cystic tumours of the uterus brought down, to show how closely some of them resemble ovarian tumours and what a large size some of them attain. Here is a very beautiful specimen of melanosis of the ovary—a specimen not often seen. Here are tumours of the spleen. This is a spleen which I removed during the life of the patient; it weighed nine pounds, and the patient lived seven days. The case I need not go into further. In two other cases, I removed the spleen just about the same size; but in neither of the three did the patient survive. There was only one that died from hæmorrhage; in the other two there was no hæmorrhage, nor much peritonitis; but there was a quantity of white clot on the right side of the heart, which seemed to be the cause of death. The diagnosis was made out with great ease in those cases. One was a case of Sir William Jenner's, in which he made out disease of the spleen as having existed some long time before. There was some alteration in the white blood-corpuscles; but Sir William Jenner thought it was a case in which one might very fairly and reasonably remove the spleen, and the patient seemed to be extremely likely to recover. She went on well for seven days; and at the end of the seventh day, without any reason that one could see, she died quite suddenly. But the reason was manifest after death: there was a very large clot on the right side of the heart.

Here are numerous cases of cancer in different parts of the abdomen; and these varieties of malignant disease in the abdomen led very often to mistakes with regard to ovarian tumours. There have been a great many cases of attempted ovariotomy where no ovarian disease at all has been found, but the tumour has proved to be cancer of some one or other of the organs of the abdomen—the liver, for instance. Here are cases of liver disease and disease of the omentum which have led to distinct mistakes. Here is a case of disease of a portion of the omentum which was mistaken for pregnancy. After death, it was found out that there was this disease of the omentum, of which this is a portion. Here is a case of enlarged liver. Here is a case of dropsy of the gall-bladder; this, of course, if larger, would make a considerable tumour; and many of you will, perhaps, read with interest next week the continuation of a paper begun by Dr. Marion Sims last week in the *British Medical Journal*, in which he relates how he opened the gall-bladder, sewed the opening to the wound in the abdominal wall, and turned out a very large number of gall-stones. I once had an operation considered in consultation about a patient in Kentish Town who had a very large tumour, and the great probability was that there were gall-stones; but there was also evidence that there was malignant disease of the liver, and nothing was done. I am afraid to say the number of gall-stones that were found after her death, but I think 1800; and besides that, the gall-bladder was very much thickened by cancer. Here is a specimen of cancer of the liver which would have made a very large tumour; there is one of melanosis of the liver. Here is one of tubercle of the liver—a very rare specimen; and here is one of hydatid of the spleen. These hydatid cysts occasionally lead to mistakes. In my work on "Diseases of the Ovaries" there is a picture of a woman, taken from a photograph, from whom I removed successfully a very large hydatid cyst which we had successfully diagnosed after tapping. The limpid fluid removed at once attracted attention. I examined the deposit, and found it characteristic of hydatid disease; so, after a time, as the woman seemed to be likely to die, I removed the hydatid cyst. She completely recovered.

Aneurism occasionally may be met with. Here are one or two good specimens of aneurism of the aorta. It is not likely that aneurism of the abdominal aorta will be mistaken for an ovarian tumour, but still it is well to bear this in mind. I know of one case in which an aneurism of the aorta low down, just where it bifurcates, was tapped through the vagina, believing it to be a pelvic abscess. That lady died upon the table in a very few minutes. So it is just as well to remember that these large aneurisms of the abdominal aorta should be considered in forming one's diagnosis.

With regard to hæmatocele and pelvic abscess, I need not say much here, except to put younger men upon their guard to remember these do form occasionally of so large a size as to be mistaken for ovarian or other tumours. I have seen a hæmatocele extend considerably above the level of the umbilicus, and a pelvic abscess almost as large.

Fæcal accumulation, too, but rarely leads to error. Occasionally one is called in to cases where accumulations of large quantities of fæces do lead to mistake, and the supposed tumour disappears after their removal.

Then, a word as to those resonant enlargements of the abdomen which have been called phantom tumours. There is now in the Samaritan Hospital a young woman with an apparently manifest abdominal tumour. The abdomen was prominent, and felt hard, but, on percussion, was distinctly resonant everywhere. She looked in perfectly good health, and, on putting her under the influence of chloroform, the swelling entirely disappeared. There has been a certain amount of doubt as to the exact pathology of these things—whether it is that the diaphragm is pressed forwards, the liver pressed backwards, and a certain amount of distension of the intestines accompanying the arching forwards of the recti; but certainly occasionally they do look very much like tumours which disappear entirely when the patient is deeply narcotised. I have seen the same thing in a man. I remember a soldier came down to Smyrna from the Crimea with a tumour which excited a good deal of attention amongst the surgeons at Smyrna, but, on putting the man under the influence of chloroform, it entirely disappeared.

With regard to pregnancy, the ordinary signs of pregnancy, of course, should be borne in mind in any case of abdominal tumour in a woman. Whether the woman is single, or married, or a widow, this complication may arise. I need not enter into the different signs of pregnancy; but I wish you to bear in mind that not only may pregnancy be mistaken for ovarian disease, or uterine disease, or the converse, but that in many cases pregnancy does complicate ovarian disease. A woman may have a large ovarian tumour,

and then she may become pregnant; and the question of the treatment of a woman who has an ovarian tumour and is also pregnant is one I shall have to speak of when I have said something about ovariotomy.

I do not think there is a specimen here, I doubt whether there is in the Museum, of what is called "movable kidney." I believe there have been only one or two such specimens shown after death at the Pathological Society, but I have occasionally seen tumours in the abdomen which appeared, as far as one could tell, to be instances of movable kidneys, either enlarged or of their natural size. One case was such a remarkable one that I will detain you a moment to tell you about it. A lady came to me believing she had, or having been told she had, a movable right kidney. I saw her with Dr. Wilson Fox, and we both agreed that was the nature of the disease. For some years it went on, and I saw her occasionally, under the impression that she was suffering from a movable kidney. Then she became pregnant, and pregnancy went on to its natural termination, and a healthy child was born. Soon afterwards she began to suffer from an ovarian cyst on the left side, the movable kidney still being on the right side; and the ovarian cyst increased so much that it was decided I should perform ovariotomy, which I did. I said at the time, "I will see what that movable kidney is now"; and, after I had removed the ovarian cyst on the left side, I felt what the supposed kidney was, and took it out; and then I found it was the right ovary, but it was attached by a pedicle fully a foot long. It had been held up under the right false ribs by the merest little film of adhesion. Quite a small patch of adhesion kept this right ovary, which was about the size of my fist and very much the shape of a kidney, just in the position of a movable kidney. The patient recovered, and remained in good health.

Then as to cancer of the ovary. Here are some specimens. Here is cancer of the ovary; and here is cancer of the kidney. There is a specimen also of a tumour of the abdominal wall. This illustrates a mistake occasionally made in practice: in the treatment of a supposed abdominal tumour, it is found the tumour is not of the abdomen at all, but is simply a tumour of the abdominal wall. I remember years ago being called to see a patient who came from Portugal, supposed to have ovarian tumour, and I expressed a strong opinion that it was not ovarian, but simply a tumour of the abdominal wall, and decided that it should be left alone; but Mr. Baker Brown afterwards saw the patient, and removed it. He removed a very large portion of the abdominal wall with it; he removed a bit of the peritoneum as large as the palm of my hand; and yet the patient made a most complete recovery. The tumour was a fibro-plastic tumour of the abdominal wall of a considerable size, and the portion of the abdominal wall removed with it was two or three inches in breadth and three or four in length. Yet the abdominal wall, which had been brought together without much tension, healed up, and the woman recovered almost as well as if the operation had been one of the most simple character.

CLINICAL LECTURES

ON THE PROGNOSIS AND TREATMENT OF CERTAIN VARIETIES OF CONSUMPTION.

DELIVERED AT THE HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, BROMPTON.

By JAMES EDWARD POLLOCK, M.D., F.R.C.P.,
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Lecture III.

Gentlemen,—It seems to me that at the very outset of any inquiry into the treatment of phthisis we must face the question, whether any specific remedy for the disease is possible or likely to be found. A specific may be defined to be an agent which meets some definite form of malady, directly counteracts its influence, and opposes its progress, or even effects its destruction. Here we have a meeting of opposing powers, but each must be defined; the "bane and antidote must be both before you." The disease must be an entity, and the remedy a recognisable and defined influence. Of such remedies, quinine in ague, and mercury in syphilis, are examples, and these diseases are sufficiently defined and recognisable by certain invariable characters. But have we in phthisis any such defined disorder? Search it thoroughly, as we have been lately doing here, and it is resolvable into many forms—and forms which are not artificial divisions, but manifestations of disease really differing in symptoms, in pathological products, and in progress and termination. Clinically and histologically there is no single definition which would correctly describe it. Its history is made up of many progressive changes, and variety in mode is its very character. Such variety eludes the direct action of any remedy; and remedies of efficacy cannot be presumed to address themselves to multiform phenomena, and certainly cannot meet in succession and overcome those morbid changes which are the result of mixed chemical and vital actions, progressively increasing, and changing their mode of destructiveness as the stage of disease advances. In a former lecture the destructiveness of phthisis was traced to the kind of degeneration which the morbid products in the lung underwent; to the nature of the lung impaction, its form, limit, and distribution; and to the amount of suffering which the system undergoes in the way of fever-waste and secondary infections while the degeneration and extension of the morbid products in the lung were proceeding. To these influences are found added such agencies as acquired hereditary features, age, sex, temperament, and the complications with other disorders. All these were described as essential considerations in estimating the gravity of any case of phthisis. But is not this summary of diverse morbid products in the lung, some tending to slow death or degeneration, others to rapid disintegration, and others again to contractile results on the tissues, added to corresponding variations in the temperature, waste and nutrition of the body, a picture not of one, but of many disorders, which, while we have stamped them with a common name, are acknowledged to have diverging tendencies, endless pathological variety, and great uncertainty of duration and even of issue? To meet all this we are to seek a single remedy, if we are to search for a specific, and a remedy which shall so directly address itself to the morbid state, that not only shall the *materies morbi* (if there be such a thing) be annihilated, but that every progressive step which we know to constitute the story of phthisis shall be stopped, the degenerations cease, the constitutional suffering be suspended, and the lung tissue be reinstated. Let us ask whether, if we could cut out the portion of diseased lung and cicatrise the wound, preventing all secondary infections, this would be a cure of phthisis? Let the surgical history of external cancer be the answer. That cause which has originally produced disease, remains as a reproductive agency, suppressed, but not destroyed. Again, if there be, as is supposed by most, a constitutional cause, inherited or acquired, which leads up to and decides the character of the local affection, this cause would seem to be still further out of the reach of any one direct remedy, involving as it does deep-seated errors in the most vital processes of sanguification and nerve-power; nor can we conceive a single agent which can be supposed to influence such a state.

Again, the irritation of the system which we call "fever," and which rises and falls with the degree and extent of lung disease, is a complex action affecting all tissues and the very vitality of the blood itself—for what is high temperature but waste, and what is waste but destructive oxidation?

And if phthisis be a mere lung disease, we know by our pathological and histological teaching how many processes are involved from the mere impaction of the alveoli, through diverse degenerative processes, which differ vitally and chemically, to destruction of tissues, and a development of new or extension of old formations, which, when accomplished, alter the entire structural character of the affected organ. Thus the nutrition of a whole tract of lung is altered, and morbid products are thrown into the blood, giving rise to secondary disorders. These changes can be produced and imitated by artificial inoculation in certain animals, but the products seem really pyæmic rather than tubercular. Can we remedy this secondary conveyance of morbid matter or affect its origin at the source? Thus, within the present limits of our knowledge we can neither remove the constitutional state nor the local disorder by any one remedy. And what shall we say of hereditary cases where not only a disease, but its very form and minute distinctive features, the time and manner of the attack, its progress and issue, are often transmitted with marvellous resemblance of the

subject to his ancestry? I fear that specifics can scarcely be expected to touch this large class, which, according to various observers, forms a fourth or even a third of all our cases. Could we, however, prove the oneness, the unity of the poison, or that there is a poison at all, as we do in vaccine and variola, we should have advanced towards a specific cure, for oneness of cause might argue in favour of oneness of remedy. Even this slight argument for the hopes and chances of our discovering a single unique nostrum is yet incomplete, for we have not hitherto produced tubercle in man by inoculation of morbid matters; while, on the other hand, evidence of the contagiousness of phthisis is altogether wanting—if, indeed, contagiousness prove the existence of the unique and special form of a disease so communicated. Is it, then, for the form and nature of the morbid local product that we are to seek a remedy? or for the cause which has preceded the local disease? or are we to direct our treatment to the unvarying systemic results of waste and exhaustion of vitality which are the combined outcomings of local and systemic disorder taken together?

These are the three problems to which all future research must be addressed; and it must be confessed that we have done almost nothing in answering the first question. I have compelled myself to a mental inquiry about the possibility of our finding a specific for phthisis, and I have stated the reasoning on the subject, and why it appears to me that such a search will be in vain. When you are tempted to read the advertising books of interesting speculators, who offer you a nostrum to cure phthisis: when you are waylaid, as we are here, by adventurers with a wine, or an oil, or a chemical compound which is to solve the tubercle in the lung, or an inhalation which is to reach it locally and expel the "peccant matter," let us think of the varied pathological forms and the deep-seated disorder of the system which it is proposed to affect and alter and eradicate by doses of a drug.

So much for our first problem; and its consideration has cleared the way for the two others, which rise into importance as the first sinks into the distance. Can we affect the cause which has preceded the local disease? And can we remedy this waste and exhaustion of vitality which represent the local and systemic disorder unitedly?

If I have spoken dispiriting but wholesome truths about the radical cure of phthisis, I have much to say that is hopeful and encouraging about the last two problems. In a word, we have already done much and can do more.

Let us briefly consider the two questions and the evidence which is before us. A wise spirit of legislation has, during the last ten or fifteen years, devoted itself more to the question of elevating the moral and physical condition of the population than to the mere repression of crime; and no greater evidence of the power which sanitary legislation possesses of controlling diseases could be found than in the remarkable diminution of phthisis which has occurred in various localities where the Sanitary Act of Parliament has been put in operation. I quote from Mr. Simon's and Dr. Buchanan's researches reported to the Privy Council in 1867. The diminution in the death-rate from different towns is astonishing, and has surprised the reporters as much as anyone. I have extracted the table from the report:—

Reduction of Death-Rate from Phthisis in Fifteen Towns.

Salisbury	49 per cent.	Cheltenham	26 per cent.
Ely	47 ,,	Bristol	22 ,,
Rugby	43 ,,	Dover	20 ,,
Banbury	41 ,,	Warwick	19 ,,
Worthing	36 ,,	Croydon	17 ,,
Leicester	32 ,,	Cardiff	17 ,,
Newport	32 ,,	Merthyr	11 ,,
Macclesfield	31 ,,		

Mr. Simon and Dr. Buchanan agree that the *drying of the soil*, which has in most cases accompanied the laying of main sewers in the improved towns, has led to the diminution, more or less considerable, of phthisis. Still further, the diminished fatality of phthisis is *by far the largest* amendment, *if not the only one*, which has taken place in the local health. Works of sewerage, by which the drying of the soil is effected, must always of necessity precede by years the accomplishment of house-drainage, abolition of cesspools, etc., on which the cessation of other diseases (diarrhœa, typhoid, etc.) depends. Again, Dr. Bowditch (Boston, 1862, five years before the English reports were published) says "the medical opinions from physicians in 183 towns prove that *dampness* of soil is intimately connected with the prevalence of consumption." The Registrar-General of Scotland, in his Seventh Annual Report, makes the same statement; and Dr. Buchanan, who has collected a vast amount of information from personal investigations made for the Privy Council, is of opinion that "wetness of soil is a cause of phthisis, and that drying of the ground is found of most importance as a preventive measure." It is curious, also, and to us deeply interesting, that diseases of the lung *other than phthisis* have not been reduced by drying of the soil.

There is no doubt that other causes are at work in the production of phthisis, and we have ourselves collected a large number of facts which demonstrate Mr. Simon's proposition that "phthisis has been shown to be developed in proportion as men are unwholesomely gathered in indoor industries." (See occupation table.)

These tables, founded on observations in this Hospital, seem conclusive of the fact that certain unwholesome influences, entirely within our reach and possible to suppress, are among the chief of the factors of consumption.

We have spent some time over these statements because of their immense importance and practical bearing; but we have met here to-day to consider the treatment of developed consumption, and I must proceed to consider the influences by which the disease, when established, is to be counteracted, and its various events to be treated.

It is evident, if we consult the many works published on the treatment of consumption, that our last problem, or how to oppose the lowered vitality and waste of phthisis, is the one to which practical physicians have attached the most importance; and to this all their main efforts have been directed.

Before examining their modes of treatment, let us ask at once how far they have been successful. Let us take the opinion of Dr. Williams, our respected Consulting Physician, published in 1871; and certainly few observers have had equal opportunities of judging of the facts, for he has enjoyed an extended practice, and much among those classes who have the means of carrying out every direction given for their treatment. He says "the average duration of life in phthisis has been quadrupled" by the modern methods of treatment introduced about the year 1845. Taking the former estimate of the duration of phthisis as *two years*, he asserts that it has been raised to *eight* years. This improvement he attributes to the introduction of cod-liver oil among our remedies; but I take leave to refer it to other influences as well, now better understood, and more universally brought to bear on the treatment of consumption.

In former times, and even so lately as the building of this Hospital in which we are met, consumption was supposed to be best treated by lodging the patient in warm, relaxing, comfortable quarters; and as cold, bracing air was supposed to be his enemy, we sent him to the hottest climate to which we had access, or, if compelled to keep him here, he was lodged in a highly heated chamber, from which the fresh air was excluded; and while we hung a thermometer on his wall, we never thought of putting one under his arm. Were he able to remove from this inclement country, he was sent to the West Indies or Madeira, and to more accessible resorts in Italy. The crossing of the ocean on his way thither was supposed to be his time of danger, and his only safety to be a warm and sheltered spot in a low locality—often near the bed of a great river, *never* on the elevated hill-side. I have visited many of these haunts of the consumptive, and they are set thick with the graves of Englishmen. Some ten years ago we selected twenty cases of phthisis in this Hospital, each of whom was examined by all the physicians, and they were supposed to be the most eligible cases for the experiment of a residence in Madeira. With the exception of one who died of hæmoptysis, the result of our examination of those who returned did not justify the Committee in repeating the experiment.

Now, the result of Dr. Buchanan's observations on the localisation of phthisis is just this—that the bed of great rivers, alluvial soil, and low, damp, and ill-drained localities are those where the disease is most prevalent and most fatal. I gave much attention to this subject before Dr. Buchanan's observations were made, and the result of an extensive research into the residences of out-patients attending at this Hospital was that the valley of the Thames furnished the greatest number.

It is plain, as I have said, from a consideration of the means now adopted for the relief of consumption, that the attention of the best physicians is directed to increase the vital powers of the patient, to remove every influence which may lower his strength, to give him invigorating diet, to expose him to the dry pure air of an elevated locality, to let him take a fair amount of exercise in open air daily, to insist on his sleeping in a well-ventilated chamber, and as far as possible to surround him with the cheering influences of society, and occupations which take a man out of his weary thoughts and elevate his mental and vital powers. To these influences are added the greatest watchfulness on the part of the attendent to meet, by early treatment, every complication of the inflammatory kind, and to obviate, as it arises, every disorder of digestion: the general conditions which constitute a healthy working of the machine are regulated with care, while every agent of a lowering tendency is avoided; tonics and nutritive medicines, as cod-liver oil, are given, and their use regulated by well-known rules.

Our results, speaking generally, are highly satisfactory, and observations made on the in-patients here show that at least 75 per cent. have gained in weight during treatment, while their symptoms have been also greatly relieved. In the out-patient department I am also well satisfied that great benefit and much prolongation of life have accrued. From my own experience, I would say that local disease has been of late years more in the chronic form, and with the features which in other lectures I have pointed out as belonging to the more favourable class of disease, chronic fibroid alterations being rather seen than the continuous and progressively destructive forms of phthisis. But I must hasten to consider more in detail the principles which should guide our treatment of consumption, and the remedies to be employed.

(*To be continued.*)

ORIGINAL COMMUNICATIONS.

UNSUCCESSFUL OVARIOTOMY, WITH CASES.(a)

By J. KNOWSLEY THORNTON, M.B., C.M.,
Surgeon to the Samaritan Free Hospital for Women and Children.

In choosing for my paper the above subject, I have been influenced by two main considerations. First. The knowledge that I have personally learnt much more from these ten ovariotomies than I have from the much larger number of those which have been successful. Second. The conviction that ovariotomy is just now at a crisis of its history when a very marked and important step is being taken in the direction of considerably reducing the present mortality, which was even before this new departure so small that I think ovariotomy may fairly be considered the most successful surgical procedure of modern times.

At a period when we are, as I believe, about to eliminate the great cause of mortality after ovariotomy, I think we may usefully look over our case-books, separate the fatal cases from the successful, and endeavour faithfully to record the causes of the different result in the two classes. In a few years such records will be all that is left to the future student by which he may learn the difficulties and dangers with which we have had to fight, and the risks which our patients have had to run before Professor Lister placed in our hands a weapon with which we can boldly face almost the only foe which we have seriously to fear in performing ovariotomy. I need hardly say that the foe I refer to is septicæmia, using the term in its widest sense; and that the weapon is the antiseptic system, efficiently and thoroughly carried out.

Without further preface I will now give short notes of ten fatal cases which have occurred in my hands out of a total of sixty completed ovariotomies:—Of these deaths, the first twenty cases contained seven; the second twenty cases contained two; the third twenty cases contained one.

Case I.—S. M., married five years and a half, never pregnant, came to me as an out-patient at the Samaritan Hospital, November 6, 1874. I diagnosed a large unilocular ovarian tumour. Mr. Wells saw her with me shortly afterwards, and thought it was a multilocular tumour. We considered the question of tapping or ovariotomy, and decided for the latter operation, which was performed on November 25. It proved to be a very rare form of tumour—viz., a multilocular extra-ovarian cyst; it was quite free from adhesions, and easily removed. I applied a small Spencer Wells' clamp to a long, thin pedicle. The operation was performed at 2.30 p.m., and at midnight the temperature was 101°, and the following morning at 9 a.m., after falling to 100·4°, it had again risen to 101·6°, pulse 144, respirations 30; at noon it was 102°. On the second day at 5.30 p.m. it was 101·8°, pulse 140, respirations 32, with slight muco-purulent expectoration; and after consultation with Mr. Wells, Dr. Savage, and Dr. Day, we decided that she was suffering from acute bronchitis, and treated accordingly. The condition did not improve, and on the third day at midnight the temperature had risen to 102·8°, pulse 124, respirations 24. At 10 a.m. on the fourth day the temperature had risen to 103·4°, and the chest symptoms remaining urgent, I performed venesection to twelve ounces; the temperature fell slightly, but no improvement took place in the general condition, and at midnight on the fourth day the temperature was 103·6°, and she was delirious. At 9.30 a.m. on the fifth day the condition was much the same, with full tense pulse, and coarse râles all over the chest. An ice-bladder was applied to the head, and at 4.30 p.m., with a temperature of 103·8°, pulse 124, she was packed in wet sheets. The temperature continued, however, to rise, and at 8.30 p.m. was 104·4°, pulse 134, respirations 36. I again bled to fourteen ounces; the blood buffed and cupped. No improvement followed, and on the sixth day condition was unchanged. On the seventh day, at 11 a.m., temperature 103·2°, pulse 140, respirations 36. There was a dark stain on the dressings, which were removed at 11.30, and dark venous-looking blood escaped from between the sutures. Mr. Wells saw her with me, and removed the clamp, but we could discover no hæmorrhage from the pedicle. At 11.30 p.m. I passed a catheter down beside the pedicle, and drew off twenty ounces of dark blood from the pelvis; temperature 102·4°, pulse 140.

I was called to see her at 4 a.m. on the eighth day, and, finding dark blood still escaping from the wound, asked my colleague Dr. Godson to come and give some bichloride of methylene. I then removed the sutures, and found the pelvis full of this dark blood. After sponging it out I carefully examined the pelvic organs, and found the uterus and left ovary intensely congested. The dark blood had evidently issued from the Fallopian tube, which was unusually patent. The period was due, and had commenced and ceased again suddenly. Having thoroughly cleansed the peritoneum, I reapplied the sutures. At 9.30 a.m. the temperature was 103·8°; pulse 140; respirations 36; patient very pallid and exhausted. No further discharge from the wound occurred, but the temperature and pulse gradually mounted to 105·4° and 150 respectively, and she died delirious at 3.30 in the afternoon.

What, then, led in such a simple case to a fatal issue? Undoubtedly a want of sufficient experience in the after-treatment of cases; and yet at that time I had assisted Mr. Wells with about 150 cases. I ought not in this case to have allowed my attention to be directed to the chest condition as a primary lesion; it was merely an indication of the general overloading of the vascular system, due to the sudden removal of a large circulating area with no compensatory loss of blood during the operation. The lungs were in this patient the organs which felt the strain most, and gave way first, probably from being her weakest part, her mother and only sister being both consumptive. In other cases we see the kidneys first affected, in others the brain, and so on. I have entered so fully into this subject in a paper which the Council of the Medico-Chirurgical Society have done me the honour to publish in the *Transactions* (vol. ix)., that I must not dwell upon it here.

Had I recognised this condition, and known as I now do the value of the application of continuous dry cold to the head by means of the ice-water cap, I am convinced that in this case I should have needed neither medicines, venesection, nor wet pack. I have since seen in the practice of Mr. Wells an exactly similar case yield at once to the application of the ice-water cap and make a perfect recovery.

The ordinary medical treatment for a case of acute bronchitis failed altogether to give relief; then I bled, with some temporary improvement; then the wet pack was tried; then

(a) Read before the Harveian Society of London, February 21, 1878.

I bled again; and still the fever continued, and the patient was evidently getting steadily worse. Then the bloody discharge beside the clamp led to the removal of the latter, and finally to the opening up of the wound and sponging out of the pelvis. I think I was a little too anxious, and treated too heroically; but I have more than once seen a patient saved by Mr. Wells by prompt venesection. The actual cause of death was undoubtedly exhaustion from the fever and severe loss of blood from the uterus following the two venesections. This hæmorrhage from the uterus through the tube is a point of very great interest, and difficult to explain. It must have been due in some way to the changed condition of the blood; but in what this consisted, and why it should have caused the blood to pass back into the peritoneum, I cannot say. I saw it actually pouring from the tube, therefore there can be no question as to its source. It was a true intra-peritoneal hæmatocele.

Whether there was any septic element in this case I cannot say, but I am inclined to think there was not, at any rate up to the time when the uterine hæmorrhage took place. I believe it was a case of pure fever, due in the first instance to the overloaded state of the vascular system; and I think probably the brain lost altogether its power of regulating the nutrition and waste of the tissues.

Case 2 was that of a single woman of forty-four, sent to me by my friend Mr. Wilcox, of Aylesbury. She was a delicate woman with spinal disease and an enormous ovarian tumour, from which I removed thirty pints of fluid a week before I performed ovariotomy. The cyst was very multilocular and very adherent, and she filled again so rapidly that, after consultation with Mr. Wells and Dr. Day, who kindly examined her chest, I decided to give her the chance of ovariotomy. The operation was a very severe one: much ovarian fluid escaped into the peritoneum, and extensive parietal, hepatic, and pelvic adhesions were encountered. A clamp was applied to the pedicle, and many silk ligatures, cut off short, to the adhesions. A glass drainage-tube was placed in the lower angle of the wound, and to the bottom of the pouch of Douglas, with the usual precautions. Discharge from this was very free. Temperature and pulse rose steadily after the operation, and she never became conscious, was restless, and then delirious, and died in thirty-seven hours. This is one of the cases from which we learn but little, considering the constitution and general state of the patient, and the formidable operation necessarily following shortly after the tapping. But though such deaths are frequently ascribed to exhaustion, I cannot but think that they find a place more correctly under septicæmia; and I believe this patient would have had a fair chance of recovery had the operation been performed antiseptically. It is easy to ascribe a death to exhaustion, but in all such cases putrefaction undoubtedly takes place, and the consequent poisoning plays such an important part in the process by which the strength of the patient is exhausted that I cannot but think that even such a case as this would get well if we could thoroughly and effectually exclude all chance of putrefaction; and I found this belief on a careful observation of those cases which I have seen eventually succumb without antiseptic precautions, and those which I have seen get well after severe operations, followed by great depression and low temperature, with quick, weak pulse, and even by distinct symptoms of carbolism after antiseptic operation.

Case 3 is in all respects so similar to the last that I will not occupy space by any details. She had been several times tapped in the Manchester Infirmary, and much difference of opinion had existed in that city as to the real nature of the case. She was sent by Dr. Thorburn to Mr. Wells to give her the last chance which his skill afforded, and possibly unfortunately for her, certainly unfortunately for my statistics, it fell to my lot to operate upon her during Mr. Wells' absence from town. He very kindly explained to the patient's husband the very unfavourable nature of the case before I operated. The tumour was removed ten days after a tapping, which was the eleventh in a period of eleven months, each having yielded from twenty to thirty pints of fluid. I put in one of Keith's glass drainage-tubes, and treated the case on the plan so well described in the paper read by Mr. Wells before the Medico-Chirurgical Society last session, but she died in thirty-one hours of exhaustion, or, as I should prefer to enter it, exhaustion due to septicæmia.

Case 4 was one which I have already detailed at length in the *Transactions of the Pathological Society* (vol. xxvii.), and to which I have also referred in a paper in the *Medical Times and Gazette* (July 23, 1877), so that I need not give the full details now. The operation was performed on the same afternoon, and immediately after the above, and also fell to me through the absence of Mr. Wells from town. The patient was four months and a half pregnant, and I had tapped her for Mr. Wells eight days before I performed ovariotomy. Some fever followed the tapping, and I suggested to Mr. Wells the propriety of performing ovariotomy at once. He thought, however, that if she was kept quiet the fever would abate, and I was obliged to give her the last chance afforded by ovariotomy when she was almost moribund in consequence of the complete strangulation of the cyst, due to rotation of its pedicle. I must refer those who care to see the particulars of the case to the records to which I have already alluded. I need only say here, that I attribute this death, in the first place, to tapping during pregnancy; and secondly, to tapping at all: for I believe had the twisting of the pedicle occurred in a cyst which had never been tapped, and into which the causes of putrid change and decomposition had never been introduced by this procedure, it would have been absolutely harmless, or would at most have led to pain and certain changes in the tumour, which would have in no way interfered with its successful removal by ovariotomy. Or, to put this into a more concise form, I believe that the causes of putrefaction were introduced into the tumour at the tapping; that the result was inflammation and putrid suppuration in the cyst; that from the position of the tumour in relation to the pregnant uterus, twisting of its pedicle occurred to such an extent as entirely to strangulate it; and that the strangulated tumour, containing already as the result of the tapping the causes of putrefaction, possibly actually putrid fluid, became as a whole putrid, and produced the poisoned condition of the patient indicated by the symptoms which I have elsewhere fully detailed—a condition which ovariotomy, performed at the eleventh hour, failed to combat, though the patient undoubtedly rallied for a few hours—a few precious hours, during which she was able to see and converse with her husband, and tell him how completely she approved of the last chance which ovariotomy afforded being given to her, or rather, how earnestly she had begged for it.

Looking to the brilliant results which Mr. Spencer Wells has obtained by performing ovariotomy during pregnancy, I would say, in reference to this case, never tap, but always perform ovariotomy when this complication arises. The farther lesson to be learned from it I shall consider at the end of my paper, when I come to the great question of antiseptic ovariotomy.

Case 5 was that of a young married woman of twenty-six, with an enormous and very solid dermoid ovarian tumour, nineteen pounds being the weight of the solid portion, which contained large masses of bone, etc.

This was the first ovariotomy I ever attempted antiseptically, and when I look back upon the performance, and think of the miserable spray-producer and the general inefficiency of my arrangements, I am heartily ashamed of the whole. Within twenty-four hours the temperature had risen to 103°, with a pulse of 154, and this high fever continued till the third day; after this, temperature and pulse gradually subsided, and she seemed likely to do well. There were no untoward abdominal symptoms, no sickness, and she had a quiet, nice expression, and was bright and cheerful. On the evening of the fourth day, with temperature at 99°, pulse 104, the ice-water cap, which had been on from the first rise of temperature, was removed. She was rather restless and excitable during the evening, and began to be sick. The sickness soon passed off, and she fell into a deep sleep, with heavy, almost stertorous, breathing. In this condition she continued for more than twenty-four hours, occasionally having some hiccough, and then some difficulty with phlegm, but never opening her eyes or appearing conscious. On the morning of the fifth day the temperature began to rise again, and the ice-cap was re-applied; it seemed, however, now quite powerless. The temperature steadily rose to 104·8°, the pulse became fast and weak, the heart acting tumultuously, and she died quietly at 10.30 p.m.; the abdomen being perfectly flat, rather retracted if anything.

I was not allowed a post-mortem, and entered the death as due to congestion of the brain. That some brain-change

suddenly supervened there can be no doubt, but there were no symptoms to guide one to an accurate diagnosis. The excitability, restlessness, and sickness coming on suddenly, and immediately followed by this final sleep, all point to the brain as the seat of mischief.

I am rather inclined myself to place this case in the same class with Case 1, and regard it as one of hyperpyrexia, not of septic origin, but simply due to the changed vascular condition, the brain being the organ which suffered, instead of the lungs, as in Case 1. Of course, without a post-mortem one can only theorise, but there were never any symptoms to indicate mischief in the peritoneum or about the wound in any way, and up to the commencement of the excitability, etc., the patient looked and was bright, cheerful, and comfortable, in spite of the high fever—all conditions pointing to the simple fever which often follows ovariotomy, and very different from those common in septicæmia in any of its varieties.

Case 6 is very like this last, and was operated upon in the same nursing home.

The patient was a nervous, excitable woman of fifty, sent to me by Mr. Dove, of Stowmarket. There was nothing remarkable in the operation; it was a difficult one, with extensive intestinal and pelvic adhesions, and the tumour was removed by a combination of enucleation and ligatures. It was a very vascular tumour, and she lost a good quantity of blood; and in this respect the case differs from the one I have just related. On the day following the operation she was flushed and thirsty; pulse 96, hard and full; temperature 101°, and the ice-water cap was put on. The temperature fell, and she seemed to be doing fairly well for forty-eight hours, and then it rose again to 102° and 103·2°, and the ice-water cap was reapplied. She now became very curious in her manner, would not speak to anyone, and resolutely refused to swallow. She continued in this condition for twenty-four hours, the temperature never falling below 101°, in spite of the ice-water cap. She now began to pass her urine in the bed, and during the dressing kept up a constant outcry, whether I was touching her or not. On the morning of the fourth day a diffuse swelling appeared over the right parotid, which was evidently painful when touched. Sir James Paget kindly saw her with me in consultation, and while declining to express a positive opinion, thought she was suffering from some curious form of pyæmia. The bowels acted involuntarily; the temperature fell to 98·8° to 100°. At 9 p.m. on the fifth day I saw her, and thought her rather better, and the nurse thought she was becoming a little conscious; but very shortly after I left the room she was suddenly seized with difficulty of breathing, and died in a few minutes, with her face congested to a deep plum colour. I examined the brain ten hours afterwards. The body was then quite fresh and sweet, presenting no signs of decomposition. The muscles were fresh and red-looking. The dura mater was generally adherent to the calvaria, most markedly so to the frontal bone. The brain was generally soft and very full of blood, and the sub-arachnoid space was full of milky serum, which levelled and in some places distended the spaces between the convolutions. The membranes when separated tore the brain-substance. There was the same milky appearance of the membranes of the medulla.

These are the chief points from my notes. It appeared to my colleague Dr. Day, who kindly assisted me, and to myself, that white softening had been going on for some time; and probably this would account for her nervous excitable manner.

In this case, again, one is inclined to think it might be simple fever expending itself chiefly on the brain from its being a weak part of the economy. But against this, and in favour of some septic condition, we have the parotid swelling. This disappeared almost entirely after death, and on incising the part I could detect nothing abnormal.

These are two very curious cases, and I should be glad to know if others have met with like ones as a sequel to surgical operations.

In this last case the abdominal condition appeared perfectly satisfactory. At the same time, it was just one of the cases in which, after much tearing of pelvic cellular tissue, I think we are especially liable to septic mischief, and I should imagine pyæmia, though I have had no experience of it unless this be a case.

(To be continued.)

MEDICAL NOTES FROM THE TRANSVAAL.

By S. K. COLTER, M.D., M.Ch.

Croup—Tracheotomy—Recovery.

On September 11, 1874, I was called to see a child suffering from catarrh apparently. His age was about four years. The cough was not very troublesome or harsh then, but became so next day, and as he appeared a delicate boy, a stimulant cough mixture, consisting of carbonate of ammonia, ipecacuanha wine, and syrup of tolu in aniseed water, was prescribed. On the 11th, the harsh croupy cough was very troublesome, and towards night he began to suffer much from oppression of the breathing. During the whole of the day his bed was kept near the fire, and the steam of two kettles directed through bamboos kept a constant vapour about his head. At 2 a.m. on the morning of September 14, the dyspnœa being urgent, the sternum drawn in at each inspiration, and the lips livid, I performed tracheotomy (without chloroform). The result of this case was complete recovery.

Croup—Tracheotomy—Death.

On March 15, 1875, I was called in consultation to see a child aged about five months. On the 16th the surgeon in charge of the case had to leave town, and asked me to attend if called. The symptoms were, as usual, those of catarrh and progressive dyspnœa. The latter becoming so urgent during the day, and the face dusky, I operated, with apparent intense relief, the child falling into a quiet sleep. I delayed operation as long as possible (as my *confrère* had promised to be back early), but not too late, I think, were there not some unfavourable circumstances connected with the case—namely, the early age of the child, and secondly, bronchitic implication of the lungs. The steam of hot water was kept up carefully during the day and night, but in spite of all care the child died at 7 a.m. on March 17.

Regarding the performance of tracheotomy, I have come to the decision that I should hesitate to perform the operation again except upon a child who was at least two years old and intelligent; except that there was no lung implication whatever—and this is a case I have never experienced, having always seen some degree of bronchitis.

The act of coughing wholly depends upon the power of making a firm stoppage above the lungs, and the sudden relaxation of this stoppage constitutes a cough. Now, when a tube is in the trachea, no more than a sigh is possible, unless the finger of the patient or some other be placed on the mouth of the tube and suddenly withdrawn; and not only this, but consentaneous action on the part of the patient is necessary: from this it at once appears what a difference age and intelligence will make in the operation. Even if there be no lung complication, there will yet be always a certain amount of mucous accumulation in the tube; and if the lungs are affected, this accumulation will be large; so that if the child has not the intelligence which is requisite, the lungs will slowly fill up hopelessly like a sponge in water, in a manner which inversion of the body to a slight degree, clearing of the tube, or any other measure, seems incapable of counteracting.

Vomiting Beetles.

In January, 1876, a Kaffir woman, aged about eighteen, came to me showing a sample of beetles which she had been in the habit of vomiting every day for some weeks. At intervals of about three days she vomited three or four dozen of them. There is a difficulty in sending a specimen, but it is quite unnecessary, as the beetle is exactly similar to the *Coleoptera* which hum about on a summer evening in England, with two outer dark brown scale-like wings, under which the real wings are. The only exception to the similarity is that there is a horn-like growth from the forehead, and hence it is called the "rhinoceros beetle." Like those in England, its habitat is in dung-hills, etc.

The remedy I prescribed was turpentine, which seemed to relieve her of them. I could gain no clue as to how they had been swallowed. The girl was much wasted, and suffered much from gastralgia and vertigo.

Mr. Richard Davy has resigned the office of Surgeon to the Surgical Aid Society.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

ROYAL INFIRMARY FOR CHILDREN AND WOMEN, WATERLOO-ROAD.

CHRONIC PYÆMIA, PROBABLY DUE TO OTITIS INTERNA—AFFECTION OF SEVERAL JOINTS—MULTIPLE ESCHARS—SECONDARY NUTRITIVE DISORDERS—TREATMENT: SALICINE, QUININE, AND CARBOLISED BATHS—CURE.

(Under the care of Dr. GREENFIELD.)

The following case is one of the comparatively rare disease described by Sir James Paget as Chronic Pyæmia (*St. Bartholomew's Hospital Reports*, vol. i. 1865, page 1). The origin seems obscure, but the course of the symptoms leaves no doubt that the case was of pyæmic nature. The marked effects of salicine and salicylate of soda in controlling the temperature are worthy of note; and also the employment of carbolised baths, which seem to have been of great service. The secondary trophic changes in the forearm and hand, consequent on injury to the ulnar nerve, form a subsidiary but interesting feature in the case. The favourable result was no doubt largely owing to the age of the child and to very careful nursing.

Susan H., aged ten years, was admitted, under Dr. Greenfield's care, to the Royal Infirmary for Children, Waterloo-road, on October 24, 1876. She had had general good health; no history of earlier illness could be gathered. The present illness was said to have begun a fortnight or three weeks before her admission with pain in the head. She was attended by a medical man, who said that she had an "abscess in her head," which broke, and was followed by a discharge from the left ear, which had only just ceased when admitted. This was the mother's account. The child herself, who was quite sensible, and remarkably intelligent, said that she had had pain in the left side of the forehead for a fortnight, and during this time had vomited three times; then a discharge from the left ear took place. There was said to have been no diarrhœa.

State on Admission, October 25.—A very well-formed, good-looking, but delicately-framed child; looks prostrate; is pale, but cheeks flushed; pupils dilated; slight sordes on gums and teeth. No pain in head now, though some on admission. Says she felt sick, but no vomiting. Rambled a little last night, but quite sensible to-day. No discharge now from ear, nor any sign of it on examination; no swelling around ear; no tenderness over mastoid process, but slight tenderness on pressure over antitragus; glands on left side of the neck slightly swollen and tender; slight fulness also of glands on right side. Hears ticking of watch with right ear at sixteen inches; left at fourteen quite readily. Tongue dry, nearly clean; thirst great. Bowels open last night, and this morning loose, after three grains of calomel given last night. Abdomen slightly tumid; some tenderness in epigastric and umbilical regions; none in left hypochondriac or right iliac. Vertical dulness of spleen increased, now nearly five inches, but no increase in forward direction, and not felt below ribs. Chest: Resonance considerably impaired at both bases, with some crepitation, rather coarse on forcible breathing. Respirations shallow, 40 per minute; slight dry cough; heart normal; skin pungently hot and dry. Temperature in axilla 104·2° (4.30 p.m.), 105·4° last evening, 102° at 9 a.m.; pulse 120, regular, very compressible and dicrotous. Urine free from albumen; much phosphates. Eyes: Pupils equal, dilated, but act readily and equally to strong light. On ophthalmic examination the vessels were seen to be very full, the veins especially so on the left side; the discs also were apparently hyperæmic, but there was no sign of exudation or other change. At this time there appeared to be nothing by which any positive diagnosis could be made, and, having regard to the absence of any marked sign of ear disease or meningitis, and to the great variations of enteric fever in children, Dr. Greenfield decided to treat the case as one of that disease. Fever diet was ordered, and a mixture containing quin. disulph. gr. j., acid nit. hyd. dil. ℥x. every four hours, and ice-bag to head.

26th.—About the same; temperature last night 104·8°, this morning 101·8°, evening 103·4°.

27th.—Slept well; seems better; pupils still dilated; slight internal strabismus of left eye; no delirium; bowels open last night, loose dark; temperature, morning 102·8°, evening 102·8.

28th.—12 noon: Slept well last night; no headache; bowels confined; pupils much dilated, left rather larger than right; skin pungently hot and dry. Shivered a good deal between 10 and 11 a.m. to-day; temperature at 8 a.m. 99°, now is 104·4°. 5 p.m.: Temperature now 105·7°, pulse 120; patient quite conscious and intelligent; abdomen tumid, tender on pressure in right iliac region; spleen can be felt distinctly below ribs, and is rather firm. Dr. Greenfield still regarded the case as probably one of enteric fever, with possibly some pyæmic complication, and fearing that the temperature might rise still higher, five grains of quinine were ordered to be given at once, and to be repeated every three hours; and if the temperature did not fall, a graduated cold bath to be given. A cold-water enema was given, and was followed by three very loose, offensive, pale motions. The temperature, however, fell almost as rapidly as it had risen, and at 5 a.m. on the 29th reached 97·4.

29th.—Slept a little last night; no delirium; takes food well; complained of tinnitus an hour after first dose of quinine, but not since. Aspect of hebetude, prostration; is paler; slightly deaf; skin cooler; pulse 84, jerking, hard, slightly irregular at times; no pain in abdomen; no rose spots; spleen still felt. Quinine to be discontinued. From 7 a.m. to 4 p.m. the temperature, which was taken every hour, was about 97°; at 6 p.m. it fell to 96·2°. At 10 p.m. it was found to have risen to 103°, or no less than seven degrees in four hours.

30th.—Patient now complains of pain in left ankle and right shoulder; the latter commenced rather suddenly at noon. The ankle is slightly tender when touched, but no redness or swelling. Face flushed; skin moist; bowels open last night, not relaxed, but motions very light in colour. During the twenty-four hours from 8 a.m. on the 30th to 8 a.m. on the 31st the temperature varied very much—at 8 a.m. 99·4°, 6 p.m. 103·6°, 12 p.m. 102°, 2 a.m. 104°, 8 a.m. 99·4°,—and in the intervals the thermometer showed very rapid variations of one or two degrees up or down. Five grains of quinine every three hours resumed; half a grain of carbonate of ammonia and twenty minims of rectified spirits of wine every two hours in addition.

31st.—Very prostrate; deaf; pupils much dilated; pulse 96, weak. Face has a very sallow, typhoid look; tongue furred, dry in centre; a small quantity of offensive discharge from left ear; pain in left ankle continues; and now also some on inner side of left knee, where there is tenderness and some swelling. Temperature less irregular—103° at 10 p.m.

November 1.—More prostrate; very pale; takes little notice; distinctly pyæmic look and odour; tongue dry; pulse 84 to 88; discharge from left ear slight but offensive. Quinine discontinued; half an ounce of wine every two hours added; carbonate of ammonia and spirits of wine in intervals. Whatever the starting-point of the affection, it was clear that the case was now one of blood-poisoning, and probably due to the ear.

2nd.—On the inner side of left knee there is now tenderness and swelling, with slight fluctuation over a space two inches square, not connected with the joint. Right knee also painful; no swelling. Tenderness of left ankle without swelling; right shoulder painful on movement. Temperature at 2 a.m. 105°, 8 p.m. 102·4°, with gradual irregular fall in interval. Ten grains of salicine every four hours to be given.

3rd.—Swelling over left knee now more distinct and fluctuating; considerable effusion in knee-joint itself. Pain in the shoulder increased. Prostration continues. Other symptoms much as before. Temperature averaging about 104° throughout the day, with rapid rises and falls of one or two degrees in short intervals. An incision made into swelling over knee-joint by Mr. Day, the House-Surgeon; only a few drops of thin sero-pus escaped.

4th.—A painful red spot has appeared in front of right ankle. Temperature still averages about 104°, but going up and down. Salicine increased to twenty grains every four hours.

6th.—Very prostrate; skin pungently hot and dry. Pulse

120, small, dicrotous. Left foot now œdematous, especially about ankle. Redness and tenderness, and a puffy condition over right instep. Twenty grains of salicine every four hours.

7th.—Salicine discontinued. The daily average of temperature has been somewhat lower for the last three days—from 102° to 103°—somewhat irregular, but much less vacillating; on the 7th being from 101° to 102°, 100·2° at 3 p.m., when the salicine was discontinued. From that moment the temperature rose steadily, reaching 103° at 2 a.m. on the 8th, 104·2° at 10 a.m., and, after a fall 104·6° at 2 p.m. Then again it fell, and averaged about 100° on the 9th, rising again rapidly on the 10th to 104° to 105°.

During this week, from the 7th to 14th, the child remained in much the same condition as before. She was quiet, apathetic and rather drowsy, extremely prostrate. The whole left foot was swolleu, the right foot and ankle swollen, with marked redness over the instep; the effusion in the left knee contiuued, and all these joints were extremely painful on movement. There was but little discharge from the incision over the knee. The appetite was good; tongue clean. The temperature from the 10th to the 17th inst. varied between 99·5° and 104°, averaging about 102°. Its diurnal course was much more regular: the lowest point was usually reached about 10 a.m., then a pretty steady rise till 4 p.m. to 102° or 103°, an evening fall of one or one and a half degree, and a rise, rather rapid, till about 2 a.m., when the maximum was usually reached; then a pretty steady fall till 10 a.m.

14th.—In the afternoon she was quite conscious, sensible, but weak; tongue clean. Pulse 120, full, rather compressible. She now complained of pain in the right elbow, which was considerably swollen and very tender. Considerable swelling of right foot and ankle persist. Complains of paiu also in right shoulder.

On the 17th she was sensible; cheerful; said she was very hungry; no discharge from ear; bowels open yesterday, natural, rather loose; spleen not now to be felt; no pain in abdomen; pulse dicrotous, but fair. Over the right instep there is now a puffy, semi-fluctuating, red, tender swelling. Right elbow-joint swollen, tense, fluctuating.

On the 19th the swelling over the right ankle, which had increased, was incised, but no pus discharged; only a little thin serum. The pain, however, subsided considerably on the following day.

On the 22nd she appeared more prostrate; had passed all her motions under her for four days. Pulse 144, very dicrotous. Swelling of right elbow considerable, and the joint extremely painful on the slightest movement. She had been taking two grains of the disulphate of quinine with six minims of dilute nitro-hydrochloric acid every six hours from the 14th inst., and half an ounce of wine every hour and a half.

On the 23rd a large abscess was found to have formed over the sacrum, aud was immediately opened, and the child placed on a water-bed.

The temperature from November 19 to 28 was of a more distinctly hectic type, ranging from 99° to 104°, the lowest temperature being now about noon, a steady and rapid rise usually occurring from that till 4 or 8 p.m., at one of which times the maximum was usually observed. On the 29th the usual fall was not observed, the thermometer varying but little from 102° to 103°, and this was succeeded on the 30th by a very sudden rise from 101·6° at noon to 104·4° at 4 p.m., 105° at 12, after which a rapid fall to 100° occurred. This sudden rise of temperature heralded the onset of a new and alarming symptom. This can hardly be better described than as an eruption of bed-sores. On every projecting point of the trunk and limbs, whether subjected to pressure or not, there appeared first a deep-red blush, then a blister formed on the surface, and the skin sloughed, leaving a gangrenous-looking eschar. These formed symmetrically over both hips, the inner side of the knees, over the projection of the head of the tibia, over both condyles of the humerus of both sides, the iliac crests, and the sacrum. They formed very rapidly, in the course of a few hours, so that there were a number of them in a day or two. At the same time the tongue became aphthous, and prostration much increased. A day or two before this, viz., on November 28, the child complained that she saw double. On examination it was found that this diplopia was solely on the right of the median line, almost exactly limited thereby, and increased on moving the object to the left. Slight obliquity of the images was stated to exist. The pupils were both much dilated, both contracting a little to a strong light, but the right most readily, and neither at all completely or persistently. There was marked internal strabismus of the left eye, and evidently some paralysis of the left sixth nerve. With the ophthalmoscope nothing wrong beyond some turgescence of veins could be discovered. No headache.

On December 2 the exposed parts of the skin were ordered to be painted with glycerine of tannin, and ten grains of salicylate of soda three times a day was ordered. The bed-sores as they formed were dressed with carbolised oil, but so rapidly did they form, and so numerous were they, that it was found impossible to dress them all separately, and the child was therefore placed in a warm bath of carbolised water for half an hour every morning, the sores being afterwards dressed with carbolised oil on lint. This treatment had the effect of greatly diminishing the gangrenous odour and promoting the cleanliness of the sores.

Until December 6 the temperature was extremely irregular, with rapid rises and falls of 3° or 4°, this irregular pyrexia coinciding with the period of formation of the eschars; but from the 7th to the 21st, though still irregular, there was no rise above 101°, and in the morning the temperature often fell to normal. On the 21st the salicylate of soda was discontinued, and on the 23rd the evening temperature rose to nearly 103°, and for the five days following presented great irregularity, rising on the evening of the 28th to 105°. On the 29th the salicylate, ten grains three times daily, was resumed, and from that time the temperature only once rose above 100° till January 25.

At this period the condition of the joints was as follows:—Pain, tenderness, and some swelling of right shoulder; considerable swelling and thickening about right elbow; right knee slightly swollen and tender; left knee with extensive swelling, some general thickening of ligaments, an open wound on inner side discharging a few drops of pus daily; both ankle-joints swollen and painful, but no obvious synovial effusion. There was a discharging sore over the right hip, and numerous superficial sloughy sores all over the trunk and limbs. The strabismus and diplopia disappeared in two or three days, and no further cerebral symptoms were developed.

From this time the general progress of the case was favourable. The bed-sores gradually healed, leaving in some places rather deep scars; the last healed at the end of February. The swelling of the joints, with the exception of the right elbow and left knee, gradually subsided, the right shoulder remaining long stiff and painful on movement. Cod-liver oil, wine, and nourishment were freely given, and the child very gradually began to regain strength. Two things, however, remained which call for some further notice. The left knee-joint, which was one of the joints earliest and most seriously affected, continued greatly enlarged, very painful on movement, with general firm swelling, and some signs of effusion. One or two small incisions allowed the escape of a little pus, but the general swelling continued, and with it some pyrexia, the evening temperature being 100° or a little over. On February 10 a free incision was made by Mr. Canton, and some pus evacuated. The more active signs gradually subsided. Some discharge of pus continued for several weeks, then the sinus closed, the swelling diminished, and the joint remained stiff but apparently cured. The right elbow also continued for a long period considerably swollen, the swelling consisting in a general thickening around the joint, especially on the inner side, where there was in addition a tough deep scar between the olecranon and the inner condyle of the humerus, the result of one of the bed-sores. As the general nutrition of the body improved, and the use of the left hand was regained, a very remarkable difference was observed between the state of the left hand and that of the right. The latter continued wasted; when protected by the clothes it was warmer than the left, but rapidly cooled on exposure to the air; its colour was much redder than the left; and it perspired more. The muscles of the little finger and thumb and the interossei were extremely wasted, and responded but feebly to the faradic current. Together with this the shape of the finger-tips and nails was in marked contrast to that of those of the left hand. The nails became, in fact, elongated, incurved both lengthwise and transversely, and the finger-tips were distinctly bulbous. This was especially noticeable because the nails of the left hand were short, triangular, flat, and recurved at the tip. It was, in fact, evident that, in

addition to the paralysis and atrophy of the muscles supplied by the ulnar nerve, there was an altered condition of capillaries of the hand and forearm, and modifications of the secretion, temperature, and general nutrition. In some respects—as the smoothness and colour of the skin, etc.—the condition resembled that seen in section of the median nerve, but no sores formed. Sensation, except of the ring and little fingers, was nearly normal. Under the influence of daily faradisation and friction with camphorated oil, all these conditions gradually disappeared, and the hand regained its natural form and power. Convalescence was very slow and prolonged, and it was not till May 29, 1877, that she was sufficiently recovered to be sent to Ramsgate. The left knee remained stiff, only very slight flexion on effort being possible. With this exception the recovery seemed complete.

MIDDLESEX HOSPITAL.

ABSTRACT OF CASES OF DIPHTHERIA IN 1876-77.

(*Concluded from page* 651.)

[For the following concise notes we are indebted to Dr. Finlay, Medical Registrar.]

Case 9.—Elizabeth G., aged six, admitted July 5, 1876. Father alive, not very strong; mother healthy; one brother suffers from epilepsy. Has had chicken-pox and scarlet fever. Four days ago mother noticed that child seemed heavy and restless, complaining of soreness of throat on attempting to swallow. Two days afterwards throat became worse, and in evening patient vomited twice. Since illness commenced patient has appeared weak and unable to move about. Has lived in basement of house, which is damp and smells badly. On admission, pulse 122; temperature 100·8°. Slight swelling at angles of jaw, tender on pressure. A long patch, creamy white, extends the whole length of each tonsil; uvula elongated, red, and granular; fauces injected. Urine 1028, acid, a considerable trace of albumen; breath-sounds normal. Evening: Pulse 136; temperature 102·8°. A good deal of swelling of sides of neck; exudation extending to uvula. Restless; breathing with difficulty. July 7: Pulse 132; temperature 103°. A dense film of exudation covering uvula and posterior part of soft palate, and both tonsils; tonsils ragged and ulcerated. Breathing laboured and stridulous; croupy cough. 8th, 10.45 a.m.: Extreme lividity of face; retraction of epigastrium and sides of chest; breathing laboured. Temperature 102·6°. Tracheotomy, followed by relief to breathing and disappearance of lividity. 9th, 2.30 a.m.: Temperature rose to 104·2°. 11 a.m.: Temperature 103·6°; pulse 152; respirations 48. Face dusky; lips and extremities blue. Cyanosis increased gradually, and death took place at 3 p.m.

Post-mortem Examination.—Posterior surface of soft palate covered with a dense greyish-white membrane. Here and there portions of membrane had broken away, exposing a raw surface. Uvula covered by a thinner membrane, continuous with the membrane on soft palate. Both tonsils covered by thin membrane; patches also on root of tongue. Posterior surface of epiglottis, and interior of larynx as far as fourth cartilage, plastered over with continuous thin, tough, and coherent membrane. When portions of this were stripped off a raw and congested surface was exposed. Each ventricle of larynx was filled up by a mass of of dense exudation. Vocal cords covered by membranes; membrane extended in patches down trachea, and into both bronchi, and even in bronchial tubes of tertiary order scattered shreds were seen. Glands at angle of jaw red and swollen. Patches of collapse in lungs. Right cavities of heart contained partially decolorised clot; left ventricle nearly empty; valves and walls normal.

Case 10.—Francis K., aged five years and three-quarters, admitted May 11, 1877. 2.30 p.m.: Pale and exhausted; extreme dyspnœa. The child had been ill about eleven days before admission, but became much worse. It had had a "whistling" cough and difficulty in breathing, and had been seen to cough up something resembling false membrane from time to time. At 2.45 p.m. tracheotomy was performed. On examining the throat as well as circumstances would allow, no patches of false membrane could be seen, but the fauces looked red and almost excoriated. Evening temperature 103°; respirations 42. He is much stronger, and breathes fairly. On coughing he ejects from the tube thick mucus, but no membrane. Urine, specific gravity 1015, acid, albumen one-eighth. May 12: Coughs up both through tube and out of his mouth shreds of membrane, and still larger pieces are removed with a feather. Under the microscope this consists of a homogeneous material interspersed with layers of fibrillated tissue, and studded with cells which appear to be dividing. 13th: Temperature 99·8°; pulse 120; respirations 48; sleeps and takes food well 15th: No albumen in urine. Some fluid escapes from his nostrils on swallowing. 16th: Child breathing badly; complains of pain in right side; pulse small and rapid. 10 p.m.: Breathing shallow and laboured; marked recession of spaces between lower ribs at each inspiratory effort. 17th, 2.45 a.m.: Death. The child had some milk and brandy a few minutes before. No evidence of suffocation; failure of heart. No post-mortem examination allowed.

Case 11.—Ada M., aged six, admitted June 27, 1877. Illness began yesterday with complaint of sore throat; breathing became bad. There have been no symptoms of catarrh. No exudation on throat, which is slightly congested. Face pallid; respiration noisy; lips cyanotic; great distress; epigastrium and intercostal spaces falling in with inspiration; glands behind angles of jaws somewhat enlarged. 10.30 p.m.: Tracheotomy, followed by immediate relief to the breathing. Temperature 101·6°; pulse 124; respirations 36. June 28: Temperature 103°; pulse 140; respirations 44. Two or three small pieces of membrane brought up during last night. 2 p.m.: Breathing becoming more laboured; tube became blocked, and pieces of membrane were removed by a feather. Even after this breathing was laboured, and, as a larger tube could not be borne, a dilator was introduced, and held in position by a nurse. 29th: Temperature 103·2°; pulse 160; respirations 44. About midnight the child snatched the dilator out of the trachea. Physician's assistant replaced it, and kept up artificial respiration for fifteen minutes, but without result. No urine passed which could be tested for albumen.

Post-mortem Examination, twenty-six hours after Death.—Both tonsils swollen, and covered with patches of thick, tough, white, leathery membrane. A similar patch on back of pharynx. Uvula and upper surface of epiglottis free from membrane and not inflamed. Under surface of epiglottis and entire interior of larynx covered with membrane similar in character to that before described, rather thicker on under surface of epiglottis than elsewhere. This membrane extended throughout the trachea, and could be traced along the bronchial tubes as far as those of the third degree, but could not be seen in the smaller ones. The lining membrane of these, however, was much injected. Lungs congested, and in places collapsed. Glands of neck slightly swollen. Heart contracted firmly, and ventricles empty. Other organs natural.

Case 12.—Martha B., aged eight years and a half, admitted August 22, 1877. Illness began on 18th of month with headache. On 21st complained of pain in neck behind jaw, where there was swelling. On admission, temperature 100°; pulse 116. Specific gravity of urine 1027; no albumen. Complains of pain on swallowing; throat generally swollen and congested; uvula and adjacent part of fauces covered by a tough grey membrane, partly separated and partly adherent to uvula; throat bleeds readily. August 25: Much improved; glands less swollen and painful; throat less sore, and membrane now distributed over both tonsils and uvula in patches. August 27: Sick twice this morning. Specific gravity of urine 1020, acid, albumen one-twentieth. September 1: Urine to-day contains no albumen. September 2: Vomited twice this morning; the vomited matter contains nothing remarkable. Vomited again at 2 p.m., and died suddenly ten minutes afterwards.

Post-mortem, twenty-four hours after Death.—All chambers of heart were much distended by clot. No appearances of diphtheritic membrane anywhere—tonsils, uvula, epiglottis, larynx, and trachea seeming perfectly healthy, and the trachea containing only a little frothy mucus. Substance of all the organs seemed natural.

Case 13.—Frederick C., aged ten, admitted August 25, 1877; brought to hospital at 10.20 p.m. The father says the boy has been ill for three days, and has frequently coughed up shreds of membrane. On admission, pulse 84; respirations 40. Child dusky, pale; sordes on lips; breathing badly; recession of soft parts between lower ribs. Uvula, tonsils, and soft palate covered with a thick grey

membrane, which is tolerably easily detached, leaving a bleeding surface. August 26, 4 a.m.: Has taken nourishment well. Breathing at first improved, and he regained colour. Now patient is paler, and breathing is more laboured. The air, however, seems to have tolerably free access to the lungs. There is no stridulus, and no violent effort to breathe. 4.35 a.m.: Pulse at wrist imperceptible. Patient died at 4.50 a.m.

Post-mortem Examination, thirty-four hours after Death.—External jugulars distended with blood. Cervical glands not enlarged. Anterior surface of palate, tonsils, and uvula covered by a tough layer of greyish-yellow false membrane. Right side of uvula and right tonsil deeply ulcerated and, in fact, gangrenous and sloughing. Posteriorly the faucial arches and uvula covered uniformly by a layer of false membrane, not very adherent, of a dirty greyish-yellow appearance. The pharyngeal mucous membrane was of a deep livid purple tint, which ceased abruptly at the termination of the pharynx below. Patches of exudation coated the pharyngeal mucosa. Œsophagus natural. Epiglottis swollen and reddened on both surfaces, and coated by false membranes. Two thin shreds of membrane on vocal cords. Larynx and trachea lined throughout by a thin tube of false membrane in one coherent layer, opaque, and greyish-yellow, with very slight adhesion to mucous membrane beneath, which was inflamed. The exudation extended in the same tubular form down the right bronchus, and some of its secondary and even tertiary divisions, so as almost to completely occlude the latter. Here, as in the trachea, it could be readily peeled off in shreds. None extending into left bronchus. Lobular collapse in lungs, especially in lower lobes; both engorged with blood. There was notable prominence of the solitary glands throughout lower half of the ileum, and marked vascularity of Peyer's patches. Beyond vascular engorgement, other organs natural.

THE MEDICAL JURY OF THE PARIS EXHIBITION.—The following are the names of the jury of Class 14, "Médecine, Hygiène, et Assistance Publique":—*England*: Prof. Lister. *United States*: Dr. Thomas W. Evans. *Italy*: Dr. Bertani, Deputy. *Switzerland*: Prof. Vogt, of Bern. *Belgium*: Prof. Hairion. *France*: Profs. Béclard, Le Fort, Trélat, and Vulpian; substitutes, Prof. Richet and M. Théophile Roussel, Deputy.—*Gaz. Hebd.*, June 14.

THE ROGER-MARVAISE BILL.—The Deputy M. Roger-Marvaise has again introduced a Bill for the abrogation of the Article 4 of the law of the 19th Ventose, An xi., which confers on the Minister the power of allowing foreign doctors to practise in France. Between 1815 and 1865 there were 256 foreign practitioners who received these authorisations. M. Marvaise has modified his *projet de loi* on this second occasion, so that the *Gazette Hebdomadaire* (July 14) believes that now even the most extreme susceptibilities will be calmed. All the candidate will have to do will be to submit to two examinations at a French Faculty—one theoretical, and the other practical—when he will receive a diploma, and take the title of authorised physician or surgeon.

MORPHIA-HABIT.—Dr. Lyman related to the Boston Society for Medical Improvement an extraordinary case of morphia-habit which had recently come under his notice in the person of a lady forty-seven years of age. It commenced as early as eighteen, by taking morphia for the relief of obscure pains in the loins; and from the age of twenty-four to the present time she has taken *sixteen grains* per diem! Occasionally she takes one-half this quantity as a single dose in the morning, and the whole is usually taken before midday. She complains only of restlessness and inability for quiet occupation, some excitement being necessary to prevent drowsiness, which is apt to come on at inopportune times. She is in good flesh, but a small eater, with a poor appetite. Her general appearance is decidedly anæmic, but there is no disturbance of the renal or cardiac functions. Sleeps tranquilly, without dreams. Her bowels are kept regular with the aid of injections, and the catamenia have always been so until a year ago, when the menopause occurred. In view of her age, the long continuance of the habit, and its comparatively trifling effect upon her general physical and mental condition, Dr. Lyman considered that the attempt at leaving off the morphia should be made only gradually.—*Boston Med. Jour.*, May 2.

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Medical Times and Gazette.

SATURDAY, JUNE 22, 1878.

THE MEDICAL BILL.

THE Corporations are beginning to move, certainly not hastily, with reference to the amendments made in Clauses 3 and 4 of the Medical Act Amendment Bill. We have made our readers aware that during its passage through the House of Lords the Bill has been so altered that it is now a very serious measure. It not only makes the formation of Conjoint Examining Boards in each of the three divisions of the kingdom compulsory, but it also takes away from the medical authorities the power of entitling persons to admission to the Medical Register, and therefore virtually of licensing men to practise. It leaves, indeed, to the Universities and the Corporations the right and the power of granting degrees and diplomas, and, in one sense, it may be said that all persons will still have to enter the profession by means of the medical authorities, for those authorities will form the Medical Boards by which the new qualifying certificates will be granted; but a qualifying certificate is to be the only title to registration, and degrees and diplomas will, so far as a legal right to practise is concerned, be entirely superfluous. And we do not understand the Bill to require that qualified practitioners shall be affiliated to any of the existing medical authorities. This change may not greatly affect the Universities, for even the general practitioner may continue to desire and seek for an M.D. degree; but it cannot fail in time to affect most gravely the power, influence, and prosperity of the Corporations, for though the higher qualifications of those bodies will still be desired by, and indeed be necessary to, all who seek to take a high position in the profession, but few, probably, will care for their ordinary diplomas and licences; and the Privy Council may not choose to sanction the charge of any higher fee for the qualifying certificate of a Medical Board than such a

one as will cover merely the expenses of the examinations. Further, as we have before pointed out, it will gradually introduce into the ranks of the profession numbers of practitioners owing no allegiance or obedience of any kind to any University or Corporation, and this may lead to a [serious deterioration of the conduct and behaviour, and therefore of the status, of the profession as a body, which would be nothing less than a national calamity. These are matters calling for the most serious consideration; and it is not a little surprising that the Corporations have not been excited to more prompt action with regard to them. However, at the meeting of the Council of the Royal College of Surgeons of England last week, a long discussion took place with respect to the amendments in Clauses 3 and 4 of the Bill. It was decided to take legal opinion about the effects of them, and a committee, consisting of the President and Vice-Presidents, with Sir James Paget and Messrs. Hancock and Humphry, was appointed to receive this opinion, and consider what steps should be taken in the matter. The committee met on Wednesday last, and we believe it was determined that a conference shall be held on the 22nd, with the College of Physicians and the representatives of the Irish Colleges, with reference to the objectionable points in the Bill. A meeting of the Royal College of Physicians of London has been summoned for this day (Friday), "to consider the Medical Bill as now before the House of Commons." The Royal Colleges of Physicians and of Surgeons in Ireland have taken steps which show that they are determined to oppose the Bill unless such amendments are made in it as will give some definite and fair settlement of the question as to diplomas and diploma fees. They have petitioned for the required amendment of the measure, and they have sent representatives to act for them in London in the matter. And elsewhere in our columns will be found the able remonstrance addressed by the Royal College of Surgeons of Edinburgh to the House of Commons against the measure. It is clear, therefore, that the Bill as it now stands will be determinedly opposed in the House of Commons, and that if some compromise cannot be effected it may be lost, independently of the "direct representation" question.

PROLONGED SWIMMING.

It seems ungracious to say one word against swimming in any shape or form. The summer is coming—or at least is still hoped for,—and brook and pool, river and sea, will entice thousands to tempt the cooling waters: and of those thousands how small a proportion can pretend to a knowledge of swimming! How small comparatively is the number of those who could rely upon saving their own lives if suddenly drawn into deep water; and how very much smaller the total of those who could confidently hope to save a drowning companion! Those who advocate and teach swimming deserve our thanks, and he who best illustrates the capabilities of a swimmer should receive the greatest praise; but we fear it is possible to illustrate a good thing excessively, and to teach it injudiciously. It is not good either to "gild refined gold" or "paint the lily," and it is possible to have too much water. We have been led into this train of thought by perusing a letter in the *Standard* from Mr. Matthew Webb, the most accomplished swimmer of Northern latitudes, and he advises that swimmers should rather practise the power of "staying in the water," than the art of rapidly passing through it. He considers that prolonged endurance is likely most to benefit a shipwrecked mariner; and, in the hope that some wanderer on the stormy main may take heart again when he tumbles into it, Mr. Webb announces as follows:—"I have determined to attempt a thirty-six hours' swim in the sea, on the same conditions as I swam the Channel—viz., no artificial dress, and not to touch any boat," etc. Well, for the sake of the fathers and mothers of all the aspiring youth of England who love manly exercises and worship a swimmer like Mr. Webb, we protest! Prolonged immersion in the cool waters of England means prolonged depression of the nervous system, and cannot possibly benefit the constitution or probably give greater power of endurance in a struggle for life, although, perhaps, the man accustomed to be hours in the water might feel less annoyed by the chill when he found himself overboard and his ship running away from him at the rate of ten knots an hour on a pitch-dark and stormy night. We think that Europeans could not safely attempt to accustom themselves to long exposure to cold water, and that if they could safely endeavour to do so, the result would be a failure. We believe that the inhabitants of Terra del Fuego wear no clothes with the exception of a small tippet, which they turn to windward to protect the shoulder-joint, and they claim to have done with their bodies what the European has attempted with his head only, and have succeeded in making themselves "all face." But what benefit could anyone expect to confer upon English society by announcing that he intended to dispense with all clothes excepting the tippet "to windward," to prove that Europeans could overcome the elements and defy the tailor? If we could all start fresh as savages, it may be that Mr. Webb's advice might be followed. Babies might be left in cold tubs for hours, youths might pass the morning in floating up from Gravesend to London-bridge, and men like Mr. Webb might take a swimming trip round the British Islands; but alas! we are not in the condition of our rude forefathers, and dare not play tricks with our constitutions. Let Mr. Webb ask himself how many men could hope to remain even a couple of hours in cold water without running the risk of becoming seriously ill. Good swimmers, or at least what the world used to consider good swimmers before Mr. Webb threw all previous water-heroes into the shade, have traced serious illnesses to prolonged swimming; and what might we expect if every lad in England took it into his head to try and rival Mr. Webb? But we hold that the practice of prolonged swimming would absolutely defeat itself. Why should prolonged exposure to cold enable a man to resist extreme cold, any more than prolonged exposure to heat enables a man to resist extreme heat? A lengthy residence in India does not harden a European against the heat, and a new comer will bear a sudden and excessive strain better than the old stager; and we believe that a moderately good swimmer would make quite as good a struggle for his life if he fell overboard as a man who had passed hours in a tub of cold water every day of his life in the hope of hardening himself. There is another point to be noticed—in all these tremendous swimming or floating matches against time, we observe an element introduced which would never be available in the case of shipwreck. Great swimmers will wear no dress and touch no boat, but they will not go without beef-tea or brandy-and-water. Now, where *any* food or stimulant is taken, the question of endurance becomes complicated. It is then not what a man can endure, but what he can do under the inspiration of repeated stimulants. We trust that if the youth of England are to be brought up to live in the water they will not be allowed to take any nourishment whatever until they come out of it. If they are ever shipwrecked they will not be accommodated with either hot beef-tea or spirits; and in the meantime it is not pleasant to think of our youngsters practising prolonged swimming, followed by boats manned by sympathising boatmen armed with the brandy-bottle.

SEPTIC AND ASEPTIC WOUND-FEVER.

One difference between cases of surgical operation and of injuries treated antiseptically and those treated by the old methods is, that in a large proportion of the former, if successfully managed, there is no rise of temperature whatever, even though the extent of wound be such that under ordinary circumstances the fever would be sufficiently severe to cause death. On the other hand, fever, and even considerable elevation of temperature, may occur in cases where the wounds have apparently been treated with all the precautions of antiseptic surgery. The fever, however, which is met with where the antiseptic method has been employed is remarkable for the slight constitutional disturbance with which it is accompanied. The elevation of temperature is almost the only, or at any rate the only remarkable, clinical symptom. In spite of their fever, the patients scarcely feel ill. This peculiarity of the fever accompanying antiseptic wounds has been carefully studied for several years, in Professor Volkmann's clinic at Halle, by himself and Dr. Alfred Genzmer, and they have summed up the conclusions which they have already arrived at in No. 121 of the *Sammlung Klinischer Vorträge*.

To the fever which accompanies ordinary wounds they give the name of "septic," and to that which may or may not be present in wounds treated antiseptically, according to the rules laid down by Professor Lister, that of "aseptic" wound-fever. Out of a thousand cases of severe injury or severe operations treated with complete success by the antiseptic method, about one-third will recover, roughly speaking, without any fever at all, one-third will have moderate fever, and one-third high fever. At first the occurrence of fever under the antiseptic treatment was considered by Volkmann to be due to some defect in the management of the dressing, but careful observation of a large number of patients showed that after all those cases in which the fever could be explained by the occurrence of small abscesses in the neighbourhood of the sutures, by imperfect drainage, by sloughing of the edges of the wound, by carbolic-acid eruptions, by individual susceptibility to the contact of the air, and by other causes (all of which clearly gave rise to transient septic infection of the mildest character), there still remained a large number of patients who had more or less severe, and more or less protracted, fever, while the progress of the wound was completely normal, without redness, swelling, purulent discharge, or the least deviation from the typical course of an antiseptically-treated wound.

The remarkable thing about aseptic fever is its complete apparent independence of the condition of the wound. A patient may have a temperature ranging from 39·5° to 40·5° Cent. (103·1° to 104·9° Fahr.) for a week or ten days, and yet appear perfectly well; in fact, he may be able, as is frequently the case at Halle after wounds or operations on the upper extremities, to walk two or three miles from his home in the country every day to the hospital to have the dressing changed. In aseptic fever, even with the highest temperatures, Volkmann and Genzmer never found the tongue dry, though there was often increased thirst. The skin never felt so hot to the touch as it was proved to be by the thermometer, and it was always moist, and not dry. Profuse sweats were not unfrequent. The urine was secreted in remarkable abundance, and the appetite of the patient was but little, if at all, affected. There was scarcely any decrease in the excretion of chlorides; on the other hand, urea was abundantly excreted, the amount being apparently proportional to the intensity of the fever. The average relation between chlorides and urea in aseptic fever was found to be as 1 : 2 — 3, and in septic fever as 1 : 10 — 18. There was usually rather a tendency to looseness of the bowels than to constipation. In spite of the fever the patients lost very little flesh or strength. The frequency of the pulse corresponded in general terms to the height of the fever, just as in the septic form, but its volume was never so small, nor its tension so marked, as it often is in the latter.

The pure form of aseptic fever is characterised by Volkmann and Genzmer as "harmless and without prognostic significance." Of course between these cases of pure aseptic fever and the cases of ordinary septic fever there are numerous transitional forms, which depend most probably on the imperfection of the present antiseptic method, by which the development of specific processes of decomposition in the secretions of the wound is not always completely prevented. The final issue of such cases depends on the predominance of the septic or aseptic element.

Cases of pure aseptic fever are rare under the old method of dressing wounds, though they do occur; on the other hand, well-marked aseptic fever is not uncommon, according to Volkmann, in cases of subcutaneous injury, severe contusions of joints, and especially in subcutaneous fractures of bones. Thus, out of fourteen cases of simple fracture of the thigh recently admitted into Volkmann's clinic, all but three were accompanied with fever ranging from 38·9° to 40° Cent. On the other hand, in only half of a number of cases of simple fracture of the leg was there any elevation of temperature. The smaller proportion of febrile cases in the latter category is explained by Volkmann to depend on the different mode of treatment of the two kinds of fractures in his clinic, fractures of the leg being either put up in plaster of Paris or in splints, whereas fractures of the thigh are invariably treated by extension with weights, so that in the former case there is less opportunity for local irritation or reaction than in the latter.

But not only are subcutaneous fractures not invariably, as some authorities have asserted, afebrile in their course, but the fever which accompanies them is not always purely aseptic in its character. Volkmann and Genzmer have noticed this especially in fractures of the neck of the femur, and they ask whether the high temperature and the general septic character of the symptoms depend in these cases on inflammatory complications which have been overlooked in internal organs, or to an unusual development of poisonous exudations between the surfaces of the fractured bone. Anyhow, with these facts before us it would be unfair to demand that patients with open wounds submitted to antiseptic treatment should exhibit *no* elevation of temperature in the early days of the healing process.

The theoretical explanation of the peculiar behaviour of aseptic wound-fever we shall give in the words of its authors:—"Aseptic wound-fever," they say, "is after all, in our opinion, nothing but a fever due to absorption, but it differs from septic fever in this respect, that the substances absorbed are not so very different from those which are produced by the retrograde metamorphosis of the tissues, and the various nutritive processes which occur physiologically in the body; whereas, in septic fever, heterologous, poisonous, and putrid bodies or fluids which contain some specific element or other, capable of exciting processes of decomposition, find their way into the blood. The knowledge which has been obtained by experiments on transfusion, and even on autotransfusion, prevents our doubting for a single moment that such substances as we have supposed to have given rise to aseptic fever are capable of producing large elevations of the temperature of the blood."

In the repair of all, even of subcutaneous injuries, large portions of tissue must be decomposed and absorbed, and, as a fact, aseptic fever most often occurs, and is highest and most protracted, in the antiseptic treatment of contused and

lacerated wounds, and after operations resulting in an excessively large breach of surface. It is a strong argument in favour of the above view of aseptic fever as an absorption-fever that Volkmann and Genzmer have almost invariably succeeded in rendering the most severe operations and injuries afebrile by means of permanent antiseptic irrigation, combined with abundant drainage of the deepest parts of the wound, so that the secretions which form between the sides of the wound in the first few days after operation are continually washed away. In concluding their observations, which they frankly admit to be provisional in character, the authors point out that one result of their researches must be to prevent a great part of the clinical symptoms of fever being referred so exclusively to the rise in the temperature of the blood as has lately been so much the fashion. The use of the thermometer *per se* gives very uncertain indications in antiseptic patients when we wish to determine whether danger is to be apprehended from their wounds, while, on the other hand, careful observation of the *general* condition of the system is of the highest importance.

THE WEEK.

TOPICS OF THE DAY.

The Stafford House Committee have recently had placed before them some interesting statistics of the dangers which attended the heroic efforts of the surgeons who have been employed in the late campaigns in the East. The Stafford House Committee and Lord Blantyre sent out 35; of these 13 were stricken with dangerous maladies and 2 died. The Red Crescent Society employed 45, of whom 14 were invalided and 7 died. The Red Cross Society furnished 14 surgeons, of whom 3 were ill and 1 died. The Turkish Compassionate Fund employed 11 doctors, and of these 3 suffered from dangerous illness. Forty Sisters of Charity lent their aid in nursing the sick and wounded, and of this number 30 were prostrated by fever and 13 lost their lives. These figures show that 105 doctors and surgeons volunteered from this country, and that no less than 33 were victims of fever, whilst 10 of them—young and vigorous men—lost their lives. If the sacrifice of the Sisters of Charity be included, the death-rate amounts to 15·9 per cent. It is reported from Constantinople that the Sultan has personally conferred the Order of the Medjidie on several German Sisters of Charity sent out by the Queen of Saxony. If this be true, it does seem remarkable that no similar honour has been conferred upon those members of the profession who risked their lives in their efforts to succour the sick and wounded of the Turkish army, and who up to the present time have only received the Sultan's thanks. If such a distinction is worth having as the mark of Royal gratitude, the surgical volunteers have certainly deserved it.

Annexed to a Parliamentary return on the subject of dog licences, we at length get from the Registrar-General some statistics relating to hydrophobia. In England and Wales 47 deaths were registered from this cause in 1875, which number was increased to 53 in the following year. Of this last number 10 occurred in the West Riding of Yorkshire, 8 in Lancashire, 6 in the county of Durham, and 6 in the metropolis. The total number of deaths from this disease in the eleven years 1866-76 was 387, averaging 35 a year, but there were only 159 in the first six years, and 228 in the following five years. Of the whole 387 deaths no less than 118 are reported to have occurred in Lancashire; whilst 72 are recorded as happening in the West Riding of Yorkshire, 41 in the metropolis, and 26 in Durham. Hydrophobia appears to be almost unknown, according to the Registrar-General's returns, in the south-western counties, the eastern counties, the south midland, and Wales. It does not seem quite clear why the return is only brought down to the year 1876, and these statistics would have been considerably altered had they included what may almost be called the hydrophobia epidemic of the past year.

Some idea of the rapid increase of population which is taking place in these islands may be gathered from the annual report of the Chamberlain for the city of Glasgow on the vital, social, and economic statistics of that town for the year 1877. The report shows that the number of births recorded during the year amounted to 21,092, and the deaths to 13,823, giving a difference of 7269, which may be regarded as the natural increase of the population, and is the highest on record for any one year. The deaths, when applied to an estimated population of 556,000, yield the simple average result of 2·486 per cent., or 24·86 per 1000. Singularly enough the marriages recorded for 1877 numbered only 4943, as against 4968 in 1876. The united population of the municipal city in the middle of the year 1877 was 556,000, but it is estimated that the city, including its connected suburban districts, represents a united population of fully 720,000.

The want of legislation for the compulsory notification of the outbreak of infectious diseases has again been rendered painfully apparent by the sudden spread of small-pox in the Paddington district. Dr. Lyle, one of the district medical officers, at a recent meeting of the Vestry, reported that no less than thirteen cases of the disease had been discovered within a few days in two or three streets of the parish. In one case seven patients were found suffering from the disease in the same house; and Dr. Lyle expressed an opinion that if the first case had been isolated the other six would, in all probability, have been prevented. Dr. Felce suggested that a handbill setting forth the value of vaccination should be circulated in the district; and it was also arranged that the Vestry should instruct the Medical Officer of Health to let the Guardians and the vaccinating officer know of any case of small-pox in the parish, when it would have the immediate attention of the Board.

In the twenty-seventh report of the Inspector of Lunatic Asylums in Ireland, it is stated that the increase of cases of lunacy last year, as compared with 1876, was 257, chiefly among females belonging to the lower classes of society. The report further states that it is found that after the fourth generation the predisposition to insanity declines.

A large room, comprising 3500 square feet of area, and an adjacent room, which is being fitted up as a library, have been allotted at University College as the Parkes Museum of Hygiene. It is intended to make the library a centre for information in all matters relating to hygiene; the contributions in money already amount to more than £800, and contributions in kind are abundantly promised. Only recently the Clothworkers' Company voted a sum of twenty guineas to the Museum, and the Lords of the Admiralty have contributed a series of plans and drawings of hospital-ships and other articles having reference to naval hygiene.

At the usual fortnightly meeting of the Metropolitan Asylums District Board, held on Saturday last, the return from the small-pox hospitals showed that there were 562 patients remaining under treatment, as against 677 at the end of the previous fortnight, giving a decrease of 115. In the same period the number of fever patients at Stockwell and Homerton was 253, against 252 in the previous fortnight, showing an increase of one patient. Lieutenant-General Sir H. P. De Bathe was appointed a member of the Training-Ship Committee until March 25 next.

The Bishop of Manchester, in consecrating a new church at Bradford-cum-Beswick on Monday last, expressed himself very strongly on the present vice of drinking. He remarked that when the amount of money spent on intoxicating drinks was considered, one somehow or other thought that we hardly deserved prosperity if money was so lavishly spent upon such unworthy objects. The times were not bad for the public-houses, for he could see them growing up in greater and greater splendour at every corner of the streets, and he really did not know what was to become of the country if these terrible drinking habits of the people were to continue; he was afraid the curse was spreading like a leprosy everywhere. Therefore, when we said that we hoped that God would give back to England its days of prosperity, he was not quite sure that days of prosperity ever would come back, or ever ought to come back, to England until England had once more become a sober and industrial land.

One of the most absorbing topics of the past week has undoubtedly been the weather, the cold and ungenial character of which has been matter for common observation. It is indeed a somewhat startling fact to read that, according to the report of the Meteorological Department, the temperature on Monday morning last was four degrees higher in Lapland than in London. A correspondent writing to a contemporary gives statistics which show that the average maximum shade temperature for the present year is 63·3°, whilst in 1877 it was 76·9°—a difference of 13·6°. The great discrepancy is, of course, to be attributed to the gloomy and unseasonable weather of the past few weeks. Nearly three times as much rain has been registered from the 1st to the 15th of the present month as was gauged in the same period of 1877. From April 1 to June 14 (ten weeks) nine inches of rain is recorded by one London authority, and this has been exceeded in some districts of the metropolis.

A milk-seller of Milton-next-Sittingbourne was summoned at the Sittingbourne Petty Sessions, on Monday last, for selling milk adulterated with one-fifth of water. The defendant stated in his defence that the police superintendent who purchased the milk took him "all unawares," and that he did not adulterate it, but his wife did, though he did not know how much water she put in. The magistrates, in fining the defendant £8, said they were determined to stop the practice, and informed him he was liable to a penalty of £20.

THE ANNUAL REPORT OF THE ROYAL COLLEGE OF SURGEONS.

The President's annual report on the affairs of the Royal College of Surgeons of England for the year 1877-78 contains very little that is not already known to our readers. Seven members of the College of the required standing were elected during the year to the Fellowship. For the Primary Examinations for the Membership 746 candidates presented themselves, of whom 477 were successful, and 269 (rather more than one-third) were referred back to their studies; and for Pass Membership 533 were examined, and 122 (nearly one-fourth) were rejected. For the Primary Fellowship 95 candidates were examined, of whom only 46 (less than one-half) were successful; while of the 44 examined for the Final Fellowship, 33 (just three-fourths) were successful. Of the 32 candidates for the Diploma in Dental Surgery, the same proportion (three-fourths, or 24) also passed the examination. It will be remembered that the Council determined to act on the power conferred by Section 5 of the Charter of the 15th Victoria, and admit to the Fellowship, without examination, two members of twenty years' standing, on the ground of distinction in surgery, or in the sciences relating to surgery. In January this year, accordingly, Mr. Owen Pemberton, of Birmingham, and Sir Joseph Fayrer, K.C.S.I., F.R.S., were nominated, and in April were elected as Fellows.

The registration of medical students at the College has been discontinued, the Council having at last decided to leave it to the General Medical Council. Sir James Paget, Bart., F.R.S., and Mr. John Marshall, F.R.S., were elected the representatives of the College in the Committee of Reference under the Scheme for a Conjoint Examining Board in England; and Dr. G. Murray Humphry, F.R.S., has been appointed to deliver the Hunterian Oration in 1879.

We learn that the Conservator of the Museum was authorised to select specimens for the Paris International Exhibition; that the Council have directed that in future the Museum shall be open to visitors at 11 a.m. instead of at noon; that Mr. Charles Hawkins presented to the library valuable autograph notes of the lectures delivered by the late Sir Benjamin Brodie, when Professor of Anatomy at the College; and that Mr. Erasmus Wilson also presented an autograph letter of John Hunter. There have been added to the library also, by donation and purchase, about 280 new works and pamphlets, besides the continuations of works and periodicals already in the library.

The report sets forth at length the memorandum, by the President and Vice-Presidents of the College, on the Duke of Richmond's "Medical Act (1858) Amendment Bill," and the resolutions adopted by the Council respecting it; as also the report, adopted by the Council, of the Committee on certain questions relating to the Diploma in Dental Surgery. But these documents are so well known that it is quite unnecessary to make any further reference to them here.

THE MADRAS LUNATIC ASYLUMS.

In noticing the Annual Report on the three Lunatic Asylums in the Madras Presidency for the year 1876-77, it will be necessary at the outset to note that the health of the Presidency during that period was generally unsatisfactory. There was, it will be remembered, a terrible scarcity of food, and epidemic diseases (especially cholera and small-pox) were widely prevalent and fatal. These causes increased the mortality-rate in the asylums, and the year was altogether so exceptional that the relative importance of its statistical returns must be estimated accordingly. Thus the percentage of recoveries to admissions was 32·55, as against 51·97 in 1875-76, and the percentage of deaths to daily average strength 19·90, as against 11·27 in the previous year. These asylums are situated at Madras, Vizagapatam, and Calicut, and are each in charge of a medical superintendent. The largest is at Madras, which is capable of accommodating 547 inmates; the smallest at Vizagapatam, where sixty patients can be received for treatment. The Report calls attention to the more or less steady increase in the number of admissions to these asylums which has been taking place since the year 1868, simultaneously with a steady accumulation of chronic and incurable cases likely to remain life-residents. Under the operation of these joint causes the available accommodation of the asylums is being rapidly diminished, and the matter is becoming so pressing that the early attention of the Government to the subject will be necessary to prevent overcrowding. It is suggested that harmless incurables might with propriety be transferred to the Municipality or Local Fund Board of their native town or locality, where a suitable asylum might be provided, or where, if experience proved the suggestion practicable, a boarding-out system similar to that in operation in Scotland might be adopted at little expense, the protection of the insane being secured by frequent inspections conducted by the civil and medical authorities. These suggestions are put forward on the ground that it is evidently a waste of medical power and of means to burden the asylums with

an increasing accumulation of incurable cases of idiocy, imbecility, and chronic dementia, when the comfort and care of patients of this description might be secured by less expensive expedients. The Report hints at the expediency of instituting a central criminal asylum for the reception of criminal lunatics, since this class has risen in the three asylums from 71 in 1872-73 to 125 in the year under notice, whilst during the same period the number of "remaining" has increased from 52 to 92. The presence of criminal lunatics in a general asylum, especially when in considerable numbers, is rightly stated to be very objectionable. It deters the general public from taking full advantage of the institution; it associates the asylum work too closely with gaol work; and it makes the friends of other lunatics averse to taking those prompt steps for their admission, which must be taken if mental derangement is to have a chance of being cured. The general report is accompanied by special reports on each of the three asylums which are respectively under the superintendence of Surgeon Nanney (Madras), Surgeon Smith (Vizagapatam), and Surgeon-Major Roberts, M.D. (Calicut). The whole report is prepared by Surgeon-General George Smith, M.D., of the Indian Medical Department, for presentation to the Madras Government.

THE HEALTH OF PORTSMOUTH.

In spite of many drawbacks the town of Portsmouth enjoys an excellent sanitary reputation; thus, in his annual report for the year 1877, Mr. George Turner, the Medical Officer of Health for that borough, is able to record that the rate of mortality for the year was only 17·3 per 1000 per annum of the estimated population—the lowest rate ever noted. The average for the last twenty-seven years is 21·5, the decrease being gradual, but more marked during the last seven years. During the period 1851-60 it was 22·7; during 1861-70 it was 21·5; while from 1871-77 it was only 20 per 1000. Speaking generally, the low mortality of the past year is due to the absence of zymotic diseases. In this report Mr. Turner deals at considerable length with the subject of infantile diarrhœa. Portsmouth, he admits, has not so much cause to consider this question as many other towns, yet, he observes, if diarrhœa in the months of August and September could only be reduced to twice its average for the rest of the year, it would diminish the annual mortality by 0·94 per 1000. To illustrate his views on this matter he has obtained statistics of infantile diarrhœa from six other towns in the kingdom. Mr. Turner impresses upon the Urban Sanitary Authority the necessity for erecting three public buildings, which it is somewhat surprising to think have not up to the present time been provided in such a flourishing and important town as Portsmouth. The first of these is a hospital for infectious diseases; the second a public mortuary; and the third a public abattoir. These wants have, he says, been considered, and in the case of the mortuary a site was selected, and plans prepared for its erection, but there the matter rested. If, however, Portsmouth is to maintain its present sanitary reputation, these most important wants should be supplied without unnecessary delay.

THE HARVEY TERCENTENARY MEMORIAL FUND.

A general meeting of the subscribers to this Fund took place at the Royal College of Physicians, Pall-mall East, on Saturday last. Dr. J. Risdon Bennett, the President of the College, took the chair, and there were present Sir George Burrows, Bart., M.D., Dr. F. J. Farre, Mr. Prescott Hewett, Mr. J. Fitness (the Mayor of Folkestone), Dr. Quain, Dr. Owen Rees, Mr. John Simon, C.B., Dr. C. J. Hare, Dr. J. G. Glover, Dr. Fincham, Mr. Edwin Saunders, Mr. Allingham, Dr. Begley, etc.; and Mr. W. G. S. Harrison and Mr. G. Eastes, the Hon. Secretaries. The report of the Executive Committee stated that, as the result of appeals to various medical corporations and learned societies, to the branches of the British Medical Association, to the general public and the members of the medical profession, a gross sum of about £1680 had been subscribed, of which £1388 had been received. The Executive Committee felt that they might now advise the subscribers to take steps for the selection of a sculptor to whom the execution of the memorial statue might be entrusted. The report of the auditors stated that the necessary expenses had been £160, so that there was in hand a sum of £1228, a part of which was invested in exchequer bills, and bore interest. They further commented upon the accuracy with which the accounts had been kept. These reports having been received, it was resolved that a sub-committee be appointed for the purpose of selecting an artist to whom the making of the memorial statue shall be entrusted; and that Sir George Burrows, Mr. E. H. Lushington, Dr. Quain, Mr. Prescott Hewett, Mr. John Simon, Dr. Owen Rees, Mr. J. J. Lonsdale (Recorder of Folkestone), Mr. John Fitness (Mayor of Folkestone), Mr. W. Bateman, Mr. W. G. S. Harrison, and Mr. George Eastes, form the sub-committee; five to form a quorum. It was also resolved that the sub-committee have full powers to select and arrange with a sculptor in any way that they may think proper, whether by open competition, or by inviting three or four well-known sculptors to send in designs with a view to the selection of the best, or by the selection of an artist without such competition. Votes of thanks to the Honorary Secretaries, the Executive Committee, to Earl Radnor for granting a site of ground for the purpose of the statue at Folkestone, and to the President of the College for presiding, brought the meeting to a close.

THE NEW YORK FLOWER AND FRUIT MISSION.

The *New York Medical Record* (May 18) states that this admirable charity recommenced its operations for this year on May 1; and distributions will take place every Monday and Thursday to the different hospitals, asylums, prisons, and other public institutions, and also to the sick and destitute in the tenement-houses of the city. The ladies having the work in charge anticipated but a comparatively small supply of flowers on the first day; but, instead of this, there was a sufficient number sent in to make more than 4000 bouquets. Of these, 400, composed exclusively of lilacs, were sent to the blind asylum, as the blind seem to be more fond of the odour of lilac than almost of any other shrub or flower. The Flower and Fruit Mission accomplishes its work at probably a less cost than any charitable society that ever existed in New York; for during the eight years of its existence its actual expenses have amounted only to 125 dollars. The flowers and fruit are all given by friends of the charity; the railroads, as a rule, furnish free transport to those sent from the country; and the ladies who distribute them pay their own expenses to and from the institutions visited by them. These kind-hearted ladies make no parade of their doings, and no names are even made public, except that of the lady-secretary for business purposes.

THE DELANCEY FEVER HOSPITAL.

There is in the neighbourhood of Cheltenham an institution called the Delancey Fever Hospital, supported by voluntary subscriptions and donations, which seems to be a most excellent charity. It has been instituted for the reception of cases of infectious fever and small-pox, and is under the management of a committee of gentlemen resident in the vicinity. The last annual report for the year 1877 shows that during the three years and a half that this Hospital has existed, small-pox has been introduced into Cheltenham upon eleven separate occasions, and has attacked

seventeen individuals; yet in no single instance, thanks to the means of isolation thus provided, has it spread beyond the family first attacked. The Delancey Hospital, in fact, supplies, through private enterprise, for the town of Cheltenham the description of establishment which should be maintained by every local board throughout the kingdom. Private patients are accommodated in a separate ward at a charge of half a guinea a day, and can be attended, if they prefer it, by their own medical attendant. The Delancey Hospital thus becomes a home hospital for cases of infectious disease, and the patient may even provide his own nurse or be nursed by a parent or relative. The Hospital is under the medical charge of Dr. Arthur B. Rye, whose report for the past year is of the most satisfactory description; and Cheltenham is to be congratulated on the possession of such a useful establishment.

ECONOMICAL CO-OPERATIVE HEATING.

We learn from our contemporary *Nature* that a very interesting and very successful experiment has been made at Lockport, New York State, in supplying heat to houses by steam supplied from a central station, in much the same way as gas is supplied. The experimental works in Lockport were commenced last year, and during the late winter about 200 houses in the city were heated from the central supply, through about three miles of piping, radiating from the boiler-house, containing two boilers sixteen feet by five feet, and one boiler eight feet by eight feet. The boiler pressure of thirty-five pounds in winter, and twenty-five pounds in summer, is maintained through the entire length of the three miles of piping up to the points of consumption, where there is a cut-off under the control of the consumers. The distribution of heat in the apartments is by means of radiators, consisting of one-inch pipes thirty inches long, placed vertically either in a circle or as a double row, and connected together, top and bottom, with an outlet pipe for the condensed water, which escapes at a temperature a little below boiling, and is sufficient for all the domestic purposes of the house, or is used as accessory heating power for horticultural and other purposes. The laid-on steam is being also used for cooking purposes, for boiling, and even baking, and Mr. G. Maur, F.G.S., who describes the system, witnessed, in a house three quarters of a mile from the boilers, a bucket of cold water raised to boiler heat in three minutes by the passage of the steam through a perforated nozzle plunged into the bucket. The operations of the Heating Company have been up to the present time of an experimental character, and from the 200 houses already supplied with the heating connexion, the actual cost of the coal that would have been used for heating has been provisionally received in payment, and the amount has left a wide margin over the working expenses, though the Company's operations at present cover but a small portion of the area for which they have provided plant.

THE VIOLET-POWDER POISONING CASE.

At the meeting of the Edmonton Local Board of Health on Wednesday, the 19th inst., Dr. Reid, the Medical Officer, reported that the Solicitors to the Treasury had communicated with him on the subject of his previous report as to cases of poisoning in Edmonton by arsenic being mixed with violet-powder, and, in the presence of Mr. Roots, of the Criminal Investigation Department, Scotland-yard, several packages of violet-powder had been more fully tested in his surgery. In one package he considered that arsenic was found in large quantities enough to warrant the suspicion of its constituting half, if not more, of the compound sold as violet-powder, and this packet also bore the name of King. He had tested packets purchased at the various chemists' shops at Edmonton, and found the violet-powder therein to be pure starch and the ordinary constituents of scented violet-powder. During the past fourteen days he had not seen any fresh cases of poisoning due to violet-powder, and the former cases were progressing favourably.

UNIVERSITY COLLEGE, LONDON.

The fiftieth anniversary of the opening of University College falls within this year. It is intended to celebrate the occasion by a gathering of members of the corporation, present and past professors and masters, old students of the College and school, and other friends and benefactors of the institution, to be held within the precincts of the College, on Tuesday, July 9, at one o'clock p.m. The Right Hon. Earl Granville, K.G., Chancellor of the University of London, has kindly accepted the invitation of the President, Council, and Senate to attend and lay the first stone of a further extension of the College buildings, and preside at the luncheon; and the presence is expected of many other persons of distinction, interested in the welfare of the College and in the promotion of University education.

THE MEDICAL ACT AMENDMENT BILL.

The Irish Medical Corporations are up in arms against Clauses 3 and 4 of the Lord President's Bill as amended by the Marquis of Ripon. Both the King and Queen's College of Physicians and the Royal College of Surgeons in Ireland have sent deputations to London on the subject. The College of Physicians seeks for the restoration of Clause 3 to its condition before amended by the noble Marquis, for direct representation on the General Medical Council, and for referring the Bills of the Lord President and of Mr. Mills to a Select Committee of the House of Commons. The College of Surgeons will, we believe, be content if Clause 3 is altered as just indicated.

THE DUBLIN SANITARY ASSOCIATION.

The annual general meeting of this philanthropic body was held on the evening of Thursday, June 13. Lord James Butler occupied the chair in the unavoidable absence of Mr. Jonathan Pim, President of the Association. The report, which was read by Mr. Robert O'B. Furlong, one of the honorary secretaries, stated that the Association now numbered 264 members. The income of the past year amounted to £158, the expenditure to £111 4s. 3d. The history of the existing small-pox epidemic was referred to at length. In this connexion the Executive Committee alluded to the benefits of vaccination, the defects of the law on the subject, and the Bill drafted by the Council of the Irish Medical Association to remove these defects. Besides neglected vaccination there were, unfortunately, other causes for the prevalence of small-pox which did not require any new enactment for their removal—1. The disgraceful sanitary state of the city, as evinced by the high death-rate; 2. The want of proper sanitary organisation and supervision; 3. The want of proper means of removing infected persons to hospital; 4. The want of epidemic hospital accommodation. The Committee were gratified to learn that the Port hospital-ship was to be maintained. The Committee also expressed themselves gratified that the idea of reducing the city sanitary staff had been abandoned. Among the many important questions which engaged the attention of the Committee during the past year, that of the propriety of allowing the flesh of cattle affected with pleuro-pneumonia to be used for human food, must take a prominent place. The Public Health Committee, having issued a circular to the medical profession asking for their opinion on the subject, the Committee of the Association referred it to Drs. Hayden, Grimshaw, J. W. Moore, Harvey

and Woodhouse for report. The report then mentioned in detail the chief business transacted by the Committee during the year. Thanks were expressed to Mr. Meldon, M.P. for Kildare, for his kind co-operation and support. Reference had been made in former reports to the Dublin Artisans' Dwellings Company (Limited). The Committee were glad to learn that the Company had erected dwellings on three sites—Upper Dominick-street, Upper Buckingham-street, and Echlin-street. Sixty-seven tenements are already inhabited, and it is believed that before the end of the year 122 additional tenements will be ready for occupation. The Committee recorded with deep regret the deaths of Dr. Fleetwood Churchill, formerly Chairman of the Executive Committee; and of Dr. Stokes, one of the warmest supporters of the Association. The adoption of the report and statement of accounts was moved by Mr. Charles Meldon, M.P., seconded by Mr. Furlong, barrister-at-law, and carried unanimously. Dr. P. C. Smyly, President of the Royal College of Surgeons, proposed the next resolution, viz. :—

"That the following do constitute the officers and Committee for the year 1877-78 :—*President:* Jonathan Pim. *Vice-Presidents:* Sir Edward R. Borough, Bart., D.L., J.P.; Maurice Brooks, M.P.; Henry Bruen, M.P.; Lord James W. Butler; the Right Hon. Edward Gibson, Q.C., M.P., Attorney-General for Ireland; Sir Arthur E. Guinness, Bart., D.L., M.P.; Ion Trant Hamilton, D.L., M.P.; A. Hudson, M.D., F.K.Q.C.P.I., Physician-in-Ordinary to the Queen in Ireland; C. H. Meldon, Q.C., M.P.; the Right Hon. Viscount Monck, G.C.M.G.; George H. Porter, M.D., F.R.C.S., Surgeon-in-Ordinary to the Queen in Ireland; the President, King and Queen's College of Physicians, Ireland; the President, Royal College of Surgeons, Ireland; Lord Talbot De Malahide, F.R.S.; Colonel the Right Hon. T. E. Taylor, D.L., M.P., Chancellor of the Duchy of Lancaster. *Executive Committee:* Surgeon-General Crawford; Francis R. Davies, K.J.J.; Charles Dawson, T.C.; George Greer; Thos. W. Grimshaw, M.D.; Thomas Hayden, F.K.Q.C.P.I.; J. J. Digges La Touche; Charles F. Moore, M.D.; George R. Price; Thomas Purcell, L.K.Q.C.P.I.; Abraham Shackleton; Mason Scott, M.D.; Albert O. Speedy, L.R.C.S.I.; H. H. Stewart, M.D.; Davys Tuckey; Henry J. Tweedy, M.D.; Stewart Woodhouse, M.D. *Hon. Treasurer:* Wilfred Haughton, 28, City-quay. *Honorary Secretaries:* Robert O'B. Furlong; Frederic W. Pim; John William Moore, M.D.; Edward F. Beatty. *Assistant Secretary:* Edward Spencer. Dr. Grimshaw seconded the motion, which was adopted. Surgeon-General Crawford, the Principal Medical Officer in Ireland, moved a vote of thanks to the press for their unvarying support. The motion was seconded by Mr. G. R. Price, barrister-at-law, and adopted. The proceedings terminated with a vote of thanks to the Chairman.

London School of Medicine for Women.—The Hon. Treasurer of this School has received a notification from Mr. George Oakes, of New South Wales, of a legacy amounting in value to nearly £7000 having been left to the institution by his late wife.

Baron Rokitansky's Sons.—Docent Karl Rokitansky has just been made an Extraordinary Professor, so that Baron Rokitansky's four sons are all Professors—two in the Medical Faculty, and two in the Conservatorium, one of whom Hans Rokitansky, is the renowned bass singer.—*Allg. Wien. Med. Zeit.*, May 28.

Myositis Ossificans.—At the Vienna Medical Society, Docent Dr. Nicoladoni presented a girl, seven years of age, as an example of a very rare affection of the muscles—viz., ossification of the muscles of the trunk and limbs. The disease had been going on for about a year, commencing in the muscles of the neck, whence it extended to the spine, the anterior part of the thorax, and the limbs. On each side of the spine a rigid line (sacro-spinales) extends. The scapula is fixed to the thorax; and in the cervical regions are found fibrous cords containing bony plates. The right knee-joint is contracted, and the pectorales are almost entirely ossified. There are only three similar cases on record.—*Allg. Wien. Med. Zeit.*, May 28.

CLINICAL LECTURES
ON THE CONNEXION OF THE DISEASES OF THE THROAT AND CHEST.

DELIVERED AT THE HOSPITAL FOR DISEASES OF THE THROAT AND CHEST.

By ROBERT HUNTER SEMPLE, M.D., F.R.C.P.L.,
Physician to the Hospital.

Lecture III.

The principal object of the present lecture is to illustrate the connexion of disease, or apparent disease, of the throat with affections of other organs and structures, especially those in the thoracic cavity, and with general constitutional maladies. The acute laryngitis of children, for instance, is seldom strictly localised in the larynx, for it usually also attacks the trachea, and not unfrequently the bronchial tubes; while the chronic laryngitis of old persons is almost always accompanied by chronic bronchitis. Diphtheria, although originally supposed to be a disease peculiar to the throat, and indeed usually commencing in that region of the body, is by no means a merely local malady, but a specific affection involving to a greater or less degree the whole of the economy. If the hypothesis be correct, that diphtheria is propagated by germs introduced from without, it is fair to suppose that these germs find a suitable soil in the mucous membrane at the back of the throat, and that they increase and multiply there and elsewhere in the usual modes of animal or vegetable generation. In point of fact, the peculiar membrane which is the essential feature of diphtheria often spreads from the back of the throat upwards to the nasal cavities, outwards to the Eustachian tubes, downwards and backwards into the œsophagus, or downwards and forwards into the larynx, trachea, and bronchial tubes; and, in epidemics of diphtheria, the skin and the conjunctiva may be attacked, or even the margins of the anus, the vagina, or the penis.

The connexion existing between the affections of the larynx and tubercular disease of the lungs is so important that it demands most careful consideration. It is true that in many cases of tubercular consumption the larynx is not much or at all affected; but in very many instances both the larynx and the lungs are diseased, sometimes simultaneously, but sometimes the lung-mischief appears first, and sometimes the larynx is the first to be invaded. In all cases of long-continued congestion or inflammation of the larynx, the most careful inquiry should be made as to the existence of constitutional disease in some other part, and when medication of the laryngeal structures is unattended with the anticipated benefit, it is reasonable to suspect a more than local cause of the malady. In persons affected with some constitutional taint, the accidental circumstances of exposure to weather and the like are only the exciting forces which call into activity the latent predisposition. The most common of these predisposing constitutional causes are the tuberculous and the syphilitic cachexiæ, and it is often difficult to determine which of these two is the real agent in a given case. In fact, they are sometimes combined together as in a remarkable case occurring in the practice of the hospital. A middle-aged married female presented herself with congestion of the larynx, but she had also what appeared to be a scrofulous ulcer on the right side of the neck, and she was pale, weak, and anæmic. Regarding the case as one of the tuberculous diathesis, soothing local applications only were employed, and the strength was maintained by tonics and alteratives—as cod-liver oil, quinine, and iron. But the sore in the neck showed no disposition to heal; and after some time of this ineffectual treatment, the thought struck me that there might be a syphilitic element in the case, and I accordingly substituted for the mild poultices and ointments formerly ordered a dressing of the old-fashioned but excellent black-wash, which was to be applied twice a day on lint, and at the same time the internal use of iodide of potassium was superadded to the ordinary tonics and alteratives. The result was almost magical, for the deep and unhealthy sore soon began to assume a clean appearance and to heal at the edges; and at present there

is only a slight scar on the neck, with a small vegetation or caruncula attached to it. What proved the real nature of the case and the correctness of the second diagnosis was not only the success of the anti-syphilitic treatment, but the fact that I subsequently received from the medical gentleman who formerly attended the patient a full history of the case, which clearly described an attack of syphilis. I may here remark that the discovery of a syphilitic history is often a matter of extreme difficulty, and more especially in females. In the latter class of subjects, independently of the natural desire to avoid revealing unpleasant circumstances, the patients are often really ignorant that they have ever suffered from specific disease; and in a certain number of instances (and this hospital is rich in such experiences) the malady is congenital, the sufferers themselves being, of course, quite unconscious of the origin of their malady.

In the very common occurrence of the connexion of laryngeal disease with tubercular consumption, it is of the highest importance to determine how far the lungs are affected, if at all, in a given case of subacute or chronic laryngitis; for knowledge of this kind has an essential bearing both upon the prognosis in general, and upon the probable result of local treatment. In many instances the chronic inflammation and ulceration of the larynx are among the latest complications of pulmonary consumption, and such a combination represents practically a hopeless condition; but sometimes the laryngeal disease is very far advanced, while the tuberculous pulmonary affection has made but little progress, and then the probabilities of success of laryngeal medication are very much enhanced. Examples of such cases are not rare in the practice of the hospital, and two of them have recently fallen under my notice. In both of these the laryngeal disease was so far advanced, and the cough and hoarseness were so distressing, that there seemed, from the general symptoms, to be very little probability of success in the local treatment, but on a careful stethoscopic examination I it was found in each case that the pulmonary mischief was not far developed, and local treatment was therefore commenced and the prognosis was so far justified by the result that both the patients were very much improved, and, indeed, were able to resume their employment, which in each instance was highly unfavourable to the chances of recovery, for one was an out-door labourer, and the other an omnibus conductor.

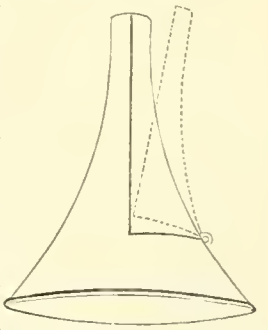
It is impossible to estimate too highly the value of laryngoscopic investigation, both as a positive and negative form of evidence, in cases of laryngeal phthisis; and the contrast between our present means of diagnosis, and those adopted by physicians only a few years ago, is well exemplified by looking over the valuable work of Trousseau and Belloc published in 1837, in which the distinguished authors admit the difficulty of diagnosis in the disease now referred to, owing to the uselessness of the instruments then employed for examining the larynx in the living body.

The connexion of laryngeal symptoms with diseases of the heart and great vessels has also derived important lessons from the evidence, positive and negative, afforded by the laryngoscope. Before the use of that instrument many cases were mistaken for instances of subacute or chronic laryngitis, whereas the symptoms were really due to aneurismal tumours within the thorax, and the vocal cords were affected only physiologically. By referring to the anatomy of the pneumogastric nerve it will be observed that the recurrent laryngeal branch of that nerve passes round the arch of the aorta on the left side; and consequently, when that portion of the aorta is the seat of an aneurism, the functions of the branch in question, which supplies the whole of the laryngeal muscles except the crico-thyroid, will be disturbed. Hence there will be difficulty of breathing, and a so-called "croupy" cough, owing to the inability to close or to open regularly the aperture of the glottis, from the spasm, or the paralysis, as the case may be, of the intrinsic muscles acting on the cords. Several such cases are on record, and in the practice of this hospital many such have presented themselves. In one very distressing case under my own care, the disease and the symptoms, and the laryngoscopic evidence, were such as I have just briefly described; and the patient having died after great suffering, the parts seen after death completely established the accuracy of the diagnosis. Another case, somewhat similar in its nature, is now under-treatment as an out-patient, the woman refusing positively the offer of admission into this or any other hospital.

ON A NEW AURAL BILL-SPECULUM.

By ROBERT T. COOPER, M.D. T.C.D.

The ear speculum, of which the accompanying woodcut gives a very fair idea, and which is here pourtrayed for the first time, was suggested to me by the difficulty we experience in thoroughly cleansing from cerumen the instruments constructed upon the principle of Gruber, Toynbee, and Politzer; in fact, it unites to these the solitary advantage possessed by Kramer's dilating speculum, and which is now almost completely thrown aside.



It will be seen from the illustration that this speculum of mine is simply an ordinary Toynbee, slightly modified at the broad end by being expanded in such a way as to admit of increased illumination, and possessing at about half an inch from this margin a hinge, upon which a door, constructed so as to accurately correspond in shape with the remaining portion of the speculum, opens and shuts in a way such as allows of the easy insertion of the edge of a towel, and the consequent thorough cleansing of the instrument—an undoubted advantage to practitioner and patient: a saving of time and trouble to the one, and a security against infection to the other.

This speculum can, of course, be constructed of different sizes and shapes, to suit the convenience of the practitioner. Thus, the door may be formed of other patterns than that in the drawing; at the broad end, for example, it may be rounded off instead of being angular. What I contend for is, that this bill arrangement is of unquestionable practical utility, and that all ear specula ought to be constructed after the same fashion; and I say this in spite of the fact of being fully cognisant of the acknowledgment of a like principle in other specula—notably, as just stated, in that of the old one of Kramer.

The presence of the door in no way impedes or otherwise interferes with the introduction of the instrument into the meatus, the sides of which lend it support and so insure its closure, while the slight hitching of the movable door when the speculum is tilted, so far from being objectionable, proves in practice, as anyone can see that makes trial of it, a very decided advantage. This slight movement oftentimes saves a patient pain, and if the walls of the meatus be irregular it generally enables us to obtain a better view of the membrane; while in no case that I have ever seen has it proved in any way objectionable.

The distribution of prizes at the Charing-cross Hospital Medical School took place on Wednesday last, the Hon. Baron Pollock occupying the chair. The following is a list of the prizes and recipients:—Scholarships, etc.: Llewellyn, £25, H. G. Jacob; Golding, £15, James Turton. Governors' Clinical Gold Medal, T. M. Hughes. Pereira Prize, £5 and bronze medal, T. M. Hughes. Midwifery: Silver medal, H. G. Jacob; certificates, H. E. Garrett, T. M. Hughes, and Charles Curde. Forensic Medicine: Silver medals, Charles Curde and A. C. N. Goldney. Materia Medica: Silver medal, James Turton; certificates, J. F. Williams and J. C. Culling. Practical Chemistry: Silver medal, John Smith; certificates, W. J. Clarke, C. R. Crane, and J. F. Williams. Botany: Silver medal, J. F. Williams; certificates, H. F. Corbould and R. W. Branthwaite. Senior Medicine: Silver medal, H. G. Jacob; certificates, T. M. Hughes and W. H. Day. Junior Medicine: Bronze medal, James Turton; certificates, H. Richardson and W. J. Clarke. Senior Surgery: Silver medal, H. G. Jacob; certificate, T. M. Hughes. Junior Surgery: Bronze medal, James Turton; certificate, W. J. Clarke. Senior Anatomy: Silver medal, James Turton; certificates, C. R. Crane and H. F. Corbould. Junior Anatomy: Bronze medal, E. E. Newnham; certificates, H. Harris and M. Koetlitz. Chemistry: Silver medals, W. G. Burrows; certificates, T. E. Rogers and J. F. Williams.

THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH AND THE MEDICAL BILL.

Unto the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled, the Petition of the Royal College of Surgeons of Edinburgh, under their Corporate Seal.

Humbly sheweth,—

That a Bill has been introduced into your Honourable House, sent down from the House of Lords, intituled, "An Act to Amend the Medical Act (1858)."

That that Bill, amongst other matters, deals with the question of the licence to practise medicine and surgery, and the registration of medical practitioners, and in doing so introduces a completely new system which virtually disfranchises all the licensing medical authorities of the kingdom, and deprives them of that licensing power which many of them have enjoyed for centuries under royal charters.

That that licensing power has been exercised, and is still exercised, in such a manner as to promote medical science, and to benefit the public and the medical profession.

That the licensing bodies have been careful from time to time, and more particularly since the passing of the Medical Act, 1858, to alter and modify, as circumstances seemed to indicate, and as recommended by the General Medical Council, their curricula of study, and also their tests by examination, which have been rendered more extensive, more practical, more searching, and in every way more efficient.

That the large proportion of rejections at their examinations, averaging about one-third of those examined, as ascertained from published official tables, testifies that no undue lenity has been shown by the licensing bodies generally.

That as the result at the present moment, the status of the medical profession is very high, and the general body of medical practitioners, in town and country, whether in private practice or in the public service, are so well trained, well-informed, and skilful in their profession, as to deserve public confidence.

That while it was desirable that in an amending Bill provision should be made for preventing any person obtaining admission to the Medical Register who had not been educated and tested in all the branches of medicine, including medicine, surgery, and midwifery, there was neither necessity nor expediency for abolishing all the old licences, and for establishing, as the Bill proposes to do, new licences in which the names of all the licensing bodies are ignored (their diplomas being set aside and declared unregistrable), and with the granting of which these bodies will, if the Bill be passed, be only very indirectly connected.

That in past times, as at present, the connexion of the licentiates with the respective bodies from whom they obtained their licences was a beneficial connexion, and had a tendency to maintain the character of the profession, and that the dissociation of the licentiates from the medical authorities seems calculated to have a deteriorating influence on the profession, by diminishing a wholesome *esprit de corps*, and by removing the members of the profession from the observation, jurisdiction, and discipline of the respective medical authorities.

That the result of the proposed changes on the medical corporations will be to lower the prestige of these peculiarly British bodies, which give the profession a useful measure of self-government, unknown abroad, and to cripple their resources, which have been employed for no selfish corporate objects, but, after payment of the expenses of their examinations, have been devoted to the erection of convenient halls for their meetings and for examination purposes, and to the founding of libraries and museums, which have greatly tended to promote the progress of medical science, and have proved not only important sources of instruction to students and medical men, but also sources of both instruction and gratification to the public, who are largely admitted to the benefits of them on liberal terms.

That your petitioners would further call attention to this circumstance, that, by the proposed Bill, foreign and colonial degrees and diplomas are to be allowed a privilege which home degrees and diplomas are to be deprived of, and to be registered without the necessity of the holders of them having been obliged to pass as licentiates, and that there is no guarantee that any equivalent reciprocal privileges are to be granted to British registered practitioners who may wish to settle abroad or in the colonies.

That this Bill contemplates, as already shown, great and fundamental changes, some of the most important of which, it may be stated, have been introduced into the Bill at the eleventh hour, and hastily passed in the House of Lords, without the medical authorities having had time and opportunity maturely to consider them.

May it therefore please your Honours to take such steps as will prevent the Bill in its present shape from being passed into Law; and, as preliminary to further medical legislation, to refer this Bill and the other Bills for amending the Medical Act which are at present before your Honourable House, and the whole question in all its bearings, for investigation, to a Select Committee of your Honourable House, or alternatively to a Royal Commission.

And your Petitioners will ever pray.

Signed in name and by authority of the Royal College,
Patrick Heron Watson, M.D.,
Edinburgh, June 15, 1878. *Preses.*

FROM ABROAD.

Foreign Body in the Bladder.

At a recent meeting of the Société de Chirurgie (*Union Méd.*, June 11), M. Lannelongue communicated a case on the part of M. Fleury, of Clermont, which gave rise to an interesting discussion. The subject of the case is a gentleman, seventy-eight years of age, of robust constitution, and remarkable for his energy. In 1863 M. Civialé performed lithotrity on him, and from that time he had always been obliged to use a catheter, a slight vesical catarrh having always remained. He employed an instrument five millimetres in diameter, and which had become much roughened by long usage. He introduced it as easily as usual on April 23, but on withdrawing it he found that a portion of it remained in the canal; and in place of sending for aid to have it extracted he forced it into the bladder by means of another catheter. M. Fleury, when consulted, advised expectation, as he considered the attempt to remove a metallic body seven centimetres in length would be of very doubtful success, while cystotomy at the age of the patient was a hazardous procedure. There was but a moderate degree of inflammation caused by the presence of the foreign body, and catheterism was performed without much difficulty, when four days afterwards, during an effort at stool, the end of the catheter presented itself at the anus, and was removed after a few tractions. From this time the pains diminished, and no urine oozed out by the rectum. The patient resumed his former habits of life, and the bladder held the urine for five or six hours, as heretofore.

At the discussion which followed the narration of this case, M. Tillaux observed that, although the procedure followed had a fortunate issue, it was not a desirable one to imitate, seeing how exceptional must be a spontaneous discharge of a foreign body from the bladder. Moreover, the age of the patient was no reason for abstaining from interference, for operations are performed at that age with successful results. So exceptional must be the discharge of a foreign body of this size through the recto-vesical wall without being followed by a fistula, that M. Tillaux would not trust to it; and if he failed to extract the metallic body by one of the instruments that have been designed for this purpose, he would not hesitate to perform lithotomy. Prof. Verneuil observed that this case raised the question whether we ought to renounce in aged persons the resources offered to us by surgery. Operations in aged persons are, indeed, always of a serious character, for the senile condition of the kidney is one of the most frequent causes of the nephritis which carries off so many patients. For several years past he has been collecting a great number of facts which much aggravate the prognosis delivered in the cases of persons undergoing operations, when subjects of a general affection; but,

in spite of this, when the necessity arrives, he operates upon them, and some of them recover. It is the same with old age, which is certainly not a worse condition, and, in his opinion, urgent cases should be operated upon. In respect to the present case, it must be admitted that a portion of catheter seven centimetres long remaining in the bladder is a terrible accident, in presence of which we have no right to remain inactive. It should be extracted, and not having much confidence in the instruments constructed for this purpose, Prof. Verneuil would have proposed lithotomy. This case of M. Fleury's possesses the great inconvenience of raising hopes that will be disappointed. M. Desprès congratulated M. Fleury in not having made use of any of the instruments contrived for removing solid bodies from the bladder, the utility of which he regards as quite illusory. None of them would have been able to remove this catheter, while their employment might have done much mischief. It is to be regretted that an examination per anum was not instituted, for the end of the instrument pressing against the recto-vesical wall would have been felt, and an incision into the rectum would have enabled it to be extracted. As to the patient's age, that was no contraindication to an operation. M. Tillaux said that he regarded this *taille rectale* recommended by M. Desprès as a bad operation; for in an adult there is often difficulty in reaching the posterior edge of the prostate, and still more the base of the bladder in which the foreign body may be felt. It is possible in a child, but much more difficult in an adult. As to the operation by the rectum, this does not consist in cutting into the base of the bladder, but in cutting through the rectum into the neck of the bladder in order to penetrate into that organ If we cut into where the foreign body was located we should divide the vesiculæ and the peritoneum.

Abscess near the Anus and Rectum.

From a lecture delivered by Prof. Van Buren, at Bellevue College (*New York Medical Record*, May 11), we take the following observations:—

This is a very common affection, though often borne in silence, especially by women, and the practitioner familiar with it is often enabled to prevent much suffering and even save life. "Recognising it by the description of characteristic symptoms, he can often confidently say to his patient—'Take a little ether, and let me save you much trouble hereafter.' There is no class of cases in which anæsthesia adds so largely to our power as in the surgery of the rectum; and here, in the country in which it was discovered, the duty would seem to devolve upon us to demonstrate its practical utility in everyday surgery, for abroad, and especially on the Continent, the tendency is very strong to continue in the beaten track, and reserve it for the greater operations."

After adverting to the numerous causes which may give rise to these abscesses, Prof. Van Buren observes that all abscesses near the lower end of the rectum have certain characteristics in common. 1. They can rarely be made to abort, going on almost inevitably to suppuration. 2. They do not heal readily, but as a rule tend to degenerate into chronic sinuses and fistulæ. 3. The pus which they discharge is offensive, in consequence of the exosmosis of gases from the bowel. It is a received rule with surgeons that they should always be opened, and opened early, even without waiting for unequivocal evidence of fluctuation. And another good rule is that all incisions should radiate from the anus as a centre, in order to avoid cutting across the course of blood-vessels, and the possible bad effects of subsequent contraction in healing. These abscesses vary in size, situation, and gravity. Often a little hard lump will form just at the verge of the orifice of the anus, originating from a hard stool, an external pile, or the chafing of a napkin, and it becomes hot and exquisitely painful, this being one of the most sensitive parts of the body. The sphincter is spasmodically contracted, and constantly pinches the little tumour; and for four or five days, or until it bursts, life is a burden. If abortion cannot be effected in twenty-four hours by a pig's bladder partially filled with ice and moulded accurately to the part, then the tumour should be freely incised, freezing with ice or ether-spray replacing (if desired) general anæsthesia. Afterwards, a piece of fine sponge, cut to fit the part, and moistened with laudanum or compound tincture of benzoin, may be kept in contact with the part. These little anal abscesses, which, like the hordeli of the eyelids, often originate in the glandular follicles, cause an amount of pain out of all proportion to their size, and occur most frequently before middle life, showing in some individuals an habitual tendency to recur. The regular use of an alcoholic or astringent lotion to harden the skin is often of service in such cases. One form of this marginal abscess takes its source in a little varicose venous pouch—one of the varieties of origin of the external hæmorrhoid. Left to itself, it is likely to leave behind it a minute "blind external fistula," often associated with a little flap of shrivelled integument. A *painless* variety of marginal abscess sometimes forms insidiously—generally in a delicate, perhaps phthisical subject; and may discharge itself and leave a little fistula without its existence having been suspected. It is more of the nature of what is known as the "dermoid" abscess, and requires decided local stimulants to make it heal after incision.

When the abscess is situated higher up, and beyond the grip of the sphincter, although it may be most acute and of considerable size, it does not give rise to the same constant and intolerable pain as when near the margin. Entire rest, narcotic and sedative poultices, with early and free opening, are here the remedies; and if the case be not promptly met, it may last a fortnight or longer. One of the prominent difficulties is to provide for defæcation without great temporary increase of pain; but this should be done daily or every other day, as fæcal accumulation should be avoided. A mild laxative, as castor oil, sulphur, and cream of tartar, or fluid extract of buckthorn, may be given, assisting it by an enema of warm water and oil. If properly managed, the introduction of the nozzle of an injecting-tube is not painful, and the patient's objection to it should be overruled. When left to itself, complete relief at first seems to follow the spontaneous bursting of the abscess; but in the course of a few weeks it is found that a fistula has formed. It happens occasionally that a collection of pus forms outside the rectum, in most cases just on a level with the upper limit of the sphincter, and, failing to reach the surface externally, and in most cases causing no very urgent pain, finally discharges itself into the bowel, so that the patient, after voiding some matter at stool, finds himself relieved. It is in this manner that what is called "the blind internal fistula" forms—a variety which is not very common. The relief is usually not permanent, a hard, tender lump remaining near the anus, and sooner or later becoming the seat of another abscess, and breaking externally—the former "blind internal fistula" becoming converted into a "complete" one.

In both this and the last variety of abscess, the exciting cause is in most instances a perforating ulcer at the bottom of one of the lacunæ of the rectum, which are situated just above the external sphincter—the ulceration having been provoked by the lodgment in the little pocket of some source of irritation derived from the passing fæces; hence the explanation of the fact that, when a complete fistula follows one of these abscesses, its communication with the bowel is most frequently found just above the limit of the external sphincter. Not rarely the starting-point of the abscess is in the substance of this muscle, so that the resulting fistula actually traverses the muscular mass. When the abscess extends entirely outside of the sphincter, it then occupies the ischio-rectal fossa, and, in the loose connective tissue and fat of this region, provided to accommodate the varying bulk of the rectal pouch, finds room for rapid development. A much more grave form of rectal abscess takes its origin, at first, deep in the ischio-rectal fossa. It is doubtless caused in some cases by ulcerative perforation of the rectal pouch, and in others is a direct result of constitutional dyscrasia. The progress of these cases is often slow, insidious, and depressing, the pus tending to travel inwards in the direction of least resistance rather than towards the surface. The dense integument and subcutaneous cushion of the buttock become thickened and brawny, often over a considerable extent of surface. There is not, necessarily, any very urgent pain or throbbing; but fever is present, and frequently there is evidence of septicæmic depression. When the surgeon is not familiar with these cases, and waits for evidence of fluctuation before interfering, extensive destruction of pelvic connective tissue may occur, involving danger to life. A finger in the rectum will recognise increased heat, and an œdematous, doughy feel; and the indications are those of phlegmonous erysipelas, the surgeon making an early and free opening through the integument, and following it with his finger, so as to secure a direct and sufficient outlet, not only for pus, but for sloughy *débris*.

This affords the only assurance of safety, and when it is neglected, extensive ulceration and sloughing may occur, with an amount of destruction of pelvic connective tissue around the lower end of the gut which is often irreparable; and when the patient does recover, he is liable to permanent disability.

There is plainly a wide interval between the little round painful abscess at the margin of the anus, and the above grave form of the disease, and in practice many varieties of abscess intermediate to these are met with; but in all abscesses near the anus and rectum the same rule is imperative, viz., to open them early and freely, with the double object of shortening the period of pain and of destruction of tissue, and of securing a cure, if possible, without fistula. Troublesome bleeding seldom follows, and pressure by compresses and a T bandage or adhesive plaster is always available; but Prof. Van Buren prefers the use of the subsulphate of iron, either in solution or powder, having found it not only useful as a hæmostatic, but also as an excellent disinfectant and a salutary local stimulant. It forms a scab under which healing goes on without suppuration. He has great hopes in the future employment of the antiseptic method in cases of large abscess; but even with this, free and early opening cannot be dispedsed with.

REVIEWS.

Notes on Rheumatism. By Julius Pollock, M.D., F.R.C.P., Senior Physician and Lecturer on Medicine, Charing-cross Hospital; Physician to the Foundling Hospital. London: J. and A. Churchill. 1878. Pp. 76.

In this modest little volume Dr. Pollock has shown himself, as it seems to us, far too diffident. He only claims for himself a merit which, in these days, is, after all, a great one—that of brevity. But no one who will take the trouble to read through Dr. Pollock's "Notes" can fail to see that the work, small as it may be, is from the pen of a physician in the best sense of the word. To these it will be at once apparent that no mere compiler could have produced such a volume. To note but one point: there is in it that intimate knowledge of the use and value of various remedies which can be only gotten of careful bedside work. So much is this the case that we regret that Dr. Pollock has not had courage enough to rest entirely on his own observations. He refers to temperatures so unusual that we are sure a further record of them would be of the utmost value. These records it is in Dr. Pollock's power to give us, and we sincerely hope that when these "Notes" come to a second edition we may find something of that special work and observation hinted at in the one now before us. For a like reason we should like to see certain portions of the present edition discarded; they mar the pointed characteristics of the book. Thus certain observations have come to be almost truisms with regard to rheumatism, and it is a pity that they should be introduced into a volume so forcibly marked by individuality.

As regards that vexed subject the treatment of rheumatism, Dr. Pollock pronounces strongly in favour of salicylate of soda. There can be no doubt of the value of this remedy—it, so to speak, "breaks the back" of many attacks, both of acute and subacute rheumatism; but we think Dr. Pollock fails to note here what he must have often seen, the proneness to relapse when the rheumatism has been subdued by its use. It has always seemed to us best to relieve the pain and reduce the temperature of the disease by its means, and then to revert to the old plan of gentle alkaline treatment. The fashion of alkaline treatment in vogue a few years ago was worse almost than bleeding, and it is a question whether more lives were not lost by pushing this to extremes than by the disease itself.

We cannot help harping on our former strain. We regret the absence of temperature-charts, and we the more regret it as we know that at the hospital which Dr. Pollock represents these records are kept carefully and methodically—which gives them twice their value. They could not fail to be of service. It would be difficult to over-rate the value of such observations, and yet since the publication of Wunderlich's book we have come to modify our views with regard to them in a most material degree. We would therefore urge Dr. Pollock, who has got such materials at his command, to be less niggardly in their use when the next edition of his useful "Notes" sees the light.

A Handbook of Uterine Therapeutics and of Diseases of Women. By Edward John Tilt, M.D., Past President of the Obstetrical Society of London, etc. Fourth Edition. London: J. and A. Churchill. 1878. Pp. 472.

The fourth edition of a work by one who ranks among the seniors of our profession does not call for a lengthened criticism. The author and his writings are well known. In the present instance the advertisement of the book as a new edition, is more than a nominal announcement, for the work has been rewritten and enlarged. The general plan and characteristics remain as before. If we want scientific analysis of the action of remedial measures and the *rationale* of symptoms, this is not the book to go to; still less for an account of the natural history of disease; but it displays an extensive acquaintance with obstetric literature, and is marked by homely common sense, and by careful attention to many little things, which, trivial in themselves, are yet more noticed and thought of by the patient than the larger matters with which the scientific observer is concerned. Dr. Tilt expresses his opinions on current topics with plainness and vigour. He speaks very strongly against what he considers the present too frequent resort to surgical measures. *Semper non nocere*, remarks our author, was all very well for olden time, but now it might be *semper operare*. He writes in especially severe language of the practice of the late Sir James Simpson: *e.g.*, "while Simpson blazoned his successful cases of hysterotomy, he buried the remembrance of his fatal cases alongside of their mortal remains"; and by the side of this we might put other passages equally uncomplimentary. It is most important that the recommendations of a man so famous as the late Edinburgh Professor of Midwifery should be appraised at their true value; and therefore we think Dr. Tilt deserves our thanks for speaking out plainly, although bluntly, what he thinks. We should have been still more indebted to him, had he stated with greater precision, and in greater number, the facts which have led him to form such opinions.

Smellie's Treatise on the Theory and Practice of Midwifery. Edited, with Annotations, by Alfred H. McClintock, M.D., etc. Vol. III. London: The New Sydenham Society. 1878. Pp. 340.

This volume completes the New Sydenham Society's edition of Smellie. The policy of republishing books of this kind is one open to discussion; books, we mean, of the greatest interest in their bearing on the history of medicine, as monuments to their author's fame, and as stimulants to thought in those who have time to think, but which are of little service in the routine of daily practice. In our profession the ornamental must always give place to the useful. A work which even a little guides and helps the practitioner in his work is of more value than one of the greatest antiquarian interest. The directly useful is better than the indirectly useful. This may seem a low ground to take; but it is not so. Our profession is nothing if not useful. Like the "fair young squire" whose shield Merlin painted, "rather use than fame" should be our motto. In our usefulness, in the thoroughness of the enlightened service we render to the public, lies our glory.

But this edition combines the advantages of both classes of works. Smellie's book has long since taken its place as a medical classic, and therefore needs no laudation from us. Dr. McClintock's notes are at once a commentary on the text, and a supplement, bringing the work abreast of modern science. We congratulate the members of the Society on the edition of Smellie which they now possess.

On the Treatment of Rupture of the Female Perineum, Immediate and Remote. By George Granville Bantock, M.D., F.R.C.S. Edin., Surgeon to the Samaritan Hospital, etc. London: J. and A. Churchill. 1878. Pp. 51.

In this little work is contained an account of the treatment of the condition in question. The author gives first a brief sketch of the history of the operation, then follows an account of the mode of its performance, and lastly some notes of a few selected successful cases. The book does not

contain any novelty; but in it the operation and the after treatment are described fully and clearly. We can, from our own experience, endorse most of Dr. Bantock's recommendations. Those who have cases of this kind under their care, and wish to obtain guidance as to the best mode of performing this operation, will find this work answer their purpose.

REPORTS OF SOCIETIES

OBSTETRICAL SOCIETY OF LONDON.

WEDNESDAY, JUNE 5.

CHARLES WEST, M.D., F.R.C.P., President, in the Chair.

THE following gentlemen were elected Fellows of the Society:—J. D. Buncombe (Beaufort West, Cape Colony), John A. Lycett (Graisely), John O'Neile, M.D. (Portobello), John A. Rawlings (Swansea), and David Thomson, M.D. (Luton).

THE LATE DR. BLUNDELL'S LIBRARY.

The PRESIDENT said that the Fellows would be aware that the Society had recently acquired the valuable library of the late Dr. Blundell, but as they already possessed many of the works thus purchased, the Council thought it advisable to offer the duplicates for sale. He had, therefore, to announce that a list of such works, with the prices at which they were valued, would be suspended at the Society's library, and Fellows would thus be given such an opportunity as they might seldom find of acquiring valuable works on obstetrics.

EXTRA-UTERINE FŒTATION.

Dr. HAYES exhibited the specimen from a case of which he had given brief particulars at the last meeting of the Society. The specimen consisted of the uterus and its appendages enveloped in a large amount of blood-clot and false membrane. At the fimbriated extremity of one Fallopian tube was a smooth-walled cyst, the rupture of which had, in Dr. Hayes' opinion, led to the symptoms from which the patient died. In reply to Dr. John Williams, Dr. Hayes stated that a true corpus luteum was found in one of the ovaries.

DICEPHALOUS MONSTER.

Dr. WILTSHIRE exhibited, on behalf of Dr. D. C. MacCallum, of Montreal, two drawings of a case of conjoined twins which had been brought to Montreal for exhibition in April last. The union between them commenced at the lower part of the thorax of each, below which point they presented the appearance of one female child. Neither the respirations nor the pulses of the children were synchronous, and Dr. MacCallum concluded that their spinal, respiratory, circulatory, and digestive systems were quite distinct. Dr. Wiltshire said that the case resembled one figured and described in M. St. Hilaire's classic work on the subject. A similar case had been recorded by Sir Astley Cooper, and another was said to have occurred in the reign of James IV. of Scotland.

BICORNED UTERUS AND VAGINA.

Dr. HERMAN showed a specimen of this abnormality, taken from the body of a woman who had committed suicide. She had borne two children, and nothing had ever been noticed during life to lead to the supposition that there was anything peculiar about her genital organs.

MYXOMA OF OVARIES.

Dr. GALABIN showed microscopical specimens from a case of the above. The patient, a woman aged twenty-one, had suffered from almost constant hæmorrhage since her marriage three years previously, and when admitted into Guy's Hospital she was so exhausted that transfusion was thought of. The hæmorrhage, however, was checked by the use of a sponge-tent and the subsequent injection of warm water, but the woman died ten days later of suprurative peritonitis. Both ovaries were found enlarged, but retaining their normal shape, and it was at first thought that the enlargement was due to acute inflammation. Microscopical examination, however, showed that the histological characters of the growth were those of myxoma, though the harder portions exhibited the characters of sarcoma. The spleen was leukæmic. The uterine mucous membrane was disintegrated on its surface (as shown in one of the microscopical sections), and altered in structure, its round cells appearing separated as if by fluid effused between them, and being surrounded by a fibrillar growth, reminding one of the state of things found in the ovaries. He would leave it to the pathologists to decide whether there was any connexion between the leukæmia from which the patient suffered, and the myxomatous enlargement of the ovaries.

DISTORTION OF CHILD IN FACE-PRESENTATIONS.

Dr. ROPER exhibited a cast of the head of a child born under face-presentation, mento-anterior, showing the characteristic distortion of head and cranium which usually takes place in this presentation; the labour, which was a hard one, did not terminate until nineteen hours after. The liquor amnii had been discharged nineteen hours. The head, however, was easily delivered by forceps, though the child, a female of large size, was still-born.

RETROFLEXED UTERUS.

Dr. CHAMPNEYS exhibited the uterus and neighbouring parts taken from the body of a woman aged forty-two, who had died of pulmonary hæmorrhage. The uterus was decidedly retroflexed—a state apparently caused by a thickened band of tissue, which, starting slightly above the level of the os internum, where it was about one-third of an inch broad, ran downwards, and ended in right utero-rectal ligament, which was decidedly thickened along its upper border, and far better marked than its fellow on the opposite side. In reply to Dr. Meadows, Dr. Champneys said that he had not yet made measurements of the thickness of the uterine walls.

HAND-BEHIND-HEAD PRESENTATION.

This case was reported to the Society by Dr. JAMES BRYDON, of Hawick. Pains did not come on until fourteen hours after the waters ruptured, and, on examining the patient two hours later, Dr. Brydon found the os dilated to the size of half-a-crown, and a hand protruding through it. As it emerged its face was to the front, the right hand protruded to the back of the head, and the arm and forearm lay around the occiput. This presentation, concluded Dr. Brydon, was very rare, and few of the cases which had been recorded passed off so easily as this one.

TREATMENT OF CHRONIC INVERSION OF THE UTERUS.

Dr. AVELING exhibited some repositors which he had devised for the treatment of inversion of the uterus, and related the particulars of a very obstinate case which he had recently succeeded in reducing by their agency. His repositors consisted of cups of various sizes attached to stems which differed from all those of other repositors in having both a pelvic and a perineal curve.

The PRESIDENT congratulated Dr. Aveling on the success of his case, and said that he felt disposed to subscribe to what he had said as to the possibility of all, or almost all, such cases being returned.

THE CURVES OF MIDWIFERY FORCEPS, THEIR ORIGIN AND USES.

This paper was contributed by Dr. AVELING, who commenced by saying that the curves of the forceps were of especial interest to Englishmen, as all of them had had their origin in this country. At present, however, it was not his intention to submit to their notice the minor curves, but only those which might be looked upon as fundamental, viz., the head curve, the pelvic curve, the perineal curve, and the handle curve. These he would consider in their historical, anatomical, and mechanical aspects:—1. The Head Curve: After briefly alluding to the anatomical conditions affecting the head curve, the author passed on to its mechanical requirements, which he considered under the headings Introduction, Prehension, Compression, and Traction. The blade of a forceps could not be easily introduced if its curve were too abrupt or too open. The nine-inch curve, which was most suitable for introduction, also fortunately happened to meet other mechanical requirements. The best curve which could be given to the blades to render them safe and effectively retentive was that which coincided most nearly with the curve of the fœtal head. The nine-inch curve fulfilled this requirement as far as was practicable, and it might therefore be advantageously adopted for introduction, prehension, and traction. 2. The Pelvic Curve: Under mechanical requirements the author showed that the pelvic curve facilitated introduction, and enabled the blades to seize the head before it entered the

pelvic cavity, in a line with the axis of the brim. In traction, however, it might or might not be advantageous, according to the manner in which the force was applied. When traction was made by the handles alone, the straight forceps drew the head less upon the pubic bones than the forceps having the pelvic curve, and to overcome this difficulty the latter must be used with two hands acting in opposite directions. 3. The Perineal Curve: The originator of this curve was Dr. Robert Wallace Johnson, who published a description of it in 1769. This curve was anatomically rendered necessary by the fact that the perineum stretched across the pelvic outlet, and occluded the space which the shanks of ordinary forceps would occupy when traction was exerted upon the distant head. The line of traction, too, which this curve permitted much more nearly approximated to the axis of the brim than in the case of straight or pelvic curve forceps. 4. The Handle Curve: Notwithstanding these improvements, no instrument was found to admit of traction being exerted in the required line when the head was high in the pelvis. Attempts had been made to overcome this difficulty by various obstetricians, and in March, 1868, the author had presented to the Society a forceps, the handles of which were curved backwards. This curve rendered introduction easier, enabled the operator to avoid undue compression, and greatly facilitated traction. But its great advantage was that it enabled one to use traction power in the right direction, and thus to reduce the necessary forces of compression and traction to the minimum of intensity. He had used both long and short forceps with the handle curve frequently, and though the model was doubtless capable of improvement, he had been much satisfied with its easy application, its efficient prehension, and, above all, with its direct tractive power.

The Revolutions of the Fœtal Head in passing through a Brim contracted only in the Conjugate Diameter.

A laboratory note on this subject was contributed by Dr. Matthews Duncan. The only point considered in the note was movements of the fœtal skull in a coronal plane—that is, revolutions around the pubic part of the pelvic brim and around the promontory of the sacrum—movements resembling right and left lateral flexion, or like revolution in an internal or occipito-frontal axis. From these last kind of movements the revolutionary movements were distinct, because the revolutionary movement on an external axis implied progress of the head as a whole, and not mere movement in itself. Dr. Duncan's conclusions were based chiefly on experiments with fresh mature fœtuses and modern pelvic brims, and tallied remarkably with the results of clinical observation of the progress of the head in head-last and in head-first cases in simple narrow pelvis. Recent inquiries into this subject had increased our practical usefulness distinctly, and further elucidation of it was desirable. The experiments were made in imitation of footling cases, and the first result of traction through the spine was a revolution around the pubic part of the brim, the sagittal suture approximating to the pubes. The side of the base of the skull placed posteriorly passed first through the contraction and during the first revolution. The side of the vault of the skull placed anteriorly passed first, and during the second or greater revolution. Litzmann, Kleinwächter, and Spiegelberg described only the first revolution, or rather its analogue in head-first cases. Burner described only the second or greater revolution. Goodell, in singular accordance with the conclusions of this note, described two movements, but not as revolutions; and he made this accurate description of both head-first and head-last cases. The movement of the sagittal suture towards the sacrum (and the base of the fœtal skull in nearly an opposite direction), in the first part of the passage in head-last cases, was analogous to the movement of the sagittal suture forwards at the same stage of a head-first case. In both the head was revolving to a slight degree on the pubic part of the brim of the pelvis. The movement of the sagittal suture towards the symphysis (and the base of the fœtal skull in nearly an opposite direction), in the second and greater part of the passage in head-last cases, was analogous to the movement of the sagittal suture backwards or towards the hollow of the sacrum at the same stage of a head-first case. In both the head was making its greater revolution on the promontory of the sacrum.

MEDICAL NEWS.

Queen's University in Ireland.—At a meeting of the University, held on Monday, June 17, in the Council Chamber, Dublin Castle, the Very Rev. the President of Queen's College, Belfast, presided as Pro-Vice-Chancellor, and conferred the following degrees and diplomas in the faculty of Medicine:—

Doctor of Medicine.—Charles Warke Allison, B.A., of Queen's College, Belfast; Alfred Constantine Bennett, of Queen's College, Cork; John Thomas Collier, of Queen's College, Belfast; Patrick Oswald Considine, of Queen's College, Belfast; William Fleck, of Queen's College, Belfast; Robert Evans Hadden, of Queen's College, Cork; Charles Hall, of Queen's College, Belfast; J. Courtney Haslett, of Queen's College, Belfast; Francis Thomas Heuston, of Queen's College, Galway; Charles Kevin, of Queen's College, Belfast; Pershouse Wm. L. Langley, of Queen's College, Belfast; Joshua Lytle, of Queen's College, Belfast; Daniel Roderick O'Connor, of Queen's College, Cork; James Wigmore, of Queen's College, Cork.

Master in Surgery.—Patrick Maurice Carleton, M.D., of Queen's College, Belfast; Isaac C. Dundee, M.D., of Queen's College, Galway; Alfred C. Bennett, of Queen's College, Cork; William Fleck, of Queen's College, Belfast; Robert Evans Hadden, of Queen's College, Cork; Francis Thomas Heuston, of Queen's College, Galway; Charles Kevin, of Queen's College, Belfast; Pershouse Wm. L. Langley, of Queen's College, Belfast; Joshua Lytle, of Queen's College, Belfast; Daniel Roderick O'Connor, of Queen's College, Cork.

Diploma in Midwifery.—Alfred C. Bennett, of Queen's College, Cork; John Thomas Collier, of Queen's College, Belfast; Robert Evans Hadden, of Queen's College, Cork; Charles Kevin, of Queen's College, Belfast.

J. Fritz Beck, M.A., M.D., of Queen's College, Belfast, *in absentia*.

King and Queen's College of Physicians in Ireland.—At the usual monthly examinations for the licences of the College, held on Tuesday, Wednesday, and Thursday, June 11, 12, and 13, the following candidates were successful:—

For the licence to practise Medicine—

Barrington, Frederick Albert.	Martyn, Robert Joseph.
Beattie, Joseph Aloysius.	Roberts, Frederick Joshua.
Dick, James Nicholas.	Sproulle, Simon Davenport.
Hughes, Richard Lawlor.	Vavasour-Lane, Alfred.
Macan, Jameson John.	Walley, Thomas Bennett.

For the licence to practise Midwifery—

Barrington, Frederick Albert.	Hughes, Richard Lawlor.
Beattie, Joseph Aloysius.	Macau, Jameson John.
Bell, Thomas Vesey.	Roberts, Frederick Joshua.
Dick, James Nicholas.	Smith, Thomas Orde.

Walley, Thomas Bennett.

For the licence as a Midwife and Nurse-tender—

McLaughlin, Eliza.

Apothecaries' Hall, London.—The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on Thursday, June 13:—

Whitehead, George Marsden, Greek-street, Stockport.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Batty, William Eaton Latham, Liverpool Hospital.
Clowes, Herbert Alfred, Guy's Hospital.

APPOINTMENTS.

*** The Editor will thank gentlemen to forward to the Publishing-office, as early as possible, information as to any new Appointments that take place.

Churton, Thomas, M.D.—Honorary Physician to the Leeds Fever Hospital, *vice* C. Chadwick, M.D., D.C.L., F.R.C.P., resigned.

Le Quesne, E. J., L.R.C.P. Lond., M.R.C.S.E., L.S.A.—Resident Medical Officer to the Jersey General Dispensary, *vice* Henry Dustan, M.R.C.S.E., L.S.A., resigned.

NAVAL, MILITARY, &c., APPOINTMENTS.

Admiralty.—Surgeon Charles Atkinson Rathborne, M.D., has been placed on the retired list from the 7th inst.

BIRTHS.

Humphreys.—On June 13, at 19, Trinity-square, E.C., the wife of F. W. Humphreys, F.R.C.S., of a daughter.

Pearce.—On June 10, at the Manor House, Brixton-rise, the wife of J. Chaning-Pearce, M.D., of a daughter.

Woodward.—On June 13, at Roslyn, Caterham Valley, the wife of G. F. M. Woodward, L.K.Q.C.P. Ire., Deputy Surgeon-General (retired), of a daughter.

MARRIAGES.

COLLINS—FOY.—On April 25, at Nelson, N.Z., Floyd Collins, L.R.C.P., M.R.C.S. Lond., third son of the late Edward Collins, Esq., of Ware, Herts, to Lizzie, second daughter of Thomas Foy, Esq., C.E., of Nelson.

COLMAN—BRAID.—On June 12, at St. Peter's, Eaton-square, Walter T. Colman, M.R.C.S.E., of Brighton, to Minna, second daughter of James Braid, M.D., of Lawnswood, Burgess-hill, Sussex.

HUTTON—WILSON.—On June 15, at Brussels, Chas. A. R. Hutton, Retired R.N., to Ida, second daughter of William Wilson, M.D., F.R.C.P. Lond., of Florence.

MORIER—GILMOUR.—On June 13, at Trinity Church, Tunbridge Wells, William John Morier, M.D. Glasg., to Susan Ewing, eldest daughter of Allan Gilmour, Esq., of Eaglesham, Renfrewshire, N.B.

PURCHAS—LOWE.—On June 15, at St. James's, Piccadilly, Thomas Berwick Purchas, M.D., Retired Deputy Inspector-General R.N., to Harriet, widow of the late Edwin Lowe, Esq.

DEATHS.

BLAND, JAMES, J.P., M.R.C.S., at Park-green, Macclesfield, aged 63.

COTTERILL, ALFRED, M.B. Lond., of Newcastle, Staffs, at Miller's Dale, Derbyshire, on June 11, aged 33.

DAVIES, THOMAS CLIFFORD, M.D., at Rhiwlas, Bury, Lancashire, on June 13, in his 57th year.

DIVER, THOMAS, M.D., late of Bombay, and 2, Oaslow-place, South Kensington, at Herne Bay, on June 17, in his 43rd year.

EVANS, WILLIAM JULIAN, M.D., at 123, Finborough-road, South Kensington on June 16, in his 74th year.

REID, MARY PATERSON, daughter of Alexander Reid, M.D., at 29, Canonbury-park North, N., on June 16, aged 15 months.

WESTALL, EDWARD, M.D., at 32, Holland-villas-road, Kensington, on June 10, aged 70.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

GENERAL HOSPITAL, BIRMINGHAM.—Assistant-Physician. Candidates must be graduates in medicine of a university by examination, and Fellows or Members of the Royal College of Physicians in London, but twelve months from the date of election will be allowed for obtaining the F.R.C.P. or M.R.C.P. Applications, accompanied by diplomas or certificates of registration and original testimonials, to the House-Governor, William T. Grant, on or before June 29.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, N.—Surgeon, Out-Patients' Department. Candidates must be Fellows of the Royal College of Surgeons of England. Applications, with copies of testimonials, to the Secretary, on or before July 2.

HULL GENERAL INFIRMARY.—Assistant House-Surgeon. Candidates must be fully qualified. Applications addressed "Chairman, House Committee," to be sent in not later than 11 a.m., July 8.

HOSPITAL FOR SICK CHILDREN, PENDLEBURY, MANCHESTER.—Junior Resident Medical Officer. Candidates must be qualified both in medicine and surgery. Applications, with testimonials, to the Chairman of the Medical Board, at the Hospital, on or before June 25.

KENT AND CANTERBURY HOSPITAL.—Physician. Candidates must have been practising as physicians for the space of two years previous to election, and be registered as regular graduates in medicine of some University of Great Britain or Ireland, or Fellows or Members of the Royal College of Physicians of London. Qualifications and testimonials to be sent to the Board of Management on or before June 28.

MANCHESTER ROYAL INFIRMARY.—Ophthalmic Surgeon. Candidates must be Fellows, Licentiates, or Members of one of the Royal Colleges of Surgeons of the United Kingdom. Diplomas, original testimonials, and a certificate of age to the Chairman of the Board on or before June 29.

MIDDLESEX HOSPITAL, W.—Assistant-Physician. Applications for the office must be made in writing, and addressed to the Chairman of the Weekly Board, on or before July 2. Candidates must be approved of by the Medical Committee before they can be admitted as candidates by the Weekly Board.

SEAMEN'S HOSPITAL, GREENWICH.—House-Physician and a House-Surgeon. The former must be a Member or Licentiate of the Royal College of Physicians of London, or a Licentiate of the Company of Apothecaries. The latter must be a Fellow or Member of the Royal College of Surgeons of England. They must in each case be unmarried and under the age of thirty years. Applications, with particulars of professional qualifications and references as to moral character, to Henry C. Burdett, Secretary, on or before June 27.

WEST BROMWICH DISTRICT HOSPITAL.—House-Surgeon. Candidates must be surgically qualified, registered, and unmarried. Applications, stating age, etc., with testimonials, to the Rev. F. Willett, West Bromwich, on or before July 1.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population in computed according to the census of 1871.

RESIGNATIONS.

Bridgwater Union.—Mr. E. F. H. Burroughs has resigned the Seventh District; area 6845; population 2121; salary £36 per annum.

Daventry Union.—Mr. C. Parsons has resigned the Sixth District; area 1610; population 1044; salary £15 per annum.

Oswestry Incorporation.—Mr. W. H. Box has resigned the St. Martin's District; area 9950; population 4477; salary £60 per annum.

APPOINTMENTS.

Cheltenham Union.—John M. Walker, B.M. and M.C. Edin., to the Third District.

Hailsham Union.—James H. Bogle, B.M., M.C., to the First District.

Kingsbridge Union.—Robert W. Soper, M.R.C.S. Eng., L.S.A., to the First and Second Districts.

Taunton Union.—Stephen W. Mackey, L.R.C.P. Ire., L.R.C.S. Ire., to the Churchstanton District.

CIVIC BENEVOLENCE.—The Grocers' Company have voted £100 towards the support of the National Hospital for Consumption (on the separate principle) at Ventnor, Isle of Wight, the majority of the patients being residents of London.

LIME-WATER AND MYRRH IN INFANTILE DIARRHŒA.—M. Delioux prescribes the following in the acid diarrhœa of infants, accompanied by colicky pains, giving it in the same doses as if it were simple lime-water—powdered myrrh two parts, lime-water 100 parts. To be left in contact for a week, frequently shaking the mixture during this time, and then filtering.—*Union Méd.*, June 11.

DEVELOPMENT OF THE CRANIUM IN DOCTORS.—In a paper by MM. Cliquet and Lacassagne, read at the Société de Médecine Publique, they state the results of some measurements which they have made at the Val-de-Grâce by aid of the *conformateur*. They were made on the heads of 190 military doctors, 133 soldiers able to read and write, 90 soldiers unable to do so, and 91 prisoners. The following are the means of the figures in centimetres:—

	Doctors.	Lettered soldiers.	Illiterate soldiers.	Prisoners.
Longitudinal diameter	85·29	81·97	79·13	81·10
Anterior	48·91	43·65	42·35	41·12
Posterior	52·58	49·66	50·27	49·90

The differences in favour of the doctors over the illiterate were 4·50 in the longitudinal diameter, 6·37 in the anterior, and 2·82 in the posterior. The development of the frontal region was 6·37 more considerable in the doctors than in the illiterate. The asymmetry of the two halves of the cranium, which was constant, differed. In the literates the left part of the frontal region was most developed, while in the illiterates it was the right part of the occipital that was so. The occipital region was always most relatively developed in the ignorant.—*Lyon Méd.*, April 21.

DALTONISM.—M. Fabre has just communicated a note, to the Académie des Sciences, "On Daltonism: Sanitary Precautions and Preventive Means." The following are his conclusions:—1. Daltonism consists in ignorance or confusion of colours. 2. There are in France more than 3,000,000 persons affected with Daltonism. 3. The number of females attacked, as compared with men, is about one to ten. 4. In nine out of ten cases it may be easily cured in young subjects. 5. The best means of treatment consists in methodical exercise of the eyes on coloured objects. 6. The women of a family ought to undertake the development of the chromatic sense in children, and especially those who may commit errors in the denomination of colours. They should be careful not to ridicule these "Daltonians." 7. In future no one ought to be admitted into the service of the railways, the marine, or schools of painting without an examination as to colours. 8. Ignorance of colours should not exempt from service in armies by land or sea, but the "Daltonians" should never be entrusted with any service connected with coloured signals. Regular exercises in colours should be instituted both in the marine and the army. 9. Examinations and exercises in colours should be established in all schools.—*Gaz. Hebd.*, June 14.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—*Bacon.*

THE MEDICAL ALLIANCE ASSOCIATION.

TO THE EDITOR OF THE MEDICAL TIMES AND GAZETTE.

SIR,—Whether the Medical Alliance Association is an "offshoot" of the Medical Association, or a creation of Mr. Carpenter, is a question of such little moment that I feel some hesitation in asking you to allow me to say a few words by way of reply to Mr. Carpenter's letter which appeared in your issue of the 15th inst. But as silence would probably be construed by some of your readers into an admission of the accuracy of his statements, I must request permission to state that I have in my possession letters and papers, bearing Mr. Carpenter's signature, which show that the East London Medical Defence Association was originally formed as a "branch" of the Medical Defence Association, and so existed for about two years, when, for reasons which it is unnecessary to discuss here, the East London Branch ceased to be connected with the parent Association, and shortly afterwards became metamorphosed into the "Medical Alliance Association." It is, I admit, quite true that the East London Branch Association was the first to commence legal proceedings against unqualified practitioners.

As to prosecuting chemists who occasionally prescribe in simple cases I can only say that my experience of what the profession requires differs from that of Mr. Carpenter. The majority of medical men whom I have

consulted in the matter feel that we cannot reasonably ask the Apothecaries' Society to sanction the taking of legal proceedings against every chemist who may occasionally give his customers medicine for trivial ailments. If Mr. Carpenter expects the co-operation of the Apothecaries' Society to this extent, I fear he will be disappointed. I am, &c.,

GEORGE BROWN, Hon. Sec. Medical Defence Association.

12, Colebrooke-row, N., June 18.

A Provincial Fellow.—Your application should have been addressed to Mr. B. T. Lowne, the Honorary Secretary. The list of stewards has been made up; we find there are sixty metropolitan and twenty-nine provincial. Mr. F. Le Gros Clark, F.R.S., late President of the College, will be the Chairman.

Dr. Burdon Sanderson.—This gentleman will deliver the annual Harveian Oration at the Royal College of Physicians, on Wednesday, the 26th inst., at five o'clock.

Mr. Soden.—There is no doubt it will be a close contest, but the by-laws are very clear on the subject of equality of votes. Section 6 says:—"If at any election two or more candidates for one or more vacancies shall obtain an equal number of votes, the right of such candidates to election shall be determined by their seniority in standing as Fellows of the College." The successful candidates pay a fee of twenty guineas on admission as members of the Council; but Mr. Gay, having already paid it, will not be called on again to do so.

Grocers' Spirit Licences.—Serjeant Wheeler, in giving judgment last week in an action brought in the Brompton County Court by a grocer for a claim of 6s. 6d., the value of two bottles of whisky supplied to the defendant's wife, who, it appeared, had ordered the spirits with her groceries, said this was the consequence of grocers' licences. He also stated that, from a long experience as a county court judge, these grocers' licences were a great evil. He had had other similar cases before him. Judgment was given for the plaintiff.

Health of Cannock.—Mr. J. C. Blackford, the Medical Officer of this district, in his last fortnightly report stated that there were only six deaths, showing a ratio of 9·75 per 1000, and there was no disease of an epidemic class in the township. The Local Government Board are about to hold a public inquiry with reference to the application of the Local Sanitary Authority for a loan of £16,000 for the sewerage scheme.

The Medical Officer of Health, Leominster.—A discussion somewhat amusing as well as instructive, as exhibiting the estimation by the local authority of the value and responsibility of the office of medical officer of health, took place at the last meeting of the Leominster Local Board of Health. It appeared that no application at all had been received in answer to the advertisements inviting candidates for that appointment. The period of Dr. Pentland's appointment would expire on July 1, after which the borough would be without a Medical Officer of Health; the Clerk, therefore, inquired what he was to report, in reference to the matter, to the Local Government Board. It was hereupon suggested not to report anything, but wait till the Board asked what had been done, and then tell the simple truth—that, there being no candidate for the appointment, the office necessarily remains vacant. It was not the fault of the Local Authority, and they would save the money. Mr. Boyce, a medical practitioner, remarked that he did not see why Mr. Cox, the Sanitary Inspector, could not fill both offices. He had, as it was, to see to the disinfection of clothes and patients where necessary, and was he not for that reason already called "Dr. Cox"? A question from the Clerk—what was to be done in case of an epidemic breaking out in the town, and the Sanitary Authority without a Medical Officer, evoked the reply that if the medical men in the town are not equal to the occasion, the sooner they retire from their profession the better! However, it was thought that the local medical practitioners could be safely trusted to deal with any epidemic that might arise, pending the appointment of a successor to Dr. Pentland (an opinion which, under the circumstances, will not probably be highly appreciated by those gentlemen), but the law required they should have a Medical Officer, and if they had fixed the salary at so low a sum as £25 a year, which evidently did not tempt medical men to seek the appointment, the question was whether the Local Government Board would not compel them to increase the remuneration, so as to induce candidates to come forward, and, therefore, this Board should reconsider its decision as to the salary. Unless they were careful, the Local Government Board, always vigilant, might oblige them to pay not £25 a year, but £125. The discussion here terminated, no action being resolved upon on the matter.

Hydrophobia.—From an official return it is shown that during the year 1876 the number of reported deaths from hydrophobia was 53; in 1875 it was 47; in 1874, 61; in 1873, 28; in 1872, 39; in 1871, 56; in 1870, 52; in 1869, 18; in 1868, 7; in 1867, 10; and in 1866, 36.

Deleterious Bacon.—The Viennese pathologist, Prof. Richard Henschel, gives a warning in the medical *Wochenschrift* to the consumers of foreign ham and bacon. He refers to the American ham, which has recently found its way to Vienna, and is recommended in preference to Westphalian hams for its freedom from trichinosis. Dr. Henschel says, however, that while among some 2000 or 2500 Westphalian hams one is infected, of the American hams inspected in North Germany, according to an official report, one in five to ten is condemned, and there is great probability that several epidemics have been caused by trichinosis from American hams.

C. Wells Wilson.—The intercourse of the English with China did not commence until 1637. A century ago opium was unknown in China except simply for its medicinal purposes. It is recorded that the opium traffic by foreign merchants in China now reaches the value of ten millions sterling annually.

Maternal Mortality.—Mr. Clay, the Ingleby Lecturer, at Queen's College, Birmingham, in the course of a recent lecture on this subject, referred to a matter which should receive the thoughtful consideration of every parent having daughters. He contended that our modern system of education of young women and girls subjected them to intellectual training so elaborate and severe as gravely to affect their physical health and the proper discharge of the duties of their sex in after life. At the present time girls are worked equally as hard as their brothers, but for the latter there is no restriction as to athletic exercises, by which they re-invigorate their bodily strength; while the almost only recreation allowed girls is, too frequently, highly detrimental to their constitutions—instance, the excitement of various kinds of evening entertainments. To this, moreover, may be added a lamentable want of knowledge of the most ordinary physiological laws, leading ultimately to a listlessness and disregard of food and other personal requisites. Girlhood thus misspent, the prime of life finds the woman incapable to endure the fatigue which the proper supervision of a household requires. It is a question of some moment, now that the advantages of education are reaching the masses, that the system adopted should not tend to produce future physical deterioration, and that the intellectual strain of females should be modified, so as to bring it within limits consistent with a strict regard to the capabilities and ultimate destiny of girls.

Sanitary Condition of Brynmawr.—Dr. C. P. Skrimshire, the Medical Officer of Health, reports that the total number of births registered in the Brynmawr Board of Health district during the year 1877 was 210; males 101, and females 109. This total of births is 35 less than that for the previous year, and 47 less than the average for the five preceding years, showing a decrease greater than can be accounted for by the estimated decrease in population. This apparent want of productiveness, it may be noted, is most probably in consequence of trade depression, and, in fact, since the recent cessation of the ironworks, upon which Brynmawr formerly depended, the population has been rapidly thinned; and the first to leave would doubtless be those recently married and those ready to do so—hence the falling off in the births. The birth-rate per 1000 of the population was 36·5, and 3·4 less than the average of the last five years. It is satisfactory to notice that the number of deaths of infants, compared with births, is decreasing; that whereas, during the past five years, on the average there was one death under twelve months of age to every six births, during 1877 the proportion was one to eight and three-quarters. The number of deaths of infants under one year old was 24—also a favourable comparison with the average for the preceding five years, being this year in proportion of 237 infant deaths per 1000 deaths, whereas 295 infant deaths per 1000 deaths is the average. The total death-rate was equal to 17·5 per 1000 population, which was 2 per 1000 less than that calculated for 1876, and 4·5 per 1000 less than the average of the five years previous to 1877.

A Hint to Owners of Property and Builders.—An owner of some property in Lawrence-street, in the city of York, was summoned last week, at the instance of the Urban Sanitary Authority, for having converted into a dwelling-house a saddle-room and corn-chamber behind his residence, without having first deposited the plans of it with the City Surveyor, as required by the by-laws, and obtained the approval of the Sanitary Authority. The Town Clerk prosecuted. The evidence was to the effect that originally the place was a saddle-room and corn-chamber, and had been recently converted by the owner into a dwelling-house, consisting of a kitchen and two bedrooms. The drainage of the premises was very defective and insufficient. There were two cesspools in the kitchen, and no proper conveniences for a habitation—in fact, the place was utterly unfit for a dwelling-house. On behalf of the defendant, the offence was admitted, but it was stated that he had committed it inadvertently, and the case, it was urged, would be met by his paying the costs. The Town Clerk, however, pressed for a fine. The Bench thought it was a bad case. It was the first they had had before them, and they find the defendant 20s. and costs. This was a very proper prosecution on the part of the Sanitary Authority—an example which might be followed with good effect in many like instances.

The Midland Counties Idiot Asylum.—The tenth annual report of this institution, just issued, shows that the general health and progress of the patients had been satisfactory. The income bears a most favourable comparison with that of 1876. The excess over expenditure was £324 14s. 3d., while the balance the previous year only amounted to £14 12s. As a result of the steady growth of income, an additional number of patients were received into the Asylum; the average was seventeen in 1876, and twenty-seven in 1877. All the inmates capable of being made useful were trained, more or less, in various domestic and other occupations; they all attended the school, and many had made gratifying progress. Frequent testimony to the efficiency and value of the training imparted had been received from the friends of patients, from the Commissioners in Lunacy, the Visiting Justices, and others.

Teetotaler.—The oath taken by licensed liquor-sellers in Alabama is to the following effect:—"I do solemnly swear that I will not knowingly sell, or give away, any vicious or spirituous liquor to any minor, or persons of unsound mind, without the permission of his or her parent or guardian." A violation of this oath is, by special statute, declared to be perjury.

Anglicanus.—No Frenchman can practise unless he has taken the degree of "Docteur en Médecine," or of "Officier de Santé" at one of the national Faculties. No foreign diploma qualifies a Frenchman for practising amongst his own countrymen; and for any infringement of the medical law the penalties are very heavy.

COMMUNICATIONS have been received from—

The Secretary of the Chasing-cross Hospital; Dr. Robt. Elliot, Carlisle; The Registrar of Apothecaries' Hall, London; The Secretary of the Royal National Hospital for Consumption, Ventnor; Sir Joseph Fayrer, London; Mr. H. Courtenay Fox, London; Dr. J. B. Russell, Glasgow; Mr. C. Higgens, London; Mr. Shirley Murphy, London; The Hon. Secretary of the Quekett Microscopical Club; Mr. Herbert Page, London; Mr. George Brown, London; Mr. Holloway, London; Mr. Richard Davy, London; Dr. G. E. Herman, London; Dr. J. W. Moore, Dublin; The Secretary of the Royal College of Physicians of London; Dr. A. M. McAldowie, North Staffordshire Infirmary; Dr. Weir, Leicester; Mr. Talfourd Ely, London; The Secretary of the Sanitary Institute of Great Britain; Dr. Robert T. Cooper, London; Mr. John Chatto, London; Mr. Thos. Bryant, London; Dr. Thomas Barlow, London; Dr. J. C. Ogilvie Will, Aberdeen; Mr. T. M. Stone, London; Dr. Robert Huntar Semple, London.

BOOKS AND PAMPHLETS RECEIVED—

M. F. Anderson, L.R.C.P. Edin., Phosphates in Nutrition and the Mineral Theory of Consumption and Allied Diseases—C. E. Armand Semple, B.A., M.B. Cantab., Aids to Chemistry, part ii.: Inorganic; The Metals—Fordyce Barker, M.D., In Memoriam, Edmund Randolph Peaslee, M.D., LL.D.—John Eric Erichsen, F.R.S., F.R.C.S., On Surgical Evidence in Courts of Law—W. Lauder Lindsay, M.D., F.R.S.E., The Theory and Practice of Non-Restraint in the Treatment of the Insane—Rickman John Godlee, M.S., F.R.C.S., An Atlas of Human Anatomy, part v.—D. B. St. John Roosa, M.D., Diseases of the Internal Ear—Memoir of the late Alfred Smee, F.R.S., by his Daughter—Edward R. Squibb, Fluid Extracts by Repercolation—A. de Watteville, M.A., B.Sc. Lond., A Practical Introduction to Medical Electricity—C. Klemm, Muscle-Beating, or Active and Passive Home Gymnastics.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—North Carolina Medical Journal—American Practitioner—Indian Medical Gazette—Saint Louis Medical and Surgical Journal—Monthly Letter of the English Anti-Tobacco Society—Canada Lancet—Dublin Journal of Medical Science.

APPOINTMENTS FOR THE WEEK.

June 22. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

24. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.

25. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

26. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

27. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

28. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1½ p.m.; Guy's, 1½ p.m.

Quekett Microscopical Club, 8 p.m. Mr. Frank Crisp, "On the Influence of Diffraction in Microscopic Vision."

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 15, 1878.

BIRTHS.

Births of Boys, 1089; Girls, 1031; Total, 2120.
Average of 10 corresponding years 1868-77, 2163·2.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	662	638	1300
Average of the ten years 1868-77	652·3	600·4	1252·7
Average corrected to increased population ...	...	...	1340
Deaths of people aged 80 and upwards ...	...	...	35

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	7	3	5	2	17	1	2	...	6
North ...	751729	4	6	10	1	17	...	3	2	4
Central ...	334369	...	4	4	1	13	...	1	1	3
East	639111	2	1	3	...	25	...	4	...	3
South	967692	11	6	2	4	29	1	4	3	5
Total	3254260	24	20	24	8	101	2	14	6	21

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·570 in.
Mean temperature	55·7°
Highest point of thermometer	71·1°
Lowest point of thermometer	44·6°
Mean dew-point temperature	48·5°
General direction of wind	S.W. & N.E.
Whole amount of rain in the week	1·28 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 15, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending June 15.	Deaths Registered during the week ending June 15.	Temperature of Air (Fahr.) Highest during the Week.	Lowest during the Week.	Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.) Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	In Centimetres.
London	3577304	47·5	2120	1300	71·1	44·6	55·7	13·17	1·28	3·27
Brighton	103923	44·1	61	27	67·6	44·2	56·7	13·72	0·31	0·79
Portsmouth ...	129481	28·9	82	39	64·5	51·0	56·1	13·39	0·35	0·89
Norwich	84620	11·3	44	27	70·2	44·0	55·3	12·95	0·33	0·84
Plymouth	73599	52·8	48	21	65·5	50·5	56·0	13·33	1·65	4·19
Bristol	206419	46·4	120	64	69·0	41·4	54·8	12·67	1·10	2·79
Wolverhampton ..	74240	21·9	61	33	70·4	41·5	52·4	11·33	1·27	3·23
Birmingham ...	383117	45·6	267	161	...	...	...	...	...	...
Leicester	121473	38·0	80	26	...	...	...	...	...	...
Nottingham ...	165267	16·6	105	56	72·5	43·5	53·7	12·06	0·80	2·03
Liverpool	532681	102·2	341	257	63·8	46·4	52·6	11·45	1·55	3·94
Manchester ...	360514	84·0	207	157	...	...	...	...	...	...
Salford	170251	32·9	108	72	64·7	37·9	51·3	10·73	2·23	5·66
Oldham	107366	23·0	52	25	...	...	...	...	...	...
Bradford	185088	25·6	129	82	67·0	44·2	52·9	11·61	1·90	4·83
Leeds	304948	14·1	221	100	70·0	45·0	53·7	12·06	2·19	5·56
Sheffield	289537	14·7	198	105	64·5	43·0	51·1	10·62	0·99	2·51
Hull	143139	39·4	98	58	...	...	...	...	...	...
Sunderland ...	112459	34·0	73	58	75·0	45·0	54·3	12·39	1·11	2·82
Newcastle-on-Tyne	144570	26·9	94	63	...	...	...	...	...	...
Edinburgh	222371	53·1	163	95	...	...	...	...	...	...
Glasgow	566940	94·0	478	290	65·0	46·5	54·9	12·72	0·89	2·26
Dublin	314666	31·3	179	156	69·9	45·2	56·9	13·83	2·67	6·78
Total of 23 Townsin United Kingdom	8373953	37·9	5330	3272	75·0	37·9	54·3	12·39	1·29	3·28

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·57 in. The lowest reading was 29·37 in. on Tuesday evening, and the highest 29·73 in. on Friday evening.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

ORIGINAL LECTURES.

LECTURES ON THE DIAGNOSIS AND SURGICAL TREATMENT OF ABDOMINAL TUMOURS.

Delivered at the Royal College of Surgeons of England.

By T. SPENCER WELLS, F.R.C.S.,
Consulting Surgeon to the Samaritan Hospital, etc.

LECTURE III.

Surgical Treatment of Ovarian Cysts and Tumours; Tapping, by Abdominal Wall, Vagina, or Rectum; Tapping, with Drainage; Injection of Iodine, or Antiseptics; Incision and Drainage; Ovariotomy—Selection of Cases—Preparation of Patient—Instruments—Anæsthetics; Duties of Assistants and Nurse.

I AM about to commence to-day by considering the question of the surgical treatment of ovarian cysts and tumours. I will begin with the treatment by tapping. There is still a great deal of difference of opinion amongst surgeons as to the amount of danger that attends tapping, and the amount of good that may be gained by it. I think the opinion of the profession is almost as unsettled now as it was when Stilling wrote, some years ago, in his paper upon the extra-peritoneal method in ovariotomy, that "no surgeon should ever puncture an ovarian cyst." Tapping, he said, was a "crime"—"never tap." And the belief is general, that ovariotomy is rendered more dangerous when a patient has been tapped. There are still surgeons who entertain that belief: they object to tapping on two grounds—first, that it is dangerous in itself; and next, that it can only be of temporary use;—and then, again, they fear that it is likely to be followed by adhesions or some other conditions which very greatly add to the danger of ovariotomy when it is afterwards performed. With regard to the amount of danger in tapping, it seems to me that many of the opponents of this simple proceeding fall into a considerable error in attributing to tapping what ought to be considered as due to the disease. If a patient die after tapping, she does not die because she is tapped; she dies because the tapping does not save her life. She would die if left alone, and tapping gives her relief for a time; the cyst fills up again, again requires tapping, and after one or more tappings she dies. It is not the tapping that kills her; she dies because the tapping does not save her. I fancy if we make a clear distinction between operations that fail to save life and operations that kill patients, we shall make a distinction between tapping as a mode of relieving for a time a patient suffering from an ovarian cyst and ovariotomy, which, if it do not succeed in saving life, kills the patient.

It is very seldom indeed that tapping is in itself dangerous. Occasionally, a bloodvessel in the abdominal wall, or in the cyst-wall, or in the omentum, may be wounded, and the patient may die of bleeding; but that is the rare exception to the general rule, that tapping is attended with very little danger. A greater danger than bleeding is when air enters the cyst, and with the air some elements of putrefaction. Putrefactive changes are set up in the fluid still contained in the cyst, or in that re-formed after the tapping, and then the patient dies from some form of pyæmic fever or septicæmia. That may be now looked upon as the chief danger after tapping, and which may hereafter probably be lessened or averted altogether by the adoption of antiseptic measures.

With regard to the mode of tapping, it may be done either through the abdominal wall, the vagina, or the rectum; and in either case we may trust to tapping alone, or to tapping followed by pressure; the punctured opening may be allowed to heal, or the opening may be kept patent by some form of drainage-tube, in the hope that a cure may be obtained by a more or less permanent drainage of the cavity; and with this drainage there may be associated the injection of iodine or some antiseptic fluid. There was a proposal at one time made which has not been very frequently followed—that of purposely leaving the opening in the cyst-wall patent, so that the fluid as it formed might gradually escape into the peritoneal cavity and be absorbed, producing pretty much the effect of a ruptured cyst.

When tapping through the abdominal wall was performed in the early days, it was done with the patient seated on a chair, an assistant on either side of the patient, a long towel fastened round her, possibly an opening in front of the towel. A pail was placed between the patient's legs, and then the surgeon, taking one of these old-fashioned trocars, with considerable force plunged it into the abdomen. Sometimes a small incision was first made in the skin with a scalpel or lancet, in order to lessen the force necessary to pass the trocar inwards; but it was very soon apparent that the danger which followed tapping in this way was due a good deal, in the first place, to the position of the patient, and, in the next, to the instrument used. The fainting of the patient, almost necessarily due to the upright position, even notwithstanding firm compression by bandages or towels, could be avoided altogether by having the patient in a recumbent position, not taking her out of bed, simply bringing her to the edge of the bed, placing her on her side, and tapping in that position. In that way no bandages were necessary, and a very large cyst might be emptied without any faintness being felt by the patient. In some cases, the surgeon would tap a patient with a trocar, and it would be what Sir Astley Cooper called "dry tapping"—no fluid followed. That arose from shortness of the canula in patients having a thick abdominal wall. I suppose this trocar would hardly go through the abdominal wall of a patient having an inch or an inch and a half of fat; by the time it reached the cyst it would barely enter it; and then, when the trocar was withdrawn, the fluid, instead of passing through the canula, escaped into the peritoneal cavity. Again, supposing one did with a trocar of this kind enter the cyst and removed the trocar, leaving the canula in the cyst, after a certain amount of fluid had escaped, the cyst contracted and fell off and sank into the peritoneum, so that no more fluid escaped, or it came away only gradually. I have seen all these things occur myself; and the first thing I did in altering the old instrument was to increase the length of the canula; and by simply lengthening the canula I avoided both the danger of not opening the cyst and that of the cyst falling off the canula. Then Mr. Thompson, of Westerham, made the great improvement, of which there is an exaggerated specimen here. He arranged the trocar in such a manner that when it entered the cyst the trocar was withdrawn beyond the point at which the fluid escaped down the long flexible tube; he thus effectually prevented any danger of air entering from the outside into the interior. He took a great deal of trouble to do this by putting the tube into a vessel of water, sucking at one end until the water rushed up through the tube. By advancing the trocar he kept the tube full of water, and as the lower end was under water in the pail beside the bed, of course no air could come up and get into the cavity of the cyst when the piston was withdrawn. I soon found that filling the tube with water was quite unnecessary, because it was only a question of the level at which one passed the trocar into the cyst. But there were one or two objections to this instrument. In the first place there is a little interval of time—a moment—between the entrance of the point into the cyst and the withdrawal of it, in which instant there may very possibly be some escape of fluid between the sides of the canula and the punctured cyst. I have seen that occur in ovariotomy, and I have no doubt it occurs also in ordinary tapping, so that I was anxious to avoid that moment which is lost between the entrance of the trocar and the removal of the piston leaving the canula free. It occurred to me that a common steel-pointed pen would do as well as anything; and I thought if that were passed into the cyst the fluid would run freely away, and it would be easy to make a syphon trocar. After a little trouble my suggestion was carried out, and the instrument I now show was the result of that trial, and it is the one which I have used ever since. The point is exactly like the point of a steel pen, and is so made that it does not cut a piece out of the abdominal wall, but simply enlarges the opening made by the scalpel. A small opening is made first by a lancet or scalpel, and then this instrument is easily passed into the cyst. It is evident, if this were left in the cyst, it would be dangerous when the cyst was empty; a sharp point like this in the interior of a contracting cyst would be pretty certain to wound it; so I added a blunt canula. I first put the cutting-point inside, but afterwards found it better to slip up the blunt canula inside the sharp tube, and that is the form of instrument now used—passing it with the point directed downwards, so as to avoid any rush upwards of air

which might occur if the point were at a higher level than the end of the tube. With the tube, the instrument at once becomes a syphon, and this calibre is large enough to allow the escape of viscid fluid. There are several small openings in the canula, because, if the opening be too large, there is the possibility of the entrance of little bits of omentum or small shreds or clots, which may be in the interior of the cyst. These would block the tube; therefore it does not do to make it too large. Fixing a long elastic tube on to the end of this instrument, the fluid is carried silently away into a vessel under the bed; the patient does not hear any splashing, and there is no possibility of any air entering into the cyst. Supposing the fluid—whether ovarian or cystic—is in the peritoneal cavity, or there is a doubt as to where it is, it is desirable to remove such fluid without the possibility of wounding any uterine tumour, or any mass of cancer, or injuring the intestines or omentum. For this operation I contrived this form of canula, which is used after a simple lancet-puncture. Passing a lancet or small scalpel through the abdominal wall until fluid appears, then removing the knife and pushing this hollow tube to the cavity, the fluid at once rushes away. The tube may be moved about as a probe to feel whether any tumour is free or adhering, and we can do that without the slightest fear of doing any harm. With these several small openings there is no fear of portions of omentum becoming entangled by the pretty strong suction that goes on through the long syphon.

There have been one or two modifications made in this instrument. Here is one by Dr. Fitch, of New York, and he believes the form of protector is of some little consequence. He calls his the "dome-shaped" trocar. It is precisely the same as mine, except that the guard is made in a dome shape. It is quite easy, supposing one wishes to wash out a cyst, to fix an ordinary enema syringe to the end of the elastic tube, and either to exert suction on the fluid contained in the cyst, or to inject any antiseptic liquid, and draw it out again by reversing the action of the syringe.

Tapping through the abdominal wall in some cases becomes not only a means of temporary relief, but if the cyst be really a single cyst it may be followed by the complete cure or recovery of the patient. I have known, now, a great many cases where, when the cyst proved to be really single or unilocular, it never refilled after the first tapping; the patient was by this very simple means completely cured. So I think we may lay down almost a positive rule, that when we can be sure that the cyst is a single cyst, and we cannot discover any secondary growths in the cyst-wall, either by examination by the abdomen or the vagina, we must consider it a duty to see what tapping will do for a patient before thinking of more serious measures. I think I have seen quite enough now to warrant me to endeavour to impress upon surgeons that if the cyst be a single cyst, before they do anything else they should see what can be gained by one tapping. If the tapping be done with precaution, the risk is extremely small: the patient loses nothing, and may be cured. There are a great many cases recorded in my book to prove that fact; and also to show that the mortality of ovariotomy, supposing it afterwards becomes necessary, is very little affected indeed by previous tappings. I gave a table showing what the effect of one, two, and many more tappings, up to eighteen, had been upon the mortality, and the difference seemed to be very trifling.

In tapping through the vagina or rectum, a somewhat different instrument is used; either such a long instrument as that, or a similar trocar fixed upon an elastic catheter, which may be tied in and left, if necessary; or, if it be desirable to introduce a drainage-tube, then an instrument much more curved. The point is carefully guarded by the finger, and, when one is quite sure where the point is, it is pushed into the cyst, and it is occasionally quite possible to introduce it near the uterus and bring it out nearer the rectum, to attach then a piece of drainage-tube to the slit in the point of the trocar, and draw it through, leaving it in the cyst after removing the canula. That is not very easy to do; but I have done it, and in the days when more was thought of drainage than is the case now it occasionally proved useful. It was used rather after ovariotomy, when a collection of fluid formed in the pelvis, than in treating ovarian cysts, because it would only be when the cyst was low down in the pelvis that it would be advisable. Sometimes, when there was a solid portion of the tumour high up in the abdomen and the more fluid portion in the pelvis, one could empty it in this way by the vagina or rectum. There was a discussion some years ago as to whether it was better to do it by the vagina or the rectum, and at one time the argument was used that it was much safer to do it by the rectum, because there was a greater probability of air entering the cyst through the vagina; and the answer to this was manifestly that one would rather have an entrance of atmospheric air than of fæcal gases.

Pressure following tapping was at one time very much the fashion; but I think it has entirely fallen into disuse. No surgeon now thinks very much of the use of long-continued pressure after tapping; it is very likely to inconvenience the patient, and may more probably occasion adhesions than if the patient be simply left alone with an ordinary amount of support. The formation of an intra-peritoneal opening in a cyst-wall, I think, also is entirely abandoned. It was a proposition made by Professor Simpson, of Edinburgh, to cut a small piece out of the cyst-wall, and then to let the cyst retract and empty. It is only in the single cyst that this could be of use, and in a single cyst the object would be much more simply and equally well effected by simple tapping.

With regard to the formation of a permanent opening through the abdominal wall or through the vagina, so as to cure a cyst by drainage, that may occasionally be useful, but I think only in very exceptional cases. It is a very tedious process; the patient remains for weeks, possibly months, in a state of great discomfort; she is exposed to the danger of suppurative action going on in the cyst, and to the fever which accompanies it; and it is only in exceptional cases that a cure is the result. I have seen patients cured in this way, but the cases have been few and far between.

Then, with regard to incision and drainage, making an incision into a cyst, and draining it when it cannot be removed, is not an intentional practice, but one to which a surgeon is driven who begins to do an ovariotomy and finds that he cannot complete it. The cyst is incised and emptied, and then it is found impossible to remove it. In that case, any portion of the cyst which has been separated may be fixed to the abdominal wall and the wound closed as far as is necessary, still leaving a sufficient opening for a tube to be passed low down to the bottom of the cyst, which may serve for drainage and for antiseptic injections. There are instances on record, apparently very hopeless, which have got well in this way. I have now a young woman acting as assistant to a nurse of mine to whom last year this very thing occurred. The cyst was opened, and was adherent everywhere; it was quite useless to attempt to separate it, so I closed the opening around a drainage-tube, and, after some months of drainage and syringing with carbolic acid, iodine, and other antiseptics, and at last with sulphurous acid, which seemed to act better than anything else in that case, it completely healed, and she is now in perfect health, and has made a recovery from what otherwise would have been a very hopeless condition indeed.

We will suppose now that we have a case to deal with in which tapping could be of very little use; or we will suppose that tapping has been tried; that fluid has re-formed after repeated tappings; that all ordinary treatment has proved of no avail: then arises the question, "Is this a case in which ovariotomy should be recommended to a patient?" and the sort of common-sense rule that I have been in the habit of following has been to say to a patient, or to the medical man with whom I am in consultation, "So long as this patient is moderately comfortable, so long as she can walk a mile, or for half an hour, without much inconvenience, so long as she can get up and down stairs, so long as there is no great pressure upon any of the organs of the abdomen or pelvis, and she can breathe pretty well, and her heart is not interfered with, such a patient as that may be left to ordinary palliative treatment, with the usual attention to the general health." But I would also say that, if the operation be delayed for a time, she should not be subjected to any useless treatment; that it is quite useless to attempt, by iodine, or bromine, or lime, or by gold, or by any other remedy, to attempt to diminish the size of the tumour, or to check its growth. All that is quite useless, and might be very injurious to the patient. Then there comes a time when the patient is so far inconvenienced by the tumour, is so much distressed by its size, that she cannot move about without great discomfort; her general health is suffering; she

is losing her rest, getting thin, and some serious damage is being done by the pressure of the cyst: that is the time when the surgeon must interfere. The question then arises, "With what prospect of success can the operation be done in any given case? Is this a case in which the patient will probably recover; or is it a case in which she will very likely die?" Of course, that is the question which every patient presses upon the surgeon. She does not care to know that the mortality is 20 or 25 per cent.; she wants to know what the probability of her own recovery is,—and that is the point one has to consider. Some patients will urge the operation upon the surgeon when they themselves are in very desperate circumstances. They may be almost at the point of death, and then wish the surgeon to step in and relieve them, they having previously resisted all advice from him. Quite lately, I saw a lady whom, a year ago, I strongly advised to have ovariotomy performed. She steadfastly resisted; she said she was old; she could get relief by tapping; she would get on as well as she could; and then, after some five or six tappings, she gradually got into such a state of suffering and exhaustion that, when the heart was almost stopping, she regretted that the operation had not been done earlier. It is necessary to explain to the patient that, if the operation have to be done (as it probably will have to be done), it must not be put off until there is no reasonable hope of its being performed successfully. In some cases the surgeon, on the other hand, is pressed to operate long before he thinks it is justifiable. A young woman wants to marry, or a wife wants to join her husband in India, or she does not like her appearance—unpleasant remarks are made about it; and then, in a case where the surgeon knows tapping will do but little good, the tumour being either multilocular or solid, he may occasionally, under such circumstances, operate quite legitimately and properly much earlier than he would if there were no such domestic reason. With regard to the mode of estimating the risk of the operation in a given case, I should like to repeat the rule I laid down many years ago, that the probable result of ovariotomy can be estimated with far greater accuracy by a knowledge of the general condition of the patient than by the size and condition of the tumour; that from a patient with a good sound constitution one can remove a very large tumour having very extensive adhesions, and she will probably recover; whereas, among people who have been drunkards, or in whom the constitution has otherwise been impaired, or who have a feeble heart, unhealthy kidneys, or diseased liver, the operation is much more hazardous than in a healthy person. The size of an ovarian tumour alone has not appeared to me to affect the result very much; the removal of some very large tumours has been followed by recovery, whereas death has followed the removal of much smaller ones. And a patient who is accustomed to the life of a sick-room bears an operation much better than a person taken from the ordinary pursuits of active life and at once subjected to an operation.

In consenting to operate upon patients who wished to go to the opera one night and to be operated upon the next day, I have learned by one or two rather painful lessons that it is far better to put off the operation till the patient is somewhat weakened or accustomed to the life of an invalid. The size of an ovarian tumour alone, I say, does not very much affect the result; but, if it be a very large solid tumour, requiring a very large incision for its removal, the incision extending very nearly to the sternum, then the risk is very much greater. I have found, if a tumour could be removed by an incision not exceeding five or six inches in length, the mortality is considerably less than when it necessarily extends to nine, ten, or eleven inches. Adhesions, as I mentioned the other day, if only to the abdominal wall, do not much affect the result; if they be low down in the pelvis, the mortality is considerably increased by them.

Almost the only positive contra-indication to an operation, I think, would be the fact that the patient has some other disease which, if it pursued its natural course, would certainly kill her. I do not think it would be right to perform ovariotomy on a patient dying with phthisis, although I have had to do it in the Samaritan Hospital with a patient in a very advanced state of phthisis; but she was suffering so much from the presence of the ovarian tumour, and was so urgent for relief, that I removed it, knowing very well the condition of her lungs. She lived for a month, very much relieved by the removal of the tumour, and I do not think her life was shortened by the operation; still, her death a month after the operation does somewhat affect the statistics. I think that one would very rarely be justified in doing an operation of that kind supposing one knows a patient has serious kidney- or liver-disease, or disease of any kind which, independently of the ovarian tumour, would, sooner or later, certainly kill her.

With regard to the suspicion of cancer, and how far that should decide the surgeon not to remove an ovarian tumour, I think, if one were certain it was cancerous, one ought to be content with tapping, removing any peritoneal fluid that might be formed around it, and not attempting to remove it. The disease would almost certainly return. But still again I have seen some very extraordinary cases in which I have removed ovarian tumours which appeared at first sight to be ordinary multilocular tumours, and where a careful examination showed evident proofs of malignant growth, yet the patients for a long time remained in good health. In one case, it was ten or eleven years before there was any return. So I think even the knowledge that a tumour was in all probability cancerous would not allow one to put operation aside altogether: but it necessarily obliges the surgeon to be very much on his guard.

I was going on to some other points as to the influence of age, social condition, and so on, of a patient upon the probable results; but the time is so short that I will now suppose we are about to do ovariotomy; and I will refer for a minute to the conditions under which it ought to be done and the preparation of the patient, the place in which she should be operated on, and so on. The place, I need hardly say, should be as healthy a place as we can find. The patient should be lodged in the best house, and in the best sanitary condition, and in the best room, that can be secured for her. Then I do not know that I need say anything about her medical treatment before the operation, except simply that her bowels should be relieved, and any evident concentration of urine corrected by citrate of potash or some other simple saline. Then, having procured a room for her either in a hospital or a private house, or in one of the nursing institutions which are now becoming common in London, the room must be so arranged that, after the operation, she can be kept perfectly quiet. The room must be well ventilated, though she must be protected from any current of cold air, and at the same time not overheated.

The table on which the operation is performed (it is useless to try to perform it on the bed) should be arranged near a window, so that the light falls on the table diagonally; then the surgeon does not stand in his own light, and the assistants do not interfere with him. The patient is brought in and lies down on the table. Her feet and legs are carefully wrapped up; and she is covered by a blanket, and a strap is fastened over her knees, so that she cannot throw her limbs about. It is well also to tie the hands; and nothing is better for this purpose than an ordinary bandage, making a loop, passing it over the sleeve of the dressing-gown, and tying the hands down to the legs of the table. Each hand should be tied down, and then she cannot interfere with the surgeon; and one or two assistants are thus dispensed with. In the next place, one wants to protect the clothing. If she have simply a nightdress on, with a flannel about her shoulders, she and the bedding are completely protected by the use of a sheet of waterproof cloth with a hole in the centre, around which on the inside adhesive plaster is spread to the extent of an inch or an inch and a half. That is thrown over the patient, and adheres to the skin of the abdomen, which, I should say, ought to have been previously well cleaned. The upper part of the sheet comes up nearly to the chin of the patient. Lately I have had it made larger; and we have a simple contrivance by which the sheet can be held up in order to protect the patient's face from the carbolic spray, supposing it to be used. The patient lying thus, with the gentleman giving chloroform at her head, she is completely protected by the indiarubber cloth from the spray, which is directed from the spray-producer and plays upon the abdomen.

We now suppose the patient is lying upon the table, and fastened there; the next thing to be done is of course to put her under the influence of some anæsthetic. I have no doubt whatever myself, from long trial of it—that the bichloride of methylene, as it is called, is a far safer anæsthetic than chloroform. Since I have used it—I believe in more than six hundred cases of ovariotomy, and more than three hundred ope-

rations of other kinds—I have never once been in the smallest anxiety about a patient. Now, every surgeon here must know how very frequently, when chloroform is given, he is looking at the patient to see whether he is—I will not say likely to die, but whether he is not injuriously affected by the depressing influence of the chloroform. I can say for myself that several times, when chloroform was given in my earlier cases, I was extremely anxious about them. In two cases I had to stop the operation and commence artificial respiration. I have seen several other cases in which, either at the time of the operation, or from protracted chloroform-vomiting afterwards, the patient, if not killed, certainly had her chances of recovery considerably diminished, simply by the action of chloroform at the time of the operation or some short time afterwards. I have never seen anything of the kind which I think could be fairly attributed to the action of bichloride of methylene. Provided it is carefully given in a proper apparatus, I have never seen the smallest cause for anxiety. This apparatus was contrived by Dr. Junker a good many years ago. The bottle is graduated to contain an ounce of methylene. The administrator fastens the bottle to his coat, and the mask is placed over the mouth of the patient. Then, by simply acting on the bellows, the air passes through the methylene, becomes charged with the methylene vapour, and the patient inspires it in the quantity of methylene vapour which the air will take up. I am told by chemists this cannot exceed 4 per cent., but, as a rule, at ordinary temperatures, it takes up scarcely more than 2 per cent.; at any rate, you cannot get it to take up more than 4 per cent.; and diluted vapour, 4 per cent. of methylene and 96 per cent. of air, is positively safe. I have heard of two deaths from methylene, but it was not given with this apparatus; it was given in a sugar-loaf cone made of leather, with a piece of sponge or lint put into the cone and saturated with the methylene. This was placed over the mouth of the patient, who breathed the vapour of methylene without any mixture of air. That is rather death from suffocation, or death from too strong vapour of methylene, than death from methylene properly administered. I believe there has been one other death from methylene, in which it was administered by this very apparatus, but the circumstances were peculiar. I am informed the patient had been drinking the night before. Full particulars of this case have been sent to the committee at Glasgow, investigating this subject for report at the next meeting of the British Medical Association at Bath. The bichloride of methylene, of which this is a specimen, I am told by Dr. Oscar Liebreich, is not really bichloride of methylene. Chemists have found that, if they obtained true bichloride of methylene, they could not keep it—it very soon changes; therefore it has a certain amount of impurity, a certain admixture of alcohol with it, by which alone it can be kept. If true pure bichloride of methylene could be made, it would cost about a guinea an ounce, and would not keep half an hour, so that this is a mixture of pure bichloride and spirit. I have seen it made. The chloroform and alcohol are placed in a retort with sheets of zinc and boiled; as distillation goes on, the chloroform and the zinc are converted into a chloride. Some people say it is only a mixture of chloroform and spirit; but that certainly is not true, because the vapour of it burns, while, as you very well know, the vapour of chloroform does not.

The nurses have sponges and water all ready—sponges of a certain size, thoroughly well cleansed and in sufficient number, neither too large nor too small. If they are too small they may be lost, and if they are too large they cannot be introduced. The assistants are ready. There are only two required: one stands opposite the operator, to be prepared to assist him in tying any vessel, and more particularly in preventing the coming out of intestines after the escape of the cyst from the abdominal cavity. If the assistant be not careful, as the cyst is drawn out, the intestines follow, and give a good deal of trouble; but, if he carefully hold up the abdominal wall, keeping the edges of the wound together, it is impossible that any intestine can follow the cyst as it escapes. He passes the middle finger inwards under the umbilicus, and the forefinger to the right, and the thumb to the left of the wound, and holding the edges closely together as the tumour comes out of the abdomen. When I first saw ovariotomy done, and when I first did it myself, we were told always to have wet flannels and warm water to wrap up the intestines if they came out. I have seen all the intestines of a patient on the table wrapped up in warm wet flannels; the result was a quantity of wool from the flannels adhering to the intestines, which had to be cleaned off before they were returned.

Then, as to the instruments one uses. First, an ordinary scalpel—working rather with the point of the instrument than with the shoulder. Next we have a number of what are called my torsion forceps, to hold any vessel in the abdominal wall. Supposing a vessel is bleeding, it is caught in a moment, and the forceps hang down holding any vessel, so that, when the peritoneal cavity is opened, no blood drops into it. I have them plated with nickel, so that they never rust. The bleeding vessels having been stopped, the next step is to divide the peritoneum, catching hold of it previously with forceps or by one of these little hooks. The advantage of the hook is that one is less likely to catch a bit of cyst with it. If the cyst be lying close to the abdominal wall when you are catching up the peritoneum with the intention of dividing it, you may catch the cyst, and sometimes divide it as well as the peritoneum. That is avoided by using this hook. One or two flat touches of the scalpel are sufficient to divide the peritoneum. Then a broad director is passed into the opening, and, with a blunt-pointed knife, the rest of the peritoneum is very safely divided as far as necessary. I rather insist upon this blunt point, because with a sharp-pointed instrument, supposing there is a bit of intestine adhering to the abdominal wall, it may be injured, or a sharp-pointed knife might enter the bladder if it were high up. Having laid bare the cyst by the incision of the peritoneum to the extent of three or four or five inches, it then becomes necessary to empty the cyst, and this is done by the form of trocar I have here, which is just one of the trocars I showed you for tapping, but of a larger size, and furnished with outer spring-hooks to fasten the cyst. It is passed into the cyst, then the point is withdrawn, and the fluid rushes through the canula into the pail below the table. As that is done, the outer hooks are opened, the cyst is caught hold of and easily fastened to the canula, and pulled out through the opening in the abdominal wall; the fluid passes out, the cyst is held by these grasping claws, and, if the cyst be free, it of course readily and easily follows the instrument. If any adhesion be noticed as the cyst comes out, it may be separated. But I must reserve any further description of that till the next lecture.

ORIGINAL COMMUNICATIONS.

CASE OF

URETHRAL CALCULUS SIMULATING STRICTURE.

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THE following case of urethral calculus presents some features of interest, as the symptoms to which it gave rise were somewhat misleading, and had apparently misled.

A. B., aged sixty, hawker, was admitted to Jacobs ward in September, 1877, complaining of difficulty in micturition. He stated that about fourteen years previously he observed that his urinary stream was of smaller size than it used to be, but he did not recollect whether the change came on gradually or suddenly; it was accompanied by increased frequency of micturition. About eight years ago, after a carouse, he was attacked by retention; he went to a hospital, where his water was drawn off by a catheter of a small size, after which he was able to relieve himself as before. Soon afterwards he had another attack of retention, and again required instrumental aid. From this time onwards he was affected by a constant desire to urinate, and he experienced great difficulty in the act: sometimes he had a very narrow stream, but the urine generally came away in drops, followed by dribbling down his trouser-leg after he had expelled as much as he could. He sought relief frequently, having been an inmate of a hospital for some time, and having consulted various medical men. When he presented himself at the Aberdeen Infirmary he said that he had a call to urinate at least once in every hour, and he compared the size of his stream to that of a "darning-needle." He denied having ever had any venereal disease. A full-sized metal bougie

was passed into his urethra, and no obstacle was encountered until the bulb was reached, when the instrument was suddenly arrested by what was at once recognised as a calculus. A No. 2 (English) catheter passed the obstruction readily, and by turning the point of the instrument downwards and behind, the calculus was found to be pretty firmly embedded in the situation it had so long occupied. The catheter having been withdrawn, a loop of silver wire was passed into the urethra, and after a little patient working I had the satisfaction of extracting a rough calculus about the size of a large pea.

The patient's symptoms were at once much ameliorated, and in the course of a few days, when he was dismissed from hospital, he was able to retain his water for several hours without inconvenience, his stream being of normal size.

The symptoms presented in this case—viz., a small stream, frequent desire, dribbling, and retention—were deceptive in the extreme, as they closely simulated those of organic stricture of the urethra; and as those who were called upon to relieve the retention apparently regarded them as diagnostic of that disease, small catheters were at once had recourse to, and thus the real cause of the man's urinary trouble escaped detection. From this it would seem that the rule to first ascertain in every case the character and situation of the cause of retention before employing measures for its relief, has not yet received universal acceptance, for had an exploration of the urethra with a full-sized instrument been first carried out, the nature of the obstruction would have been at once evident, and the patient's sufferings would undoubtedly have been put an end to long before he came under my observation. It is to be hoped that the record of such cases as that now under notice may assist in more firmly establishing the advisability of the adoption of this operation.

The method used for extracting the calculus possesses the recommendation of simplicity, and, as I have already pointed out in a communication to a contemporary (*Lancet*, vol. i. 1876, page 703), it is applicable not only to simple cases, but even to those in which the instruments usually employed fail, the case adduced being that of a calculus arrested by a stricture through which no ordinary urethral forceps could be insinuated. Since the publication of the paper referred to, another proof of its utility in cases not amenable to the ordinary means has been communicated to me by my friend Dr. Greig Smith, of Bristol, who sent me a calculus of no mean dimensions which he had removed by means of the wire-loop from the urethra of a child six years of age, brought to him suffering from retention of urine. The mode of applying the wire-loop hardly needs description, for it only requires to be passed well behind the calculus, and then to be drawn gently forward until it is brought into contact with it, and by a jerking motion the foreign body is removed from its bed, and is either at once totally withdrawn, or carried into a new position from which it can be readily extracted by re-applying the loop. In some cases, where unusual difficulty is experienced, the use of a canula slipped over the ends of the wire will prove of service; but on this point I must refer those interested to the paper already alluded to, where the mode of procedure is fully described.

As every surgeon has a strand of wire at his command, and as very many have not the elaborate and expensive forceps constructed for the removal of foreign bodies from the urethra, I beg to recommend a trial of the snare, feeling satisfied that it will be found both easy of application and effectual.

Fatal Gunshot-Wound of the Skull.—The *Boston Medical Journal*, May 2, gives an account of an accident that occurred at Pawtucket, Rhode Island. Incredible as it may seem, the authorities of the place permitted, and audiences witnessed repeatedly, the realisation of the Tell legend of shooting at an apple placed on the head. A woman having the apple on her head and placed at a distance of nine feet only, with an elevation of an inch and a quarter to the foot, a conical bullet, No. 22, was fired at her by another woman, having her back towards this target, and firing with the gun laid over her shoulder, sight being taken by aid of a mirror. The "amusement" had been carried on, it seems, for several seasons successfully; but at last the bullet penetrated the skull, and the woman was killed. It is to be hoped that the verdict of the coroner's jury, calling on the authorities to prohibit all performances endangering life, will have due effect.

REPORTS OF HOSPITAL PRACTICE IN MEDICINE AND SURGERY.

GUY'S HOSPITAL.

STRUMOUS DISEASE OF THE VAS DEFERENS SIMULATING INGUINAL HERNIA—ILIAC ABSCESS—ACUTE CARIES OF SPINE—PYÆMIA—DEATH.

(Under the care of Mr. BRYANT.)

[Reported by G. F. Dixon.]

Michael B., aged forty-four, a labourer, was admitted into Job ward on April 25, 1877. His family history is good. He is married, and has three children alive; buried two. He has never had a severe illness. Seven weeks ago he was very unwell for a week with cold, and in that time he got weak, but after nine days' rest he went to work again for about five days, when the following day he felt a dull aching pain in the left groin; the left side of the abdomen was also swollen and painful; he continued, however, at work till five o'clock, when the pain became so bad that he was obliged to stop. He went home, and about an hour after was very sick, and the pain was very great. A medical man saw him that evening, who gave him medicine which stopped sickness, and ordered a poultice to the abdomen. Later in the evening the patient noticed the swelling in the scrotum. He showed it to the doctor, who said he must go on poultiecing, which he did for three weeks. Patient has been taking physic up to admission. He was rather sick on the 22nd; his bowels have been open daily.

On admission, the patient seems weak; his appetite is bad; examination showed at the left side of the lower part of the abdomen a swelling about three inches in length, extending from the external abdominal ring to the middle of the scrotum. There is no impulse in it on coughing; but it is very tense and painful on pressure at the upper part, but not at the lower. Both testes can be felt, and the lower part of the scrotum is perfectly normal. There is likewise fulness in the left groin, but no pain on coughing. He also complains of pain in the back and loins, extending at times all over the abdomen.

April 27.—Mr. Bryant saw him, and said the case looked like an incarcerated hernia, and that the contents of the sac were probably omentum. The parts were ordered to be raised, and ice-bags applied. Bowels have not acted since the 25th.

28th.—Bowels acted yesterday afternoon; no sickness; swelling very painful at times.

30th.—Swelling is decidedly smaller and less painful; bowels open last night; his appetite is good.

May 3.—He is not quite so well this morning; abdominal pain more frequent; cannot eat to-day; scrotal swelling about the same; complains of pain in his back.

7th.—Ice-bag is kept on; swelling is smaller and less painful; bowels regular; pain in back easier.

10th.—The swelling is larger, more inflamed, and softer; just on the inside of the upper part is a round patch more inflamed than the rest. He has very bad nights; bowels acted at 4 p.m. on May 8.

11th.—Yesterday Mr. Bryant saw patient and examined the swelling, and said it was an abscess in the sac; so the dresser made an opening about an inch long, and let out two ounces and a half of thick pus, with sloughy tissue which looked like dead omentum; the wound was plugged with lint soaked in terebene.

13th.—The wound is suppurating a good deal, and small pieces of sloughing tissue can be syringed out. He has great pain from the wound. His temperature has risen to 103·1°; pulse 108.

14th.—Wound discharges a great deal of offensive pus. He had a bad night; bowels not open. His temperature has fallen 1° since yesterday.

15th.—The Surgeon enlarged the opening yesterday, but not much pus came out. He cut a small artery, which was twisted. Patient had an injection of morphia last night, and slept well. His temperature is normal again.

16th.—The omentum, or what was supposed to be such, is suppurating very much; his bowels are open; had another subcutaneous injection of morphia last night.

17th.—The pain is very bad; tongue dirty and mouth clammy; abdomen very much distended; discharge still

continues, and is fetid; eats nothing; temperature 101·1° pulse 102.

18th.—He is better and had a good night; bowels open yesterday and to-day; smell of discharge is intolerable, and somewhat fæcal; the abdomen is less distended than yesterday; had hot fomentations applied, which relieved him.

19th.—Patient was sick last night with diarrhœa; abdomen still distended, not painful.

20th.—He is better this morning; diarrhœa less; distension diminished; no sickness; tongue cleaner; more cheerful; has no appetite; discharge frightfully fetid.

22nd.—Wound was very painful in night; it is dressed with lint soaked in a mixture of oil and terebene, after being washed out.

23rd.—The abdomen appears normal now; no pain on pressure. The dresser, on squeezing the abdomen this morning, evacuated at least fifteen ounces of exceedingly fetid pus. The wound does not seem to heal; patient is very weak.

24th.—He is very ill this morning; his tongue furred, and mouth dry and clammy; abdomen not distended; no sickness: bowels open; the wound is painful and discharge profuse; eats nothing; pulse cannot be felt; respirations 30 and laboured. The opening was again enlarged this afternoon (being now two inches and a half in length), the suppurating cavity thoroughly washed out with warm iodine solution, and a drainage-tube put in. 10 p.m.: Has taken nourishment and feels more comfortable.

25th.—3 a.m.: Has been sinking for the last hour or two. He died quietly.

Post-mortem by Dr. Fagge.—There was no acute peritonitis, and the only sign of old inflammation was an adhesion of the omentum (itself not thickened) to the parietes near the left iliac fossa, and a thickening of the peritoneal covering of the sigmoid flexure, which was fixed down rather tightly. There was no trace of any hernia having ever existed. Turning to the groin, there was a large open wound, and on the inner side of it an inflamed mass, looking very like omentum, but which proved to be the spermatic cord, swollen by inflammatory products. From the wound there was free communication with a large sloughing abscess-cavity in the left iliac fossa (superficial to the iliac fascia), the communication passing over Poupart's ligament; this extended up behind the kidneys and reached the back of the spleen, and there was a little cheesy material from old inflammation below it and the diaphragm. When the viscera were removed, the cause of this iliac abscess was found to be disease of the spine. The pus and cheesy material were traced to the junction of the eleventh and twelfth dorsal vertebræ. The parts were therefore sawn out, and it was then found that the mischief was of recent date. The intervertebral substance was only partially destroyed. There was much yellow infiltration of the osseous tissue of the adjacent parts of the two vertebræ, and one or two pieces of necrosed bone. The abscess passed behind the left kidney (separated from it by its fat as well as capsule), and there did not appear to be any traceable connexion between the spinal affection and a much older state of disease in this kidney; it was shrunken, lobulated, and, on section, converted into a mass of cysts containing cheesy or putty-like material. These seemed not to communicate, and some of them had smooth membranes. The corresponding parts of the cortex were converted into a dense white fibrous material. At one part the affection was in an earlier stage; there was the typical spreading cheesy ulcer: there the cortex had undergone less complete destruction. The ureter was thickened, and its mucous membrane covered with a granular layer down to the bladder. The right kidney and ureter were healthy; the bladder was healthy, except that on the right side of its floor there was a round ulcer the size of a shilling, with sharp edges and a floor depressed some distance below them and undermining them, with a little cheesy material on its floor. The prostate contained a little cheesy stuff in one or two places. The left vas deferens and testis were healthy. The right vas deferens showed tuberculous disease of its lining membrane throughout, even from the bladder; and the right epididymis and testis showed advanced disease, the tuberculous character of which was very evident. The testis was full of tubercles isolated from one another. The epididymis was full of a cheesy substance. The spleen was lardaceous, as was also the liver, which contained numerous small pyæmic abscesses.

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Medical Times and Gazette.

SATURDAY, JUNE 29, 1878.

THE MEDICAL BILL IN THE COMMONS.

The other week we expressed a very strong opinion that the General Medical Council should be at once convened to take into consideration the very serious aspect that has been assumed by the present attempt at medical legislation since the third reading of the Bill in the House of Lords. We are glad to be informed that professional opinion has been so strongly stirred upon the subject that the Council has been summoned, and will meet to-day. The business that will come before it will be, of course, the amendments that have been made in the Bill since the recent session of the Council.

When, several months ago, in our first remarks upon the subject of medical reform, we stated that the conjoint system of examination would probably be made compulsory throughout the three kingdoms, we had reason to believe that this provision was included in the original draft of the Bill. When the Bill appeared it was found to be destitute of this obligatory clause. Soon, however, it was proposed that the obligation should be thrust upon the Corporations only; and finally, when the Bill came into committee, the compulsory clause was made universal in its application, but at the same time registration was to be made dependent on qualifying certificates only. Thus the disestablishment of the various Corporations was seriously threatened. Such is the present state of affairs, and we have already on more than one occasion indicated its gravity. We pointed out how injurious the system of the registration of the qualifying certificate would be—first, to the profession in general, by begetting a new class of practitioners; secondly, to the Corporations, which, if they were to remain honest, would be disendowed and speedily ruined financially, or, if they chose to be dishonest, would open a Dutch auction of their several honorary distinctions; lastly, but not leastly, it would entail serious injury to the public.

In this state, and disfigured by many other imperfections, the Bill will be discussed by the Medical Council. The Council will find that the Duke of Richmond has paid attention to

some of the suggestions which they made and submitted to him as the result of their last meeting; but that he has given less attention than they deserved to others; and especially that he has not followed their advice upon the subject of a Conjoint Scheme. We trust that the Council will adhere to its original resolution; and that it may be enabled to press successfully upon the Lord President the importance of compelling the formation of conjoint boards on the same principles as those incorporated in the English scheme, which has been willingly accepted by the authorities in Ireland, and which promises to be a success.

The question of the women is another to which the Lord President has not given that attention to the wishes of the Council which they merited. When last we spoke on this subject we referred to the particular clause in the Bill which provided for the examination of women by "alternative questions to be answered by each candidate." This absurdity, which would allow women to choose to be examined on the diseases incident to the male organs of generation if it should so please them, still remains. It has, however, been proposed to substitute the words "with such distinctions as may be judged proper between the cases of men and women." The results of such a distinction would be that the Register would contain persons unequally qualified, and that the uniformity of qualification which all these efforts are being expended to establish would be hopelessly prevented. How much more simple it would be if the Lord President would follow the suggestion of the Medical Council—that there should be special examinations for women suited to their sex, and a special register framed for them—when they are found qualified to practise. The more prominent of the women's leaders declare that the women have no desire to become acquainted with the surgical diseases of men. They want but a legal qualification to practise, more especially among women and children. If there is any truth in this statement, there can be no great difficulty in carrying out the object just indicated. If some of the more advanced or more masculine women are not satisfied, and wish to be men as nearly as nature will allow, it is more than probable that, seeking to grasp everything, they will lose all; and that the House of Commons will refuse to sanction a measure which might require a woman publicly to exhibit her dexterity—as is said to have been recently the case at an examination in Dublin—in sounding a man for stone. We would earnestly impress upon the Council not to waste its time in talking, but to take up the most important subjects at once. These are—first, the establishment of Conjoint Boards, something on the principle adopted in England; secondly, a suitable provision for the examination and registration of women; thirdly, a penal clause which shall prevent the practice of physic by impostors; fourthly, a clause which will legalise under equitable conditions the registration of foreign and colonial practitioners. The Council should leave the other questions that have been mooted to be settled afterwards.

"BATHING IN PUBLIC."

We imagine that no one who has had occasion to look into the subject will deny that the laws which regulate public bathing in the open air require amending. The Public Health Act for this purpose is defective, and although "local authorities" all round the coast have issued many orders regulating the "beach" within their districts, it would seem that they have no power to enforce them to the necessary extent. The "model by-laws" issued by the Local Government Board appear to recognise this, for they call the attention of those who are about to frame new by-laws for the purpose of regulating public bathing in urban districts to two cases, to be found by the legal student in vol. ii. of "Campbell's," and in vol. xii. of "Cox's Reports," in order, presumably, that the new regulations may be such as the London Board may be able to confirm. The local authorities at Paignton some time ago made by-laws to regulate the bathing on Goodrington Sands, but they had to be informed that by the terms of Section 69 of the 10th and 11th Vict., cap. 89, the scope is limited to the regulation of public bathing in connexion with the use of bathing-machines. Hence, probably, the direction to future local legislators to study the reports of Cox and Campbell. We have taken the trouble to look at these two volumes, and we find that any person being a traveller, or any resident on the English coast, may object to any other person divesting himself of his clothing within the range of vision from the highway or from the windows of a domicile. And the traveller, the lodger, or the householder may do more than object—he may prosecute the offender *for a misdemeanour*. It matters nothing that the person who intends to bathe exhibits the greatest delicacy while divesting himself of his clothing, nor that he enters the water with the greatest rapidity, for the law is the offspring of civilisation, and disapproves of "man" in a state of nature, and will protect any person from being compelled to study the "nude," if he objects to the exhibition. The judges who tried the two cases referred to in the law books are of one mind upon this matter. Counsel pleaded for the defendant in the case of Rex *v.* Crunden, in the time of the good King George the Third, that he had only done what thousands had done before him by bathing in the same place. It was a vain plea, for Crunden had bathed after a house had been erected from which the bather could be seen. It was urged by counsel that the house was the offender against decency, as it had come to the nuisance, for the bathing was older than the house; but the judge laughed the argument to scorn, and Crunden was convicted of a misdemeanour. The second case, which was tried a few years ago, differed only from the first in the circumstance that the individuals who divested themselves of their garments were within sight of travellers on a public pathway, though out of sight of houses. But this did not excuse the bathers in the eyes of the law. Travellers are not bound to shut their eyes as they walk along, for fear of seeing unpleasant sights; and so one of the offenders was convicted of a misdemeanour. Now, when the "Local Government Board" calls attention to these two cases, it points out apparently that, as the law gives power to anybody and everybody to prosecute an offending bather, the "local boards" had better be cautious how they interfere. But this is an eminently unsatisfactory state of things, for it is not pleasant for a private individual to prosecute an offender against the public; and in these cases that which is everybody's business turns out to be nobody's. It is clear that the duty of regulating the bathing of the seaside should be acknowledged, and there is no fear that local authorities would abuse the powers with which they might be entrusted. The public would obey "orders," although they are not very likely to listen to "requests" regarding matters which are attended with some slight personal inconvenience to themselves. We may mention, for instance, one regulation which might be properly enforced, and which, if complied with, would go far to render open-air bathing unobjectionable to any looker-on not morbidly fastidious. It would be no hardship to require all bathers and swimmers to wear drawers. It is very doubtful whether a "request" to this effect would be attended to in many parts of England. The wearing of a bathing-dress is considered "foreign" and "outlandish" by hosts of uneducated Englishmen, and they hate innovations. Yet it is hard that the comfort of a seaside place should be spoilt by indecency. For, after all, the law which calls it a mis-

demeanour to take off all your clothes in public only confirms the unwritten law of ages. Since the time of Adam and Eve, to appear naked in public has been held as an indecency, and with few exceptions "savages" agree in this matter with civilised men, and clothing of some kind is a necessity. We do not see why people who intend to bathe should be excused from complying with the wishes of the general run of mankind, when compliance would cost so little trouble or expense; and we are even less able to perceive why individuals should not be relieved from the onus of prosecuting indecent people, or why the duty should not be transferred to local boards.

THE LATEST PROPOSAL RESPECTING THE MEDICAL BILL.

We desire to call particular attention to an extremely dangerous suggestion that has been made in connexion with the fourth clause of the new Medical Bill. Our readers are aware that the latest amendment made on the Bill before it left the House of Lords was the adoption of the revolutionary principle contained in the fourth clause, which provides that a qualifying certificate obtained from a conjoint board, and *not diplomas or degrees*, shall in future give admission to the Register. They are also aware by this time that this provision is almost universally condemned. What we are now anxious to draw attention to is a compromise which the movers and promoters of the suggestion above alluded to are offering with a dangerous amount of plausibility, without fully abandoning an amendment which the profession refuse to accept. The compromise is embodied in a proposal, which is said to emanate from the College of Surgeons of England—that a person who has obtained a *qualifying certificate* shall be registered as a licentiate in medicine, surgery, and midwifery, "provided that, if the scheme of any Joint Board requires that any persons passing the examinations of the Board shall become affiliated to any medical Corporation or Corporations concerned in the scheme, it shall be the duty of such Corporation or Corporations to affiliate, as the scheme requires, each such person on his application; and no such person shall be registered *as a licentiate* under the above enactment till he shall have been enrolled by the Corporation or Corporations." (The *italics* are ours.) This proviso is to be added, as a rider, at the end of Clause 4 of the Bill.

At first sight this suggestion sounds fair and reasonable. But let us clearly understand what the proposal means. It means that in future the qualifying certificate of a Conjoint Board shall be the only registrable qualification, and that no degree, diploma, or other certificate of proficiency or of excellence shall be inscribed upon the Medical Register, except as a mere honorary distinction. Under the system adopted in the English Conjoint Scheme, while the possession of a qualifying certificate would be necessary before a diploma or a degree could be obtained, the degree or diploma, and *not* the qualifying certificate, would be registered. While uniformity of qualification would thus be secured, the Register would be an authoritative list not simply of men who had been examined, but of the membership of the Corporation or University that each medical person enjoyed, and of the distinctions that had been conferred upon him, exactly as in the present Register. By the proposal to which we now object, such registration of degrees and diplomas is superseded, and with it the licensing powers of the Corporations are abolished. It is true that the clause which we have quoted allows any of the Joint Boards to require that any persons passing their examinations shall become "affiliated to" or "enrolled by" some of the co-operating Corporations. But, after all, the person is to be registered "as a licentiate," not in virtue of such affiliation: his "affiliation" or "enrolment" may mean anything or nothing, and the co-operating bodies may or may not require this arrangement, just as they may think fit.

A more unhappy suggestion can hardly be conceived. It possesses all the characters of a compromise, and is an attempt to cling till the very last to a position that is felt to be untenable. It is manifestly the work of the promoters of the scheme to rob the Corporations of their power and their independence which immediately preceded it, and for which it is but a blinding substitute. It is, indeed, the same scheme in an occult and equally dangerous form. As we have said, it would deprive the Corporations and Universities of all their licensing power, and substitute for this privilege, which they value so highly, a pitiful power of "affiliating" successful candidates. And even such power of "affiliation" is voluntary, that is, it is not compulsory unless the particular Conjoint Board resolve that it shall be compulsory. Now, the resolution of any given Conjoint Board will be determined by the votes of the majority of the co-operating bodies. If the majority of the co-operating bodies in England, for example, resolve that persons obtaining a qualifying certificate from the Board shall *not* be required to be affiliated, then we shall have seen the last of our time-honoured Colleges as licensing bodies. Have the Colleges considered how easily the four English Universities might thus by a majority in the Conjoint Board give the *coup de grâce* to the three Corporations? One of our correspondents the other week compared the attitude of the Corporations to the preparation for the execution of the *happy despatch*. No sooner are the bodies rescued from this attempt at suicide than we find them again calmly planning their own destruction by a much more elaborate system of torture. What we wish plainly to do is, to ask the Corporations, if they *will* thus put an end to their existence, to die with their eyes open.

THE WEEK.

TOPICS OF THE DAY.

The case of the Local Board of Health at Wandsworth against certain chemical manufacturers carrying on their works in the New-road, Battersea, heard before the Lord Chief Justice last week, involves many points of great public importance. The defendants manufacture sulphuret of ammonia and sulphuric acid, for which purpose they use sulphur and the refuse liquids from gas-works; and it was represented that the fluids and gases evolved in the works, in addition to being offensive, were positively injurious to health. It was stated that the liquid discharged into the sewers was so noxious as to cause the death of a man employed on duty in them. This case had been previously tried, upon which occasion the jury were discharged without coming to a verdict; but the defendants now pleaded guilty to the charge made against them so far as concerned the past. They denied, however, that their works now create any nuisance, in consequence of great changes which had been made, at large expense, in the manufacturing process; and they applied for leave to file affidavits showing that the nuisance had been abated. A large number of such affidavits had accordingly been filed, but there was an equally large number on the other side to show that the nuisance had not been abated, but still existed. After a very lengthy discussion, in the course of which the Lord Chief Justice expressed an opinion that the works ought not to be carried on at all in such a place, in the midst of a populous neighbourhood, it was decided that, as the Court was not quite satisfied as to whether the nuisance, which was undoubtedly of a most serious character, had been, or

had not been abated, the case should stand over to the next sittings in November for final judgment; with the understanding that if in the interval the nuisance was still found to be serious, an application could again be made to the Court, who were determined to use their full power to suppress it unless it ceased to be injurious to the health of the neighbourhood.

It is announced that the Social Science Congress has accepted the invitation of the town of Cheltenham to hold its annual meeting this year in that place, and arrangements have already been entered into for its proper reception and accommodation. A guarantee fund has been subscribed, and the Congress is fixed to be held from October 23 to 30 next. The president for the year has not yet been elected, but among the local vice-presidents who have consented to act will be found the names of Lords Bathurst, Ducie, Sudeley, Moreton, and Sherborne, Mr. Agg-Gardner, M.P., the Mayor of Cheltenham, etc. The departments in which papers will be read are five in number—1. Jurisprudence and Amendment of the Law (subdivided into two sections: International and Municipal Law); 2. Education; 3. Health; 4. Economy and Trade; 5. Art.

There would seem to be ample evidence that the term of human life at the present day is, if anything, growing more extended. A lady recently died at Calstock, Cornwall, at the ripe age of a hundred years and ten months. Cornwall has before now produced marvellous specimens of longevity. It is also announced that next week a festival is to be held at the Town Hall, Towcester, to commemorate the anniversary of the one hundred and first birthday of Thomas Hart, a native of that place. The *Philadelphia Ledger* reports the death of a lady who had reached the age of a hundred and two years and five months, and who was nursed in her last illness by her eldest daughter, now just eighty-two years of age.

If statistics were necessary to testify to the rapid and enormous growth of this metropolis, they may be found in a return which has just been issued by the Metropolitan Board of Works, showing "the number of inhabited houses, population, and rateable annual value of the parishes and districts comprised within the metropolitan area in the years 1856 and 1876, or as near as these data can be accurately stated." This return shows that the total rateable annual value has more than doubled itself within the twenty years specified. In 1856 the amount was £11,283,668, and in 1876 it was £23,111,313. In 1851 the population of the metropolis was 2,363,405, and in 1871 it had increased to 3,266,987. The return in question has been issued in view of a possible re-adjustment of the representation of the several vestries and district boards at the Metropolitan Board of Works.

We take this opportunity of again mentioning that Sunday, the 30th inst. (to-morrow), is the day appointed for the collection in aid of the Hospital Sunday Fund. The Lord Mayor and Sheriffs will, as heretofore, attend in state at St. Paul's Cathedral in the morning, and at Westminster Abbey in the afternoon. A meeting of the Council of the Fund was held last week at the Mansion House to make arrangements for the collection, and after considerable discussion it was determined to solicit the clergy and ministers of all denominations to allow all the services on the 30th inst. in their respective places of worship to be made available for the general collection in aid of the Fund.

The *Globe* states the Russian Government has given orders for the construction of a large number of temporary hospitals at Odessa, to which place the typhus invalids from San Stefano will be sent as soon as the buildings are completed. In connexion with these arrangements half a dozen steamers are being fitted up as hospital transports, and a camp for convalescents prepared on the Yalta side of the Crimea. Another contemporary states that the number of doctors engaged by the Russian Government up to the present moment, for service at the seat of war, amounts to 4000, being one-third of the total medical practitioners in the empire.

A meeting, presided over by Professor Huxley, has been held at St. John's-wood, "to consider the question of the present epidemic of diphtheria in the district." It was admitted that the Local Government Board were doing all in their power to trace the origin of the outbreak, but, in the opinion of the chairman, "it was very needful that the officials should be made aware that the attention of the public was observantly directed to what they were doing." Dr. Howell, who first addressed the meeting, positively attributed the outbreak to the escape of sewer-gas; the epidemic, he said, was subsiding, and the cases which had occurred during the past few days were less severe, still it was important that they should endeavour to trace the disease to its source. In his opinion, there was no doubt that the epidemic was due to defective drainage. The milk-supply of the neighbourhood was accused as the cause of the outbreak by a gentleman present, who had lost one of his children by the epidemic. In his own family he had three children who were large consumers of milk, and they were the only ones out of seven who were attacked; the youngest child was the greatest consumer, and the only one that did not recover. The cans of the milkman who supplied his house were washed with water from a well supplied by the company's water, and the suggestion was, that owing to the heavy rains the well had become contaminated. Eventually a committee was appointed to co-operate with the Government inspector conducting the inquiry, and before the meeting separated, Professor Huxley seized the opportunity to affirm that there is very strong reason to believe that diphtheria is propagated by definite organic particles, so that when people talked about the disease being propagated by sewer-gas, it was important to remember that sewer-gas alone, without zymotic germs, would not have caused the epidemic.

An application has been made under Palmer's Act to remove the trial of King, the druggist of Kingsland, who is charged with having caused the deaths of several children by selling violet powder adulterated with arsenic, from the Chelmsford Assizes to the Central Criminal Court. In addition to grounds of prejudice, it was shown that it would be much more convenient for the witnesses to attend in London instead of at Chelmsford, more especially as several London witnesses will be called for the defence to prove that the accused was not really a chemist, but only a drysalter, and that as he had no knowledge of arsenic himself, but simply purchased the materials for making the powder, some accident must have arisen in the supplies made to him. The Lord Chief Justice observed that as this was a Crown prosecution the law officers of the Crown must have notice of the application, but, as most probably they would assent to it, he granted a rule *nisi* for a *certiorari*.

A recent inquest held before Dr. Hardwicke in Broad-street, Bloomsbury, on the death of a child aged sixteen months, has elicited another instance of the disgraceful manner in which certificates of death are given to cover the random prescribing of unqualified persons. The mother deposed that the child had been taken ill with whooping-cough, and she obtained the services of a Mr. Andrews, whom she thought was a medical man, of the Medical Hall, Little St. Andrew-street, St. Giles, who attended the child, and it got better, but was afterwards taken ill with measles. The

child got worse, and the father went for Mr. Andrews; instead of this person, however, a gentleman came who was the worse for drink, and who could scarcely speak. He said that all the child wanted was a little powder on the tongue. The father told him he was not in a fit state to prescribe, and ordered him to leave the house. After the death of the child she went to Mr. Andrews for a certificate, and saw him write it; it was signed "Joseph L. Kingston." Dr. Faulkner said he was registrar of the district. He had received this certificate, and also six others similarly signed. He had never seen Dr. Kingston write. Mr. Andrews deposed that he kept the Medical Hall, Little St. Andrew-street. He was a chemist, but was not qualified, and had been a pupil of Dr. Kingston's for sixteen months. He had not attended any lectures, nor had he walked the hospitals, although he had been connected with the medical profession for twenty years. He was paying Dr. Kingston 9s. per week for reading up, and intended to enter at Charing-cross Hospital. He attended this case, and as Dr. Kingston was in a hurry to go somewhere, he left the certificate signed, so that witness might fill it in. The jury returned a verdict "That the deceased died from inflammation of the lungs after measles; and that they were of opinion that it was highly improper that George James Andrews, acting as a chemist and unqualified, should be allowed to attend patients and to procure certificates of death signed by a qualified practitioner for the purpose of registering deaths."

PROFESSOR LISTER AT THE ACADEMY OF MEDICINE.

Considerable interest was aroused in Paris when it was announced that Prof. Lister intended to take the occasion of being there as one of the jurors of the Exhibition to address a communication to the Academy of Medicine. It was naturally supposed that he would take part in the discussion on the treatment of wounds, which has occupied the attention of the Academy at intervals for several weeks, or even months past, and during which his own method has been often under consideration. The opportunity seemed a good one for stating its positive claims and for rectifying the misunderstandings which have prevailed concerning it. The disappointment was therefore considerable when it was found that he had no intention of adverting to the subject at all, but contented himself with a communication of the results of some researches which he has been making "On the Influence of the Position of the Limbs on the Circulation." The medical journals, commenting on the paper, state that there is not much novelty in some of the facts adduced, and that what had been previously done in the matter by Gerdy, Guyon, and Piorry has been completely ignored. Indeed, the veteran Prof. Piorry gave notice that at a future meeting he intends to show that he has anticipated the views of Mr. Lister. The very competent committee (Profs. Richet, Vulpian, and Broca) to which the communication has been referred will, no doubt, do ample justice on this point. The communication, having been in part written and in part spoken, seems to have not been very clearly apprehended as regards the theoretical explanation of the phenomena; "the Anglicanism of the phrases and diction, while," according to the journals, "giving much originality" to the address, also somewhat obscured its clearness. We shall defer our notice of the paper until the committee reports upon it.

THE MEDICAL ACT AMENDMENT BILLS.

A deputation from the King and Queen's College of Physicians in Ireland has been in London for some days in reference to the Bills now before Parliament for the amendment of the Medical Act of 1858. The deputation, consisting of Dr. Gordon (President of the College), Dr. Finny (Registrar), and Drs. Lyons, Grimshaw, and J. W. Moore, waited upon Lord George Hamilton, Mr. Mills, and several influential peers and members of the House of Commons. Both Lord George Hamilton and Mr. Mills seemed, we understand, to be much impressed by the arguments advanced by the deputation against the Marquis of Ripon's amendment to Clauses 3 and 4 of the Lord President's Bill. They had apparently not foreseen that the effect of that amendment would almost inevitably be that a large proportion of men would enter on the practice of the profession without being affiliated to any medical authority; and they recognised that such a state of things might most prejudicially affect the public as well as the profession.

HARD LINES.

The existing regulations affecting medical officers of health in regard to their appointment, supervision, and tenure of office have often been shown to be of the most unsatisfactory nature, not only for all personally concerned, but for the cause of sanitary science itself. A painful illustration of the truth of this has lately occurred in Lancashire, the victim in this instance being a gentleman of the highest professional qualifications, Dr. P. Hinckes Bird. He was appointed five years ago (as we learn from the local press) as the Medical Officer of Health to the Fylde Rural and all the combined Urban Authorities of the district, with every prospect of a long, if not a permanent, tenure of office. But being honest enough to discharge his duties without fear or favour, we learn that he soon incurred the displeasure of some who had sufficient influence to damage his position in a pecuniary sense, by the secession of several of the Authorities from the combination by whom he was originally appointed. He was thereby compelled to resign what remained, and to seek for employment elsewhere. Now, this insecurity of office is surely a state of matters deserving the early consideration of a Government whose very watchword has been declared by its chief to be "*Sanitas*." Such appointments ought surely to be independent of the caprice of this or that local magnate, whose crotchets it may have been the duty no less than the misfortune of the officer of health to disturb.

CONGRESS ON MENTAL MEDICINE.

Among the numerous congresses planned to meet during the Paris Exhibition is that on Mental Medicine (during the week commencing August 5), under the presidency of M. Baillarger. All wishing to take part are requested to address M. Motet, Secretary of the Société Médico-Psychologique, 161, Rue de Charonne. The subscription is fixed at 10 fr. The subjects already determined upon are—The best measures to adopt with regard to criminal lunatics; the clinical varieties of general paralysis; and the various forms of sudden madness in relation to legal medicine. Besides these, members of the Society may bring forward other subjects relating to mental pathology, on forwarding their papers to the Secretary before July 1. Excursions will also be made to the asylums of the departments of the Seine and Seine-Inférieure.

A DEMOGRAPHIC CONGRESS.

M. Levasseur and Drs. Bertillon and Chervin have issued, in the name of the "French Demographs," an invitation to all those interested in the progress of Demography and Medical Geography to a congress, to be held July 3 to July 9. The following questions are recommended for discussion:—Censuses and registration of populations; registrations of births and deaths; stillborn children; modes of calculating mortality; military statistics; medical geography; organisation of statistical bureaux; publication

of the demography of different countries; emigration; and instruction in demography. Secretary, Dr. Chervin, 90, Avenue d'Eylau.

THE INDIAN SALT-TAX.

Mary Lady Hobart, widow of the late Governor of Madras, has published a collection of her husband's notes and minutes on the impolicy of raising the salt-tax in India. She shows that the average income for a family of five persons was about £12 per annum, and that the total taxation upon such an income was, as nearly as possible, £1 2s. 7d. Increased taxation of the poorer class, she observes, seems a questionable weapon for averting the recurrence of famines in India. "The salt-tax," says the *Madras Weekly Mail*, "seems to be much felt in Sind, where salt has already more than doubled in price. The indirect action on the food of a large section of the poorer class of the Sind community, with whom dried salt fish stands in the place of meat, is represented as a great hardship. The increase in the price of salt adds at least 25 to 30 per cent. to the selling rate of dried fish. In Kurrachee and the neighbourhood the most useful section of the labouring class consume but little grain, dates and fish constituting the main part of their diet."

BRITISH MEDICAL ASSOCIATION SCIENTIFIC GRANTS.

The sum of £400 has been granted by the British Medical Association during the past year in aid of scientific research, £100 of which was especially granted to a committee in aid of a research upon the pathology and treatment of hydrophobia and rabies. Applications for new grants should be sent in at once.

CHANGES AT UNIVERSITY COLLEGE.

Dr. Sydney Ringer has been appointed to the Chair of Medicine in University College, vacated by the resignation of Dr. Russell Reynolds; and Dr. Frederick T. Roberts has been appointed to fill the vacant Professorship of Materia Medica and Therapeutics.

MEETING OF THE GENERAL MEDICAL COUNCIL.

A meeting of the General Medical Council has been summoned for this day (Friday), at two o'clock, to consider the amendment of the Medical Acts.

MEDICAL PARLIAMENTARY AFFAIRS.

Medical Service of the Army.—Colonel Stanley, replying to Mr. Mitchell Henry's inquiry with reference to the new warrant for the Medical Service of the Army under the ten-years system, said that a committee is now sitting to inquire into the position of the Medical Officers of the Army, and until that report was sent in he could not give any opinion as to the merits of the proposals.

Contagious Diseases (Animals) Bill.—This measure having passed the House of Lords without any serious opposition, has been referred to the House of Commons. Sir H. Selwin-Ibbetson, on behalf of the Government, moved the second reading on Monday, June 24. He traced the history of the various attempts to deal with the contagious diseases of cattle, and spoke of the appointment of a Select Committee as preliminary to further legislation. The conclusion arrived at by the Committee was that inspection only was delusive, and that the most efficacious method of increasing the food-supply of the country was by encouraging home breeding. The Government had come to the conclusion that slaughter at the ports was the only alternative, and this was recommended in the interests of the consumers. He quoted numerous extracts from the evidence before the Select Committee to show the necessity for such a measure. By protecting the country against the possible introduction of such diseases, the supply of meat would continue regular, store animals would be kept in larger numbers by the farmers, and there would arise a very large trade in dead meat, by which the price of meat would be cheapened. Mr. Forster, while approving many clauses of the Bill referring to quarantine regulations, moved, as an amendment, that slaughter at the ports would increase the cost of food. He complained that the trade generally was against compulsory slaughter, and that foreign countries would not accommodate themselves to it. No mention was made, he said, of the ravages of rinderpest, so that practically the Bill was aimed against one disease, *i.e.*, foot-and-mouth disease, which could only be stamped out by increasing the stringency of home regulations. Colonel Kingscote, as President of the Royal Agricultural Society, supported the Bill.

Public Health.—The Public Health Bill for Ireland was read a third time, and passed.

In the House of Lords, on Tuesday, June 25, the third reading of the Public Health Act (1875) Amendment Bill was contested by Earl De la Warr on the ground that amendments which he hoped would have been proposed to remove certain alleged objections to the measure were not forthcoming. He much feared that existing difficulties as regarded the provision of suitable cottage accommodation would rather be increased than diminished by the passing of this Amendment Bill. Small local authorities would be armed with a power which he thought it undesirable they should have. There might be exceptional cases where it was imperative to erect cottages in situations where water could not be obtained except by carriage from a neighbouring well. The sanitary authorities had sufficient power now to prevent the use of water which was impure and unfit for drinking purposes. The Earl of Kimberley explained that the sanitary officers not only required condemning powers, but also powers to enforce provision of a suitable supply of water to cottages and hamlets where such did not now exist. The Bill was then read a third time and passed.

Contagious Diseases (Animals) Bill.—The House of Commons resumed the adjourned debate on this measure. The speakers generally considered that some measures of restriction upon importation of foreign cattle were urgently demanded; the objectors for the most part promised to support the second reading of the Bill. The chief objection made was that more stringent measures should be adopted to enforce early isolation of infected cattle in this country. Lord Sandon admitted the obligation of the Government to take every precaution against a rise in the price of meat. He argued that restrictions would largely increase the home supply, and give greater confidence to farmers of store cattle. He also anticipated a large development of the dead-meat trade. The United States and Canada would be left entirely open to carry on the trade in cattle, so that the Bill could not be considered a measure for protecting the home producer. The Government would be glad to listen to any suggestions for improvement in Committee.

Fellows' Dinner.—We understand that Mr. John Gay has accepted the office of chairman at the dinner of the Fellows of the Royal College of Surgeons, England, for the year 1879.

Prolonged Retention of a Button in the Trachea.—At the New York Pathological Society, Dr. Bridge related the case of a woman forty years of age who had been sent to him in order to have her larynx examined, as she had long been the subject of a dry and harassing cough. On examination he found the larynx and pharynx looking quite normal; but when the patient took a deep inspiration, and separated the vocal cords fully, he discovered that a black substance was lying diagonally across the trachea. On questioning the woman, Dr. Bridge learned that three years previously, when holding a button between her lips while playing with her child, it escaped down her throat during an inspiration. Immediately afterwards she had a number of suffocative spasms, but these ceased in an hour or two. Those whom she consulted believed that she must have swallowed the button; but a year after the accident she was seized with dry cough, attended with some wheezing, which persisted. The button lay in such a position that it might have been readily seized with a forceps; but, as there was danger of its changing position during the struggles of the patient, and thus plugging the trachea, ether was administered, and then it was easily removed. She left the infirmary ten days afterwards, quite well.—*New York Med. Record*, May 18.

ABSTRACT OF

THE HARVEIAN ORATION.

By PROFESSOR BURDON-SANDERSON, M.D., F.R.S.

A VERY large audience assembled in the library of the Royal College of Physicians on the afternoon of Wednesday last to hear Dr. Burdon-Sanderson deliver the Harveian Oration for the present year.

The Orator began by enumerating the objects for which the Oration was instituted. One of these being an enumeration of the benefactors of the College, he took occasion to eulogise the gift of Mr. Benet-Stopford in connexion with hydrophobia, pointing out that the investigation of this—the most formidable of all contagious diseases—was a most worthy object of liberality, inasmuch as there had lately been a sufficient number of cases to attract public notice, and there were reasons for thinking that it was a preventable, if not also a curable, disease.

But the great burden of the Oration was devoted to another of the objects of its foundation, viz., to exhort the Fellows and Members of the College to the study of Nature after the example and method of Harvey. Anything like an encomium on Harvey's worth the Orator considered quite unnecessary in view of the recent tercentenary speeches. But for his example in dealing with the investigation of Nature, we owed him even a deeper debt of gratitude than for his actual additions to our knowledge. We have to deal with Nature as with a living personality whose secrets can be wrung from her only by insatiable curiosity and unflagging perseverance in proper methods of inquiry. In this spirit Harvey pursued his investigations, not in order to verify any preconceived theories of his own, but to make Nature herself tell her own secrets. Harvey has been misrepresented by his admirers as too much of a reasoner; he was rather a truthful interpreter of phenomena observed. He saw and felt for himself the movements in the heart and vessels, and demonstrated them to others with a simplicity and directness which formed much of his merit.

In regard to our methods of advance in the knowledge of the circulation since the time of Harvey, the first name worthy of mention is that of Dr. Stephen Hales, a Fellow of the Royal Society and contemporary with Newton. As a clergyman he was orthodox in matters of religion, but in regard to physical and biological problems he was a true sceptic, depending on the teachings of observation and experiment. He was a century before his age in physiology, and the only criticism we can make on his methods is that they were rough and rude, but they were correct in principle. Eighty years after Hales we come on the name of the great mechanical and physical philosopher Dr. Thomas Young, a Fellow of this College. He was a man of extraordinary ability, and was as far before his contemporaries in physiology as in mathematics and physics. The great advance he made in the physiology of the circulation was the explanation of the return of the blood to the heart through the capillaries and veins—a subject on which Harvey had incorrect notions. The causes of the onward flow of the blood through the arteries Harvey seems to have understood well, but the only explanation he could offer of the return current through the capillaries and veins was the adoption of an old theory that there was some kind of innate tendency of the blood to return from the different parts of the body to the heart. Young happily applied his knowledge of mechanical and physical laws to this problem, and in 1811 communicated to the Royal Society a series of researches on the motions of fluids in solid and elastic tubes, from which he concluded that the blood-current through the capillaries and veins was the result of the difference of pressure in the two directions, the force of the onward current of blood, when it reaches the capillaries, being collectively nearly equal to that with which the blood starts from the heart. But as Young was too much engaged in other studies, notably optics and acoustics, he had not time to make a sufficient number of experiments on the subject so as to furnish exact data, and the consequence was that his conclusions had, at the time, little effect on the general teaching of the physiology of the circulation.

With the further development and exposition of the physiology of the circulation are identified the two great names of Magendie and Johannes Müller. With the former began the modern era of accurate and delicately arranged methods of experimentation; while the latter, from the universality of his knowledge, was able to reduce to a system all that had been previously ascertained, thus affording a common basis of operation for the work of his numerous pupils and followers in the medical schools of Germany.

In comparing the older with the more recent results, it is not to be denied that some of the former have had to be re-examined by the more exact modern methods of research; but it is a great proof of the soundness of the method followed by Harvey that his conclusions have been rendered not less certain, but only more accurate and explicit, by our modern and more delicate methods of investigation.

In considering how we may best follow Harvey's example in the study of nature, it must be remembered that, as a result of the delicate and accurate methods of modern physiology, more previous training is necessary now than in Harvey's time for successful work. If, therefore, research is to be done at all, it must be begun early in life. It is in early manhood that the mind is best suited for the struggle with Nature, with its attendant fears and hopes and joys. Young men aiming at honourable positions in the profession have usually ten or twelve years to wait for patients; but the occupations of these years are usually incompatible with genuine intellectual work tending towards research, and it is scarcely matter of doubt that, for the object now in view, our age in many respects contrasts unfavourably with that of Harvey. Thus our young medical men are condemned to the wearying toils of the out-patient department, and to teaching or lecturing on a variety of subjects that may be uncongenial. Then, again, the encyclopædic knowledge required of candidates at examinations necessitates a line of study certainly not calculated to fit young men for genuine and sustained intellectual work in the line of physiological research. In this connexion the Orator urged the advisability of the University of London granting some of her highest rewards, not on the students who are most distinguished in the examination-room, but on the real students of nature in Harvey's sense. He also lamented the increasing reluctance of young men to spend some considerable portion of their time at the universities of the Continent, pointing out that Harvey's great discovery was in great measure due to his having studied at Padua, under the great anatomist Fabricius. The universities of Germany ought to attract as much now as the Italian schools did in Harvey's time, for there may be found that supervision, direction, and assistance in research which cannot be found at home. In this respect we have handed over to the continental schools the glory of doing Harvey's work, all the time that we ourselves do nothing but sound his praises.

The Orator concluded by contrasting the position of matters in our country and in Germany. In the latter country there were magnificent State endowments for the prosecution of research in pathology and pharmacology—the two sciences which together constituted medicine; while in this country, that flattered itself on its practical wisdom and abundant wealth, no encouragement was given to the advancement of the healing art by the public endowment of research in pathology and therapeutics, at the same time that we did not hesitate to vote large sums of money in certain favourite directions, such as in the accumulation of the materials of war, and in the improvement of engines for the destruction of human life.

THE PARIS PERIODICAL PRESS.—In 1877 there were published in Paris 836 journals and reviews, which were distributed as follows:—Political, 51 journals and 14 reviews; *belles lettres*, 74; 20 teaching; 66 law; 85 political economy; 20 geography; 52 literature; 15 fine arts; 3 photography; 9 architecture; 4 archæology; 8 music; 7 theatres; 68 fashions; technicology; 74 medicine and pharmacy; 43 science; 22 the army and the military art; 31 agriculture; 16 veterinary; and 17 various. It is reckoned that, as a mean, 110 new journals annually appear, and a slightly larger number die off.—*Lyon Méd.*, June 23.

REVIEWS.

On Defects of Vision which are Remediable by Optical Appliances. A Course of Lectures delivered at the Royal College of Surgeons of England. By ROBERT BRUDENELL CARTER, F.R.C.S., late Hunterian Professor of Pathology and Surgery to the College; Ophthalmic Surgeon to St. George's Hospital, etc. With numerous illustrations. London: Macmillan and Co. Pp. 145.

THE lectures of which this work consists have, with the exception of a few verbal alterations only, in substance already appeared in the columns of the *Medical Times and Gazette*. Their object was, as the author states, "to place in the hands of the profession a simple account of conditions which are often sources of great trouble and annoyance to patients, which generally admit of being relieved, and concerning which there have been recent changes both as regards nomenclature and practice"; and no one will hesitate to admit that Mr. Carter has admirably fulfilled his purpose. The work presents a concise account of the modern doctrines concerning accommodation and refraction, and is one of the first works of English origin which treats of the metrical measurement of spectacle-lenses. Lectures I. and II. treat of Refraction, and of Accommodation and Convergence, and contain a description of several new—or, at least, but little known—instruments, such as the phakometer of Snellen, and the optometer of Hirschberg; while Risley's optometer is also fully described in another lecture. The well-known dicta of Donders upon these subjects have been here restated, and they lose nothing of their force by the style and freshness with which this has been done. Lecture III. treats of Presbyopia; Lecture IV., of Hypermetropia and Myopia; Lecture V., of Astigmatism; and Lecture VI., of Asthenopia.

With regard to the power of estimating the variety and even the actual degree of ametropia existing in individual instances, which is claimed by, or at all events for, many observers, Mr. Carter is very sceptical; and he thinks that, in order to determine with precision the degree of any defect of refractive power, conditions are required which can never or scarcely ever be fulfilled; and the accuracy of any opinion upon this point is very materially influenced by the inherent defects of the observer's own eye, which are not sufficiently taken into consideration.

All the lectures are well worthy of, and will amply repay, careful study; but we have no intention of attempting any general criticism of them, as we have already shown our appreciation of their value by publishing them in our pages. Mr. Carter probably expects that his sixth lecture—that on Asthenopia—will attract most attention. This lecture contains more original matter than the others, and in it Mr. Carter endeavours to overthrow the hitherto received doctrine of Von Graefe—that the asthenopia of myopes is usually due to a want of power of continuous convergence, owing to "insufficiency of the internal recti muscles"; but we may be content to leave Mr. Carter's arguments and criticism to be dealt with by ophthalmologists. We do not quite see what doctrine Mr. Carter would have us accept in the place of Von Graefe's; but at any rate he teaches very clearly how to diagnose and how to cure the asthenopia of myopes, and that is something upon which we can rely, and for which we may be thankful.

The whole work is written with Mr. Carter's admirable and enviable command of language; and the book is thoroughly well got up, its external appearance owing much to the impression of what may be called the St. George's Hospital Staff stamp—viz., Tenniel's George and Dragon—upon the cover.

MUSEUM OF THE ROYAL COLLEGE OF SURGEONS.—The preparations added to the Museum during the last twelve months will be exhibited in the theatre of the College on Tuesday, Wednesday, and Thursday next.

THE Town Council of Worcester have given permission to Mr. J. A. Stephen to erect small gasworks, and to form a connexion with the city sewer, for the purpose of trying the experiment of making gas from sewage. A guarantee has been given that there is nothing offensive or injurious to health in the process.

REPORTS OF SOCIETIES.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 24.

GEORGE W. CALLENDER, F.R.S., President; in the Chair.

SEQUEL OF A CASE OF CHYLOUS DISCHARGE FROM THE LEG.

THE PRESIDENT communicated for Dr. DAY the points in this case, which had been recorded in an early volume of the *Transactions of the Clinical Society*. Nine years had passed since the earlier report before the patient had died from exhaustion. Dr. Wickham Legg had examined the body, and Dr. Gowers had examined the tissues microscopically. The case was one of lymphatic elephantiasis.

ERYTHEMA WITH SUBSEQUENT EXUDATION AND CRUSTING, ALLIED TO HERPES.

Dr. SANGSTER exhibited the patient, aged thirteen, a somewhat delicate-looking little girl, sent to him last February by Dr. Barlow. When first seen, she had on the back of the left hand three patches (the largest about the size of half a crown) of livid desquamating skin; there was also on the back and outside of the same forearm, a little above the wrist, a patch, about two inches long, of dried sero-purulent incrustation, abruptly margined and without any surrounding inflammation. The patient stated that the patches on the back of the hand had had crusts on them. When seen a week later, the condition of the large crusted patch was similar to that of the patches on the back of the hand; but there was, in addition, a patch nearer the elbow as large as half a crown, the appearance of which was quite peculiar; it looked precisely as if some mild escharotic had been painted over the surface; for the epidermis was dry, of a buff-brown colour, and commencing to crack at the margins; there was also a halo of congestion around the destroyed epidermis. The diseased part was hot and painful when touched, and the patient complained of a burning sensation in it. Patches continued to come out on different parts of the forearm and arm; later, on the left leg and thigh; they did not follow any special nerve-distribution. In April, the patient was admitted to Charing-cross Hospital, and the disease carefully watched. While in the ward, several fresh places appeared in the distribution of the descending branches of the superficial cervical plexus; there were patches over the sternum, left clavicle, and left acromial regions. They commenced as erythematous areæ, the coming of which the patient said she could foretell by the pricking and smarting in the part. Subsequently, the epidermis involved turned brown and cracked; next, serum, sero-pus, and often blood, oozed through the cracks and dried on the surface; finally, the crust fell off at the end of about ten days, leaving the part livid and desquamating. At no time was there to be seen any appearance of pustules or vesicles. While the patient was in the hospital, the temperature in both axillæ was taken night and morning. On some occasions, on the affected side it was a degree higher than on the sound side. The spine was tender. There were no other facts of interest in the case to be elicited. The disease seemed to be allied to herpes in its clinical characters, inasmuch as—1. It pursued a definite course; 2. It was associated with pain such as that experienced in herpes; 3. On one occasion it followed a special nerve-distribution.

Dr. IRVINE, who had seen the case in the hospital, confirmed Dr. Sangster's description of it. Observation had shown that the skin-affection was not artificially produced.

SEQUEL OF A CASE OF CANCER OF THE TONGUE.

Mr. GEORGE BROWN read a paper on the sequel of a case of cancer supervening on ichthyosis linguæ, for which Mr. Brown had removed the patient's tongue in November, 1876, as reported in vol. x. of the Society's *Transactions*. Seven months after the operation, the stump was attacked with cancerous ulceration, which spread rapidly, notwithstanding the application of various forms of caustic. About six weeks after the ulceration commenced, the case threatened to terminate speedily, as hæmorrhage was beginning to be troublesome. Mr. Brown then ordered an application consisting of tannic acid dissolved in alcohol (six drachms to the ounce) to be applied to the ulcerated surface daily. The use of this application had a marked effect in checking the

ulceration, and no further hæmorrhage took place, although the patient lived seven months after its use was begun. Mr. Brown believed that the alcoholic solution of tannic acid made as above or saturated (alcohol dissolved in nearly an equal weight of pure tannic acid) would prove to be very useful in cancer of the womb, cancrum oris, and ulcerations of a sluggish and unhealthy character generally. In August, 1877, the cervical glands, which had been indurated for several months, began to enlarge, giving rise to a good deal of difficulty in swallowing. The patient gradually became weaker, and he died from exhaustion on January 31, 1878 fourteen months after the tongue was excised. Before death, the glands on both sides of the neck had enlarged to a great size, giving rise to considerable dyspnœa. During the last two months of his life the patient took scarcely any nourishment but brandy and milk. Freedom from pain was insured by frequent and large doses of morphia.

A Case in which Gastrotomy was performed for Acute Intestinal Obstruction.

Mr. Cripps read notes of the case. The patient, a thin anæmic boy aged seventeen, five months ago received a blow on the abdomen, causing intense pain, but from which he quite recovered in a day or two. After this blow he was much troubled with constipation. Five days before admission into the hospital, whilst bending over, he suddenly experienced intense pain in the right iliac fossa. The next day vomiting set in, which became fæcal on the fourth day. On admission into the hospital, the abdomen was slightly distended, not painful on pressure; the vomiting was almost constant. Injection, inversion, etc., failed to give relief. The patient was then given twenty-five drops of opium and a hot bath. After this he expressed himself as much relieved; vomiting entirely ceased, and he slept for several hours. This improvement lasted nearly twenty-four hours, but on the following evening fæcal vomiting set in again more obstinately than ever, and the patient appeared to be sinking. It was then decided to open the abdominal cavity. This was done under carbolic spray, by an incision three inches long in the middle line. The finger introduced into the opening failed to detect any obstruction. The bowel was then gently drawn out from the lower portion of the wound, and passed in again at the upper in such a way that only a few inches were exposed at a time. After several feet of gut had been examined in this way, a portion of the lower part of the ileum was found tightly strangulated by a fibrous band thrown across from the termination of the ileum to the parietal layer of the peritoneum covering the psoas muscle. The bowel was easily liberated; the abdominal wound was closed and covered with Lister's dressing. All vomiting ceased, and six hours later the patient had a copious fluid motion. The patient did well for the first few days, when obstinate diarrhœa set in, and he died from exhaustion on the eighth day. There was no rise of temperature or tenderness of the abdomen, and the post-mortem examination showed no trace of peritonitis. Before admission, the patient had taken large doses of purgative medicine. Attention was drawn to the ease with which the bowel was returned into the abdomen, by only drawing out a few inches at a time. It was a matter of regret that opium had been given; and probably this had much to do with the fatal issue. The symptoms at the time were completely smothered by the narcotic; twenty-four precious hours thus lost, and the operation ultimately performed upon a patient whose vital energy had slowly sunk below a possible rallying point.

The President thought the case most interesting and well narrated. The surgeon's decision as to the course to be pursued by him in such cases was highly momentous, inasmuch as the patient's condition, unless relieved, tended to death.

Mr. Marsh eulogised Mr. Cripps's method for discovering the seat of obstruction.

Mr. Smith had adopted it in a somewhat similar case, and had easily found the obstructed portion of bowel.

Mr. Brown thought the operation of exploring the peritoneal cavity should be more frequently attempted. It might be done, as he had accomplished it in a case of abdominal tumour without bad result.

The President considered it essential to the performance of the operation to know the nature of the obstruction. All surgeons had seen cases of the kind, and doubted when to interfere; and occasionally the symptoms would rapidly disappear. In a recent case seen by himself, gastrotomy had been strongly advised, but the patient had recovered without it, the administration of opiates and of large enemata having alone been practised. Such cases should make one cautious in proposing this formidable operation.

Mr. Cripps replied, and thought the question rested between the dangers of waiting and of operating. Statistics were not ready to hand as to the frequency of recovery when surgical interference was not attempted. In this case an accident had preceded the obstruction, which Mr. Gay had stated to be the case in one-third of all instances of obstruction.

Incubative Period of Scarlet Fever and of some other Diseases.

Dr. Murchison read an abstract of a paper upon this subject, based upon observations made in seventy-five cases, and extending over a period of twenty years. Observations upon the incubative periods of small-pox, of varicella, and of measles (about ten days), whooping-cough, typhus fever (supplemental to observation published some years ago in the *St. Thomas's Hospital Reports*), enteric and relapsing fevers, were given, and with the result that in neither of these diseases was the period of incubation fixed. The eruptive fevers in this respect fell, however, into two classes: one class comprised variola, varicella, measles, typhus, enteric fever, relapsing fever, and mumps—these had a long period of incubation; whilst erysipelas, diphtheria, dengue, and scarlet fever had a short incubative period. As regards scarlet fever, its period of incubation was variously given as varying from two days to one month. In a paper published by himself in the *Lancet* in 1864, he had analysed twenty-three cases, in none of which did the incubative period exceed one week. The present paper comprised twenty-five cases, in two of which the incubative period was very short; in one it did not exceed eighteen hours, and in the other (that of two children on board ship) it was less than twenty-four hours. In the well-known case at the West-end some few years ago, where guests at a dinner-party were subsequently attacked with scarlet fever, in none of them was the incubative period longer than five days. In fact, in none of Dr. Murchison's seventy-five cases was the period longer than six days; in forty-four it did not exceed four days, in sixteen it did not exceed two days, and in fifteen cases was not twenty-four hours. Dr. Richardson's personal experience, Trousseau's case, in which the incubation period was seven or eight hours, and other well-recorded instances of short incubative periods, were given, the result being the rule that if, after exposure to scarlatinal infection, a person were subjected to a week's quarantine, and showed no symptoms of having been infected, he was safe. Dr. Murchison had adopted this rule, and never known it fail. As regarded the point whether it was possible for a patient to communicate an infectious disease during the incubative period, Dr. Murchison gave some instances of small-pox which rendered it probable that such might be the case.

The President thought the paper very important.

Dr. Wilberforce Smith thought it possible there might be varieties of the same contagium, with various periods of development.

Dr. Crocker mentioned an epidemic of scarlet fever in a children's ward, in which, in most cases, the incubative period lasted about four days, though, in one instance, it seemed to be eight days. In one case of enteric fever, the incubative period had seemed to be only three days.

Mr. G. Brown mentioned a case of scarlet fever with an apparently conclusive history of incubation lasting nine days.

Dr. Murchison, in reply, thought that differences in the force of the fever depended more upon peculiarities of the patient than upon varieties of the fever-poison. There were many instances on record of very short incubative periods in typhoid fever.

Sudden Death after the Tapping of a Hydatid of the Liver.

Mr. Bryant read notes of this case, which was that of a man aged forty, who for three years had had a steadily enlarging tumour in the right side of his abdomen, which had produced no other symptoms than those caused by its size. It occupied the right hypogastric, epigastric, and lumbar regions, and either side of the median line of the abdomen for about two inches. On January 21, 1878, a small trocar and canula not larger than a silver probe were introduced into

the tumour, and nine ounces of clear hydatid fluid drawn off. The puncture was made below the ribs on the right side, and enough fluid was withdrawn to relieve the tension of the cyst, but not to empty it. The operation caused no pain or distress. The canula was then withdrawn, when in less than a minute the man's face became scarlet, and he was seized with an agonising pain in his jaws. This was succeeded by a death-like pallor, vomiting, stertorous breathing, and death in five minutes. After death, an immense hydatid cyst of the size of a man's head was found beneath the liver, full of fluid slightly blood-stained. The portal vein was in front of the cyst, and the trocar had passed through one of its large branches. The brain and lungs were healthy. The heart on both sides contained uncoagulated purple blood in small quantities, and was healthy. The inferior vena cava was much obstructed by the cyst, and its walls were adherent to a very considerable extent, although there was room for a passage of blood. No opinion was given as to the cause of death in this case, although the symptoms were those of nerve-shock. No air could have entered the blood-vessels through the canula.

Dr. MURCHISON stated that rapid death after the tapping of hydatid cysts was not unknown in other instances. In a case recently recorded, the patient, who had some peritonitis, lived only eighteen hours after the operation; whilst, in another case recorded at page 389 of the *London Medical Record* for 1875, by M. Martineau, death resulted within twenty minutes after the operation. In that case there was no peritonitis.

A CASE OF ŒSOPHAGOTOMY.

Mr. MAC CORMAC read a paper by Dr. MCKEOWN, of Belfast, on this case. The patient, Mrs. G., of Glenary, in the County Antrim, consulted him on January 16 last. Three weeks previously she had swallowed a set of false teeth, which stuck in the œsophagus. Various attempts had been made to displace it, but without avail. By palpation, a body could be felt at the lower part of the neck on the right side, and by passing a whalebone with a smooth metallic end down the œsophagus, the diagnosis of the presence of a foreign body was confirmed. The patient being able to swallow sufficient fluid to keep her alive, and the body being just within reach of forceps, Dr. McKeown did not propose œsophagotomy till all other measures had failed. By manipulation on the outside, the body was moved from the right to the left side, and seemed to have been pushed upwards. On two occasions it had been seized firmly by long, strong œsophageal forceps. On the second occasion most alarming symptoms showed themselves. The plate had been so firmly grasped that it might have been extracted had it been at all possible. The plate could be moved easily from side to side; but when traction was exerted to bring it upwards, the patient became livid, respiration seemed to cease, she could not speak, the tongue protruded from the mouth, and the eyes stared. It seemed as if tracheotomy would be necessary, but fortunately, on relaxing the grasp and removing the forceps, all the symptoms quickly abated. All further attempts at extraction by the mouth were definitely abandoned, and œsophagotomy was performed on January 28 by Dr. McKeown, assisted by Drs. James and John Moore and Dr. Johnston. The incision was made on the left side, and extended along the groove in front of the sterno-mastoid from a point about opposite the middle of the thyroid cartilage to near the sternum. The cervial fascia having been cut, the carotid sheath with its contained vessels was carefully separated (chiefly by the handle of the scalpel and director, scissors and knife being occasionally used to cut resisting bands of fascia) from the laryngeal muscles, the thyroid body, trachea, and œsophagus. The œsophagus was then opened as freely as possible, but much trouble was experienced in removing the plate, because of its size, its inequalities, and hooks. The plate could neither be moved up nor down, because of the hooks; and it was only by rotating it that it was at last freed and extracted. The plate was found to be situate entirely in the œsophagus at its beginning, the long diameter being vertical. The patient made uninterrupted progress. She was fed for a week by the stomach-pump tube. On the seventh day the œsophageal wound was healed, and on the fourteenth day the whole wound was closed. The wound was kept scrupulously clean by syringing with solution of Condy's fluid, and also by causing the patient to swallow frequently a little weak whisky-and-water with chlorate of potash, so that a part might pass from within outwards whilst the œsophageal wound was open. On leaving town the patient could swallow quite well, and her speech was quite unimpaired. Dr. McKeown concluded by remarking that, had he known beforehand the shape of the plate, he would not have so long persevered in attempting to extract by the mouth, but should have operated at once. He thought the operation should be more frequently performed than it was. The plate was exhibited to the Society. It had three incisor teeth attached, and a place for a fourth. Its length was an inch and a half.

The PRESIDENT thought the Society much indebted to Dr. McKeown for his valuable paper. He himself had seen three operations of the kind. One was that of a man who had swallowed a piece of bone, and who was under the care of the late Mr. Stanley. After repeated attempts at its extraction by the mouth had failed, œsophagotomy was performed, but too late, for the bone had already perforated the œsophagus, and caused an abscess in the anterior mediastinum, which opened into the pleura. The patient eventually died. In another case, a fish-bone from the œsophagus perforated the aorta.

Mr. BRYANT thought much force should not be used in attempts to extract foreign bodies lodged in the œsophagus; he mentioned a case in which rupture of the œsophagus had been so produced.

Mr. CRIPPS mentioned a case in which a small fish-bone lodged in the gullet. Pain was experienced for a week or so, without other inconvenience. A little while subsequently there supervened sudden severe pain, a gush of blood from the mouth, and death, which was due to perforation of the œsophagus by the bone, and consequent ulceration of the carotid artery.

MEDICAL NEWS.

APOTHECARIES' HALL, LONDON.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Thursday, June 20:—

Leigh, William Watkin, Llanfabon, Pontypridd.
Sharples, Charles William, 25, Albert-street, N.W.

The following gentlemen also on the same day passed their Primary Professional Examination:—

James, James Thomas, Middlesex Hospital.
Mehta, Maeckjee Sorabjee, Bombay.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations, were admitted Licentiates in Dental Surgery at a meeting of the Board of Examiners on the 25th inst., viz.:

Ackery, John, Camberwell.
Bennett, Frederick Joseph, George-street, Hanover-square.
Burt, Walter, Weymouth.
Fothergill, Edward, Darlington.
Galpin, George Luck, Great Marlborough-street.
Henry, Martin, King William-street, E.C.
Hepburn, Duncan Stuart, Nottingham.
Kennedy, John Bannerman, Scarborough.
Keen, Edward, M.R.C.S., Chelsea.
Newton, J. N. Peill, Liverpool.
Noble, Charles James, Acton.
Stevenson, Louis, Edinburgh.
Taylor, Arthur, Sutton-Coldfield.
Underwood, Arthur Swayne, M.R.C.S., Bedford-square.
Winterbottom, Augustus, F.R.C.S. Eng., Sloane-street.
Woodward, Francis Herbert, Princess-terrace, Regent's-park.

Eight candidates having failed to acquit themselves to the satisfaction of the Board, were rejected.

NAVAL, MILITARY, &c., APPOINTMENTS.

ADMIRALTY.—Fleet Surgeon Thomas John Breen has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet, with seniority of May 22, 1878.

BOMBAY MEDICAL ESTABLISHMENT.—To be Surgeons-Major—Surgeon Wellington Gray; Surgeon David Erskine Hughes, M.D.; Surgeon Thomas Holmested; Surgeon Thomas Cody; Surgeon John Raby.

BIRTHS.

ANDERSON.—On June 21, at 6, Brunton-place, Edinburgh, the wife of Surgeon-Major John Anderson, M.R.C.S. Eng., of a son.

LEWIS.—On June 25, at 2, Gordon-square, W.C., the wife of Waller Lewis, M.B. Cantab., M.R.C.P. Lond., of a daughter.

MARRIAGES.

DAVENHILL—EYKYN.—On June 24, at St. John's, Worcester, Robert Septimus, M.R.C.S.E., L.S.A.S., youngest son of the late John Savadge Davenhill, of Fettenhall Wood, Wolverhampton, to Emily Mary, eldest daughter of John Eykyn, of Handsworth.

DEARDEN—DICKSON.—On June 19, at Douglas, Isle of Man, John Alfred Dearden, L.R.C.P., M.R.C.S., to Mary Selina, second daughter of the late Edward Ward Dickson, Esq., C.E.

DOUGLAS—PEREGRINE.—On June 19, at Silchester, Hants, Claude Douglas, Esq., of New Walk, Leicester, to Louisa Bolitho, youngest daughter of Thomas Peregrine, M.D., late of 3, Half-Moon-street, Mayfair.

HENDERSON—GORDON.—On June 20, at Dublin, H. J. Hume Henderson, Esq., to Eleanor Hamilton, daughter of Samuel Gordon, M.D., President of the King and Queen's College of Physicians.

LUCIUS—DUFFY.—On May 2, at Valparaiso, Chili, Karl Wilhelm Lucius, third son of the late Friedr. Lucius, Frankfort-on-Maine, to Margarita Cecilia, eldest daughter of James W. Duffy, M.D., Valparaiso.

MOIR—FOWLER.—On June 20, at St. Andrew's Episcopal Church, John Wilson Moir, M.D., of St. Andrews, son of the late David Macbeth Moir, M.D., of Musselburgh, to Helen Alice Levine, only child of R. Dashwood Fowler, Esq., of Hope-street, St. Andrews.

O'CONNOR—LEAHY.—On June 18, at Shrewsbury, Ignatius Jeremiah, third son of William O'Connor, M.D., to Mary, elder surviving daughter of the late Daniel Leahy, Esq., of Rosacon, County Cork.

PAYNE—DITMAS.—On April 23, at Cape Town, Henry P. Payne, L.R.C.P. Lond., M.R.C.S. Eng., of Tulbagh, South Africa, to Edith, daughter of the late William Ditmas, Esq., of Beverley, Yorkshire.

ROTH—BRIGHT.—On June 20, at Wanstead Meeting-house, Leytonstone, Essex, Bernard Roth, M.R.C.S. Eng., eldest son of M. Roth, M.D., of Wimpole-street, London, and Gloucester-place, Brighton, to Lilhe, third daughter of the Right Honourable John Bright, M.P., of One Ash, Rochdale.

DEATHS.

ALLSHORN, REBECCA ANNE, wife of Adolph Hahnemann Allshorn, M.D., at 90, Dalton-lane, on June 20, aged 30.

BRADY, PATRICK AUGUSTUS, M.D., at Horton-road, Bradford, on June 19, aged 68.

BRAND, SAMUEL ELWIN, M.R.C.S. Eng., of 23, Cornhill, and South Hackney, on June 18, aged 51.

BROOKES, MARY ERSKINE, wife of Robert Brookes, M.R.C.S. Eng., of Waterloo-road, S.E., at Camberwell New-road, on June 23, aged 63.

CARGILL, JOHN, M.D., at Newcastle-on-Tyne, on June 22, aged 67.

CROMARTY, JAMES PATISSON, M.R.C.S., elder son of James Cromarty, Esq., of Bankburn House, South Ronaldstray, Orkney, at Tura, Garo Hills, Assam, on May 11.

EVANS, GEORGE, M.R.C.S.L., late 9th Lancers, at 4, Cornwall Residences, Regent's-park, on June 19, aged 44.

HOWELL, THOMAS GWYNNE, M.R.C.S. Eng., Surgeon-Major 19th Regiment N.I., at Octacamund, India, on June 17.

LOY, THOMAS RICHARDSON, M.D., at Harrogate, on June 16, aged 83.

PINNELL, THOMAS MARK, M.B. Lond., M.R.C.S. Eng., at the Hospital, Wolverhampton, on June 18, aged 24.

SMITH, FRANCES, wife of S. W. Smith, L.F.P.S. Glasg., of Surrey Villa, Kennington-road, S.E., on June 25.

SMITH, GEORGE, M.R.C.S. Eng., of Northampton, on June 14, aged 64.

WILLOUGHBY, HENRIETTA AVARILLA, daughter of Eward F. Willoughby, M.B., at 76, Marquess-road, Canonbury, N., on June 10, aged 6.

WILSON, THOMAS, M.D., at Pocklington, on June 19, aged 72.

WOOD, ALEXANDER, M.D., Surgeon Bengal Army, eldest son of James Wood, of Banff, in London, on June 16, aged 31.

VACANCIES.

In the following list the nature of the office vacant, the qualifications required in the Candidate, the person to whom application should be made and the day of election (as far as known) are stated in succession.

GENERAL HOSPITAL, BIRMINGHAM.—Assistant-Physician. Candidates must be graduates in medicine of a university by examination, and Fellows or Members of the Royal College of Physicians in London, but twelve months from the date of election will be allowed for obtaining the F.R.C.P. or M.R.C.P. Applications, accompanied by diplomas or certificates of registration and original testimonials, to the House-Governor, William T. Grant, on or before June 29.

GREAT NORTHERN HOSPITAL, CALEDONIAN-ROAD, N.—Surgeon, Out-Patients' Department. Candidates must be Fellows of the Royal College of Surgeons of England. Applications, with copies of testimonials, to the Secretary, on or before July 2.

GREENWICH UNION INFIRMARY.—Assistant Medical Officer. Candidates must be duly qualified, registered, and unmarried. Applications, accompanied by not more than three testimonials of recent date, to the Medical Officer, on or before July 3.

HULL GENERAL INFIRMARY.—Assistant House-Surgeon. Candidates must be fully qualified. Applications addressed "Chairman, House Committee," to be sent in not later than 11 a.m., July 8.

LEICESTER BOROUGH LUNATIC ASYLUM.—Assistant Medical Officer. Candidates must be qualified and registered, should not exceed thirty years of age, and must be unmarried. Applications, with copies of recent testimonials, to Dr. Finch, at the Asylum, not later than July 18.

MANCHESTER ROYAL INFIRMARY.—Ophthalmic Surgeon. Candidates must be Fellows, Licentiates, or Members of one of the Royal Colleges of Surgeons of the United Kingdom. Diplomas, original testimonials, and a certificate of age to the Chairman of the Board on or before June 29.

MIDDLESEX HOSPITAL, W.—Assistant-Physician. Applications for the office must be made in writing, and addressed to the Chairman of the Weekly Board, on or before July 2. Candidates must be approved of by the Medical Committee before they can be admitted as candidates by the Weekly Board.

WEST BROMWICH DISTRICT HOSPITAL.—House-Surgeon. Candidates must be surgically qualified, registered, and unmarried. Applications, stating age, etc., with testimonials, to the Rev. F. Willett, West Bromwich, on or before July 1.

UNION AND PAROCHIAL MEDICAL SERVICE.

*** The area of each district is stated in acres. The population is computed according to the census of 1871.

RESIGNATIONS.

Bridlington Union.—The Third District is vacant; area 20,995; population 3081; salary £25 per annum.

Forden Union.—Mr. J. Hickman has resigned the Worthen District; area 21,637; population 4202; salary £80 per annum.

APPOINTMENTS.

Honiton Union.—Stephen W. Mackey, L.K.&Q.C.P. Ire., L.R.C.S. Ire., to the Ninth District.

Mitford and Launditch Union.—Hannibal H. Sheppard, M.R.C.S. Eng., to the Fransham District. Francis Coomber, M.R.C.S. Eng., L.R.C.P. Lond., to the Colkirk District.

New Sarum.—William W. Stoddart, F.C.S., as Analyst for the City.

Sussex.—Edward H. Moore reappointed Analyst for the Western Division of the County for one year.

Totnes Union.—Samuel B. Colston, M.R.C.S. Eng., to the Brixham District.

ROYAL COLLEGE OF SURGEONS.—The following were the questions on Dental Anatomy and Physiology, and Dental Pathology and Surgery, submitted to the candidates for the licence in Dental Surgery at a meeting of the Board on the 21st inst., viz.:—1. Describe the structure of an incisor tooth in a horse, and a molar in a cow; also the morphological arrangement of the developmental organs in each. 2. Describe the terms "calcospherite" and "calcoglobulin"; and give an account of the researches of Rainie and Harting into the nature of calcification. 3. Describe the three specimens under the microscope.—I. Describe the experiments performed for the production of artificial dental caries; give the results, and name the authorities. 2. Enumerate the different forms of cleft and perforate palate, and state the treatment which they would receive at the hands of a dentist. What are the characteristic differences as to the results of treatment in congenital and accidental cases? 3. Describe the appearance to the naked eye and also under the microscope of the cementum, and of the peridental membrane of a tooth extracted on account of exostosis. Mention any other maladies likely to be mistaken for it, and the symptoms by which you would distinguish it. The following were the questions on Anatomy and Physiology, and Pathology and Surgery, viz.:—1. Describe the thyroid cartilage; and give an account of the mechanism by which the voice is produced. 2. From what sources does the tongue receive its nerve-supply? Describe how each nerve leaves the skull, and to which part of the tongue each is distributed. State what are their respective functions.—1. What is traumatic trismus? State which muscles and nerves are involved in this disease, and how it is produced. 2. Describe the process by which a wound is healed after loss of texture, as in a case of cancrum oris.

POST-MORTEM CÆSARIAN OPERATIONS.—*The Gazette Hebdom.* (June 21) states that much excitement has arisen from the performance of the Cæsarian operation after the death of the mother in two recent cases in the department of the Loire. One of these was practised an hour after death by an inn-keeper, by means of a poignard-knife, at the instigation of the priest; but the infant was dead. The other was executed by a pork-butcher, at the instance of the friends of the deceased, and a living child removed, who died shortly after. One of these operators was fined five francs, and the other fifteen francs, for the "illegal practice of medicine." In both cases a doctor had been searched for in vain. Writing on the subject of post-mortem Cæsarian operations in general, Dr. Thévenot (*Progrès Méd.*, June 1) calls attention to the procedure devised as a substitute by Prof. Rizzoli some forty years ago, and since had recourse to in Italy, Belgium, and Germany, although quite ignored in France, and, he might have added, in England. It is founded on the fact that at the period when death is approaching, the process of delivery often commences and sometimes is terminated, and even when this is not the case the sphincter and orifices of the cervix undergo great relaxation, so that the hand can be slowly introduced, and the child brought away by the feet. During an epidemic of cholera in 1855, Rizzoli and his colleagues delivered women in this way without any difficulty; and in three cases of eclampsia, in which the Cæsarian operation was about to be

performed, delivery was effected, and the women recovered. The woman's death need not be waited for, as delivery can be effected almost as easily some hours before. This procedure is indicated in the instance of the child as giving it many more chances of life, and of the mother as her death may be sometimes only apparent.

NOTES, QUERIES, AND REPLIES.

He that questioneth much shall learn much.—Bacon.

Dens Sap.—The following gentlemen are the members of the Dental Board, viz.:—Messrs. F. Le Gros Clark, F.R.S., Chairman; William Scovell Savory, F.R.S.; John Birkett, President of the College; Samuel J. A. Salter, F.R.S.; T. Arnold Rogers, M.R.C.S.; and Henry J. Barrett, M.R.C.S.

COMMUNICATIONS have been received from—

Dr. McAldowie, Stoke-upon-Trent; The Registrar of Apothecaries' Hall, London; The Secretary of the University of Edinburgh; The Registrar-General, Edinburgh; Dr. John Williams, London; The Secretary of the Royal Institution; Dr. Edward Sparks, Crewkerne; The Registrar of the General Medical Council; Dr. Peddie, Edinburgh; Dr. P. Hinckes Bird, London; Mr. F. Fowke, London; Mr. T. A. Pettit, Glossop; Dr. Lory Marsh, London; Dr. Forbes Winslow, London; Dr. J. M. Winn, London; The Faculty of Physicians and Surgeons of Glasgow; Mr. A. W. Mayo Robson, Leeds; Dr. Thos. Barlow, London; Mr. T. M. Stone, London; Mr. John Chatto, London; Dr. James Edward Pollock, London; Dr. J. M. Bruce, London; Mr. J. T. W. Bacot, Seaton, Devonshire.

BOOKS AND PAMPHLETS RECEIVED—

J. Milner Fothergill, M.D. Edin., The Antagonism of Therapeutic Agents and What it Teaches—Robert Barnes, M.D. Lond., A Clinical History of the Medical and Surgical Diseases of Women—Dr. Wilh. Alex. Freund, Eine neue Methode der Exstirpation des Ganzen Uterus—M. Pattison Muir, F.R.S.E., Practical Chemistry for Medical Students—Dr. Albert Eulenburg, Lehrbuch der Nervenkrankheiten.

PERIODICALS AND NEWSPAPERS RECEIVED—

Lancet—British Medical Journal—Medical Press and Circular—Berliner Klinische Wochenschrift—Centralblatt für Chirurgie—Gazette des Hôpitaux—Gazette Médicale—Gazette Hebdomadaire—Le Progrès Médicale—Bulletin de l'Académie de Médecine—Pharmaceutical Journal—Wiener Medizinische Wochenschrift—The Louisville Medical News—Boston Medical and Surgical Journal—Nature—Philadelphia Medical Times—Cincinnati Clinic—Night and Day—Home Chronicler—West London Express—Quarterly Journal of Inebriety—Chicago Medical Journal and Examiner.

APPOINTMENTS FOR THE WEEK.

June 29. Saturday (this day).

Operations at St. Bartholomew's, 1½ p.m.; King's College, 1½ p.m.; Royal Free, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; London, 2 p.m.

July 1. Monday.

Operations at the Metropolitan Free, 2 p.m.; St. Mark's Hospital for Diseases of the Rectum, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westmioster Ophthalmic, 1½ p.m.

Royal Institution, 3 p.m. General Monthly Meeting.

2. Tuesday.

Operations at Guy's, 1½ p.m.; Westminster, 2 p.m.; National Orthopædic, Great Portland-street, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; West London, 3 p.m.

3. Wednesday.

Operations at University College, 2 p.m.; St. Mary's, 1½ p.m.; Middlesex, 1 p.m.; London, 2 p.m.; St. Bartholomew's, 1½ p.m.; Great Northern, 2 p.m.; Samaritan, 2½ p.m.; King's College (by Mr. Wood), 1½ p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. Thomas's, 1½ p.m.; St. Peter's Hospital for Stone, 2 p.m.

Obstetrical Society, 8 p.m. Dr. John Williams: Specimens and Microscopic Sections illustrating changes resulting in the Uterus resulting from Pregnancy; "On some Changes in the Uterus resulting from Pregnancy, and on their Value in the Diagnosis of Parity." Dr. A. W. Edis, "Case exemplifying the Difficulty of Diagnosis in Abdominal Tumours." Mr. Brewer, "Labour complicated with Ovarian Cyst."

4. Thursday.

Operations at St. George's, 1 p.m.; Central London Ophthalmic, 1 p.m.; Royal Orthopædic, 2 p.m.; University College, 2 p.m.; Royal London Ophthalmic, 11 a.m.; Royal Westminster Ophthalmic, 1½ p.m.; Hospital for Diseases of the Throat, 2 p.m.; Hospital for Women, 2 p.m.; Charing-cross, 2 p.m.; St. Thomas's (ophthalmic operations), 4 p.m.; London, 2 p.m.

5. Friday.

Operations at Central London Ophthalmic, 2 p.m.; Royal London Ophthalmic, 11 a.m.; South London Ophthalmic, 2 p.m.; Royal Westminster Ophthalmic, 1½ p.m.; St. George's (ophthalmic operations), 1¼ p.m.; Guy's, 1½ p.m.

VITAL STATISTICS OF LONDON.

Week ending Saturday, June 22, 1878.

BIRTHS.

Births of Boys, 1352; Girls, 1273; Total, 2625.
Average of 10 corresponding years 1868-77, 2135·1.

DEATHS.

	Males.	Females.	Total.
Deaths during the week	727	664	1391
Average of the ten years 1868-77	675·0	606·2	1281·2
Average corrected to increased population ...	...	...	1371
Deaths of people aged 80 and upwards ...	...	...	31

Note.—The births and deaths registered last week may be compared with the average numbers in the corresponding weeks of the ten years 1868-77 after raising the average by 7 per cent. for increase of population.

DEATHS IN SUB-DISTRICTS FROM EPIDEMICS.

	Population, 1871.	Small-pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping-cough.	Typhus.	Enteric (or Typhoid) Fever.	Simple continued Fever.	Diarrhœa.
West	561359	4	3	2	3	17	...	2	...	4
North ...	751729	4	1	4	2	26	...	...	1	5
Central ...	334369	...	3	3	1	16	...	2	2	2
East	639111	1	...	1	1	13	...	3	1	5
South	967692	10	10	7	5	36	3	4	1	7
Total	3254260	19	17	17	12	108	3	11	5	23

METEOROLOGY.

From Observations at the Greenwich Observatory.

Mean height of barometer	29·818 in.
Mean temperature	59·0°
Highest point of thermometer	80·1°
Lowest point of thermometer	45·9°
Mean dew-point temperature	50·9°
General direction of wind	S.W.
Whole amount of rain in the week	0·99 in.

BIRTHS and DEATHS Registered and METEOROLOGY during the Week ending Saturday, June 22, 1878, in the following large Towns:—

Boroughs, etc. (Municipal boundaries for all except London.)	Estimated Population to middle of the year 1878.*	Persons to an Acre. (1878.)	Births Registered during the week ending June 22.	Deaths Registered during the week ending June 22.	Temperature of Air (Fahr.), Highest during the Week.	Temperature of Air (Fahr.), Lowest during the Week.	Temperature of Air (Fahr.), Weekly Mean of Mean Daily Values.	Temp. of Air (Cent.), Weekly Mean of Mean Daily Values.	Rain Fall. In Inches.	Rain Fall. In Centimetres.
London	3577304	47·5	2625	1391	80·1	45·9	59·0	15·00	0·99	2·51
Brighton	103923	44·1	60	38	74·0	47·4	57·0	13·89	0·51	1·30
Portsmouth ...	129461	28·9	86	44	...	...	...	...	...	...
Norwich	84620	11·3	58	36	80·5	46·0	58·0	14·44	0·19	0·48
Plymouth	73599	52·8	39	32	68·0	48·0	56·5	13·61	0·44	0·61
Bristol	206419	46·4	168	68	80·3	45·8	59·3	15·17	0·01	0·03
Wolverhampton ...	74240	21·9	60	32	72·4	44·9	55·2	12·89	0·03	0·08
Birmingham ...	383117	45·6	325	164	...	...	...	...	...	...
Leicester	121473	38·0	83	31	77·8	48·2	58·2	14·55	0·05	0·13
Nottingham ...	165267	16·6	134	42	78·6	44·3	56·3	13·50	0·03	0·08
Liverpool	532681	102·2	405	265	68·5	50·4	56·1	13·39	0·05	0·13
Manchester ...	360514	84·0	352	179	...	...	...	...	...	...
Salford	170251	32·9	167	74	71·7	42·0	54·2	12·33	0·26	0·66
Oldham	107366	23·0	100	54	...	...	...	...	...	...
Bradford	185088	25·6	145	68	69·1	42·8	54·1	12·28	0·04	0·10
Leeds	304948	14·1	244	114	72·0	44·0	55·0	12·78	0·12	0·30
Sheffield	289537	14·7	209	132	71·0	44·0	56·4	13·55	0·12	0·56
Hull	143139	39·4	91	63	77·0	45·0	55·5	13·06	0·22	...
Sunderland ...	112459	34·0	96	60	...	...	...	...	...	...
Newcastle-on-Tyne	144570	26·9	110	47	...	...	...	...	...	...
Edinburgh	222371	53·1	147	87	...	...	...	...	...	...
Glasgow	566940	94·0	425	278	69·0	44·5	57·0	13·89	0·28	0·71
Dublin	314666	31·3	217	136	71·4	44·2	58·4	14·66	0·42	1·07
Total of 23 Towns in United Kingdom	8373953	37·9	6346	3438	80·5	42·0	56·6	13·67	0·24	0·61

At the Royal Observatory, Greenwich, the mean reading of the barometer last week was 29·82 in. The lowest reading was 29·63 in. on Sunday evening, and the highest 30·03 in. on Saturday morning.

* The figures for the English and Scottish towns are the numbers enumerated in April, 1871, raised to the middle of 1878 by the addition of seven years and a quarter's increase, calculated on the rate which prevailed between 1861 and 1871. Nottingham, Salford, and Oldham, however, form exceptions to this rule, as the estimates for these three towns have been revised with the aid of local information as to the rate of increase of inhabited houses. The population of Dublin is taken as stationary at the number enumerated in April, 1871.

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